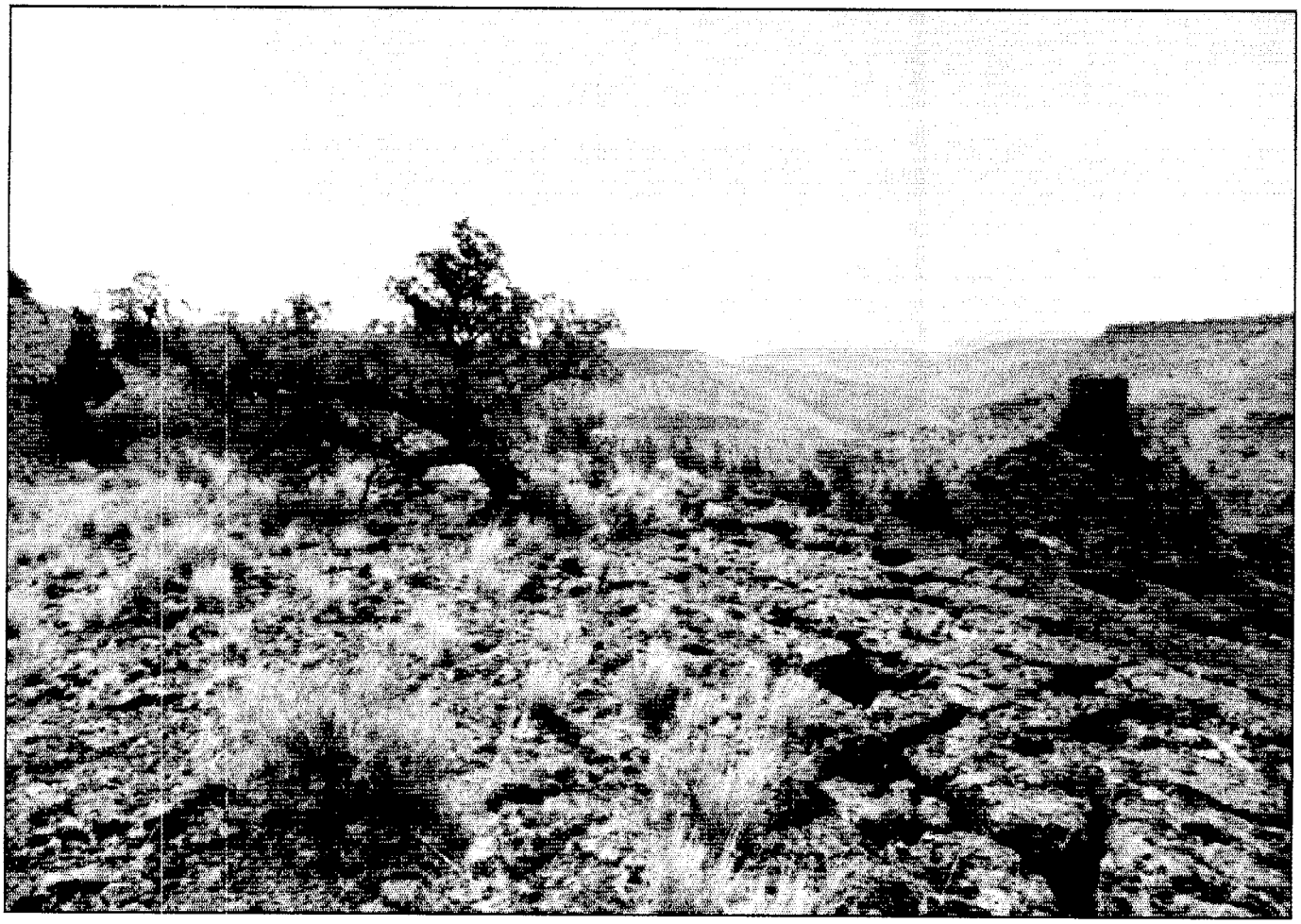
U.S. Department of the Interior
Bureau of Land Management
Prineville District

Bureau of Reclamation
Pacific Northwest Region

October 1992

Lower Crooked Wild and Scenic River (Chimney Rock Segment) Management Plan



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources. protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing forthe enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

Decision Record
and
Finding of No Significant Impact

Lower Crooked (Chimney Rock Segment)
Wild and Scenic River Management Plan

Prineville, Oregon

USDI, Bureau of Land Management
USDI, Bureau of Reclamation

Decision:

It is the decision of the Bureau of Land Management and the Bureau of Reclamation to adopt the Preferred Alternative (Alternative 5) and its associated management plan as described in the Draft Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan and Environmental Assessment (LCMP/EA - July 1992). This decision incorporates by reference all management actions under the Preferred Alternative and Management Actions Common to All Alternatives (MACTAA's). Some management actions were slightly modified to reflect new information and public comments received during the public review period of the Draft LCMP/EA. This decision also incorporates by reference mitigating measures identified in the Draft LCMP/EA.

Rationale:

The Preferred Alternative and MACTAA's were chosen as the best management alternative scenario because together they offer the widest range of beneficial uses of the environment without degradation and provide the greatest overall protection and enhancement of the river corridors outstandingly remarkable and significant resource values.

All management actions are in conformance with the Brothers/LaPine and Prineville Reservoir Resource Management Plans, and satisfy requirements of the Omnibus Oregon Wild and Scenic Rivers Act of 1988 and the National Environmental Policy Act.

Monitoring:

Monitoring and evaluation of the river management plan has been addressed in Chapter 3 of the accompanying document. This monitoring plan is incorporated by reference into this decision,

Finding of No Significant Impact:

The Bureau of Land Management (Prineville District) and Bureau of Reclamation (Pacific Northwest Region) have analyzed various alternatives for managing the Lower Crooked (Chimney Rock Segment) Wild and Scenic River corridor. The alternatives and associated analysis are described in the Draft LCMP/EA; which was made available for public review on July 17, 1992. This document is available for review at the BLM, Prineville District Office. The options for management direction identified in the Draft LCMP/EA, hereby incorporated by reference, will assure that no significant impacts will occur to the human environment.

Under the five alternatives analyzed, significant impacts on quality of the human environment will not occur based on, but not limited to, the following considerations:

Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality.

Public health or safety will not be significantly affected.

The lands within the legal river corridor boundary will remain in federal ownership under all alternatives. This will ensure protection of riparian resources (floodplain/ wetland).

The alternatives are not a part of any other action having the potential for cumulatively significant impacts to the important and relevant (ACEC) resource values in the planning area.

Cultural resources on, or eligible for, the National Register of Historic Places will not be adversely affected, nor would Native American religious sites.

The alternatives will not significantly affect endangered or threatened species or their habitat determined to be critical under the Endangered Species Act of 1973.

The alternatives do not violate federal, state, or local legal requirements for environmental protection, or are there any known inconsistencies with officially approved or adopted federal, state, tribal, or local resource plans, policies or programs.

Adverse impacts identified are minimal. Continued resource monitoring will ensure that no significant adverse impacts occur. As needed, appropriate management actions will be instituted to protect outstandingly remarkable values (scenery, recreation, and fish), important natural and cultural resources, and impacts to threatened or endangered species habitat.

On the basis of the information contained in the Draft LCMP/EA and all other information available as summarized above, it is the determination of the Bureau of Land Management and Bureau of Reclamation that none of the five alternatives constitute a major federal action

significantly affecting the quality of the human environment. Therefore, an environmental impact statement i.s unnecessary and will not be prepared.

I recommend adoption of the Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan/EA.

Edward F. Perault — Oct. 22, 1992 (Date)
Outdoor Recreation Planner
Bureau of Land Management

Management Approval:

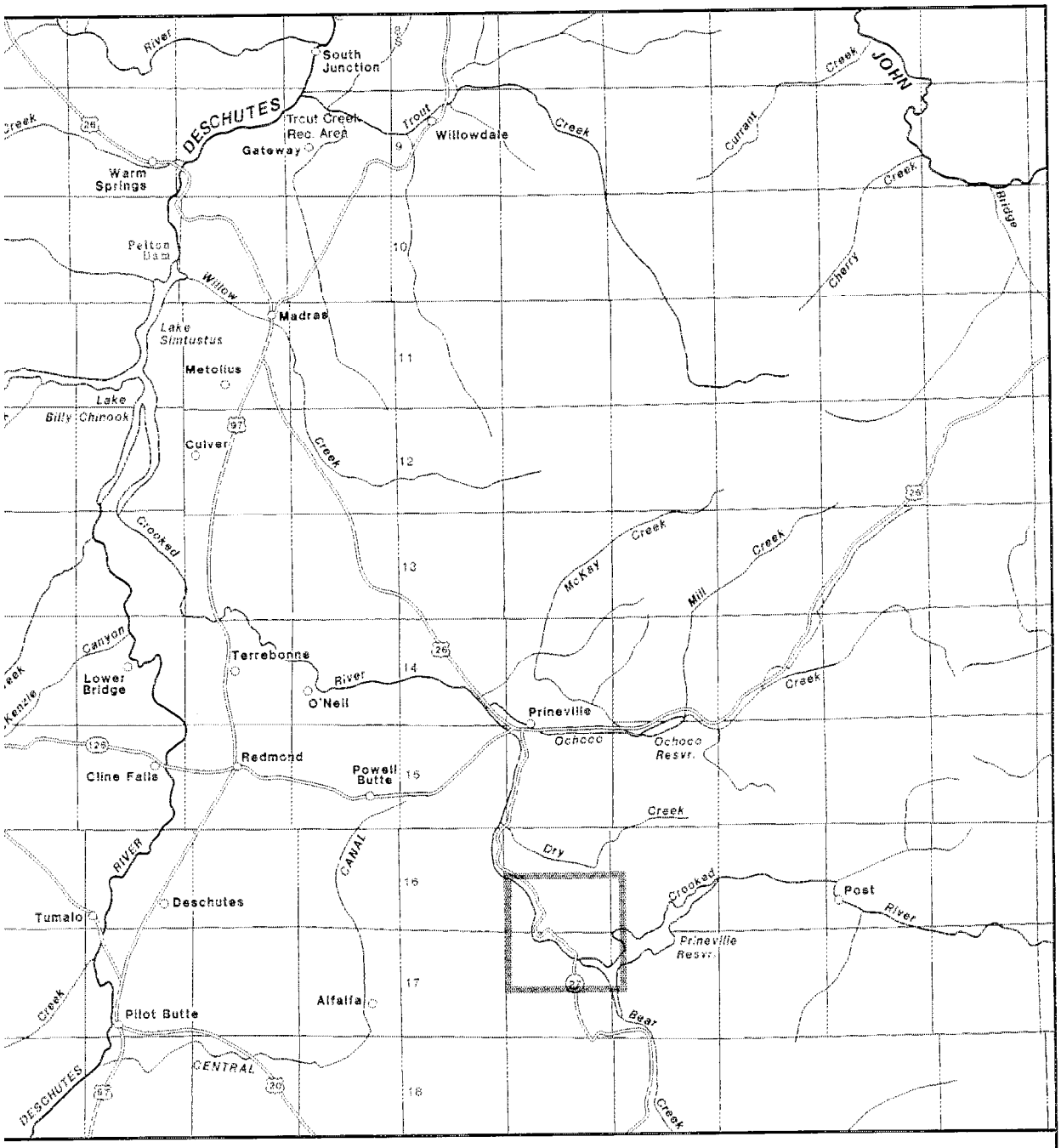
I approve the Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan/ EA decisions as recommended. This document meets the requirement for agency decision making as provided in 40 CFR 1505.

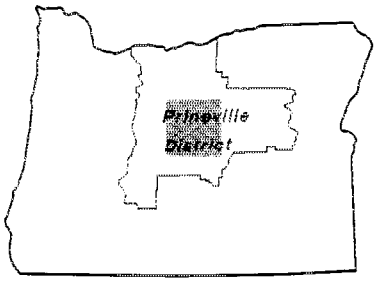
James G. Kenna — November 10, 1992 (Date)
Deschutes Resource 'Area Manager
Bureau of Land Management

John W. Keys III — Oct. 28, 1992 (Date)
Regional Director
Bureau of Reclamation, Pacific Northwest Region

Appeals Process

Within 30 days of the receipt of this decision, you hate the right to protest to the Prineville District Manager and thereafter appeal to the Board of Land Appeals, Office of the Secretary, in accordance with the regulations of 43 Code of Federal Regulations 4.400. The Protest to the District Manager must be filed in writing in the Prineville District Office of the Bureau of Land Management. If no protests or appeals are filed, this decision will become effective and be implemented in 30 days.





OREGON

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Oregon

Lower Crooked (Chimney Rock Segment) Wild and Scenic River Vicinity Map

MAP 1

5 0 5 10 15 Miles

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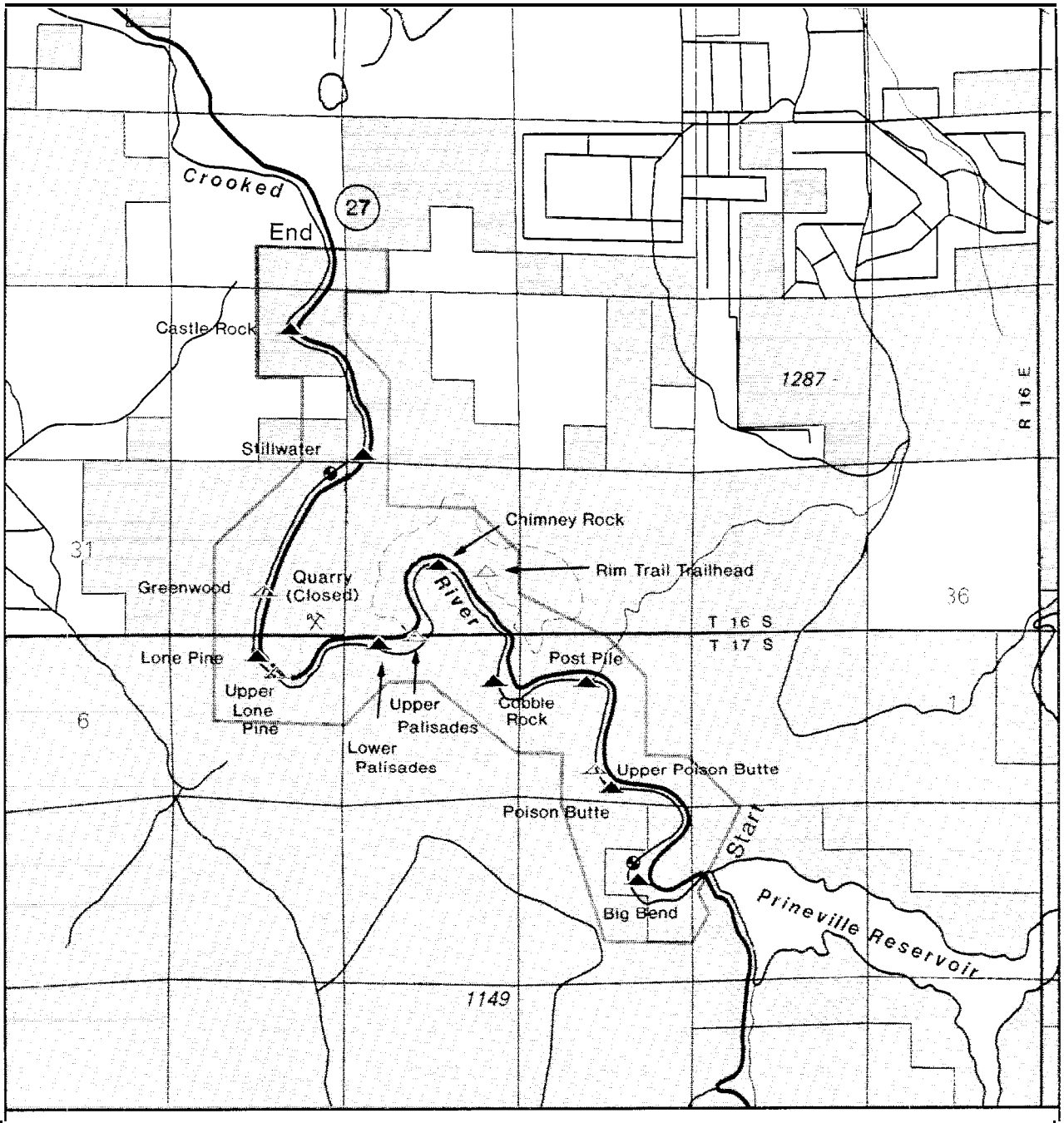


LEGEND

- **Public Lands (Admin. by BLM)**
- State Lands
- **Bureau of Reclamation / Reclamation Zone**
- **Private Lands**
- **Wild and Scenic River** Boundary
- Overnight Camping
- Day Use Area
- Rim Trail

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Oregon

Lower Crooked (Chimney Rock Segment) Wild and Scenic River

MAP 2

0.5 0 0.5 1.0 1.5 Miles

10/92

Table of Contents

I. Introduction

A. Introduction

This river management plan contains management actions necessary to protect and enhance resource values and resolve key issues that exist within the Lower Crooked (Chimney Rock Segment) Wild and Scenic River corridor as presented in the July 1992 Draft Management Plan and Environmental Assessment. The plan also describes in detail the implementation and monitoring strategies for those management actions. It describes how each resource will be managed as well as the projects and coordination necessary to implement the plan.

The plan does not present information on the affected environment, environmental consequences, rational, or effects of management. This information was previously discussed in the Draft Management Plan and Environmental Assessment which can be obtained by contacting the BLM, Prineville District Office.

An interdisciplinary team approach was used to prepare the river management plan (a list of planning team members and resource specialists is included in Appendix A). The planning process provided opportunities for involvement of local, State, Tribal, and other Federal agencies as well as interested citizens in accordance with the National Environmental Policy Act (NEPA) and the Wild and Scenic Rivers Act of 1968, including all amendments.

The river management plan is organized into three separate parts. Chapter 1 is an introduction and overview. Chapter 2 defines management goals, desired future conditions, and management actions that will be applied to the river corridor. Chapter 3 discusses the implementation and monitoring strategy. Appendices include: a List of Preparers, References, Glossary, Campground and Day Use/Highway Parking and Pullout Matrix, and the Wild and Scenic River Legal Boundary Description.

B. Purpose and Need

Congress enacted the National Wild and Scenic Rivers Act in 1968. With this legislation, a system was established for protecting outstanding free-flowing rivers nation-wide. The National Wild and Scenic Rivers Act requires that a river be free-flowing and possess one or more "Outstandingly Remarkable" values. The Act provides for protective management and control of development for rivers included in the system.

In October 1938, the 8-mile segment of the Lower Crooked River between Bowman Dam and State Scenic Highway 27 mile marker 12 (Chimney Rock Segment) was designated by the U.S. Congress as a National Wild and Scenic River and classified as a recreational river area, The Congressional Record indicates that scenic and recreational values within the river corridor boundaries qualify as Outstandingly Remarkable. A resource assessment conducted early in the planning process confirmed these findings and added the fish resource to the list of Outstandingly Remarkable values.

Section 3 ot' the Wild and Scenic Rivers Act (Public Law 90-542, 82 Stat. 907) specifies that a comprehensive management plan will be developed for the Lower Crooked River. The Secretary of Interior, given responsibility for administering the river, delegated this duty to the Bureau of Land Management (BLM) and is mandated to have the plan completed by October, 1992. Because the Bureau of Reclamation (BOR) also manages lands within the river corridor, they are a joint partner in the coordinated planning process.

The joint river management plan will guide management of this designated portion of the Lower Crooked River until it is revised. The Plan serves as a subordinate site-specific activity plan which complements and implements portions of the Brothers/LaPine Resource Management Plan (RMP) and Prineville Reservoir RMP. The Plan will provide protection and enhancement of resource values in the river corridor, and allow public use and enjoyment of those resource values. Overall, the river management plan satisfies the requirements of the National Environmental Policy Act, the Omnibus Oregon Wild and Scenic Rivers Act of 1988, and conforms to planning objectives in the Brothers/LaPine and Prineville Reservoir RMP's.

C. River Description and Historical Perspective

This document provides a comprehensive framework for managing public lands within the Lower Crooked River Planning Area (river corridor) as shown on Map 2. The boundary is an irregular shape designed to include as many of the areas as possible that contain or directly support the identified outstandingly remarkable values associated with the river. The area within the corridor boundary averages 320 acres per river mile as required by the Wild and Scenic Rivers Act.

The Lower Crooked River corridor encompasses 2,560 acres of public and private land along the river from Bowman Dam to State Scenic Highway 27 mile marker 12. The Bureau of Reclamation (BOR) manages one river mile (220 acres), while the Bureau of Land Management (BLM) manages seven river miles (2,300 acres). 40 acres of private land existing within the boundary are under consideration for land exchange between the BLM and the willing landowner. All 2,560 acres are located entirely in Crook Count):. Land ownership is shown in Table 1 and Map 2.

The Federally designated S-mile Chimney Rock segment of the Lower Crooked River is located 12 miles south of Prineville, Oregon. It contains outstandingly remarkable scenic, recreation, and fish values in addition to its important, hydrologic, wildlife, geologic, cultural, vegetation, and ecological resource values. The river meanders through a very scenic, rugged canyon that includes towering basalt cliffs up to 600 feet high, with scattered western juniper growing on its steep hillsides. State Scenic Highway 27, adjacent to the river on the cast bank, is also a National Back Country Byway. Several primitive BLM camping areas and the Chimney Rock Recreation Site are also located on the east bank between the highway and the river. Outstanding fishing opportunities exist for catching rainbow trout, mountain whitefish, and an occasional smallmouth bass.

This segment is also protected as an Area of Critical Environmental Concern (ACEC) as described in the Brothers/LaPine Resource Management Plan. The area has specific management use guidelines focusing on wild and scenic interim management goals and objectives.

Table 1. Lower Crooked River Acreage by Ownership

County	BLM	BOR	Private	Total
Crook.	2,300	220	40	2,560

As a historical note, the Lower Crooked River corridor played a significant role in shaping the lifestyles of those occupying the area. Native American people and early Euroamerican settlers utilized the corridor for travel, lodging and fishing. Ethnographic data indicates that Indian groups belonging to the Penutian and Aztec-Tanoan linguistic groups used the area for hunting and gathering. Early fur traders, immigrants looking for a quicker or easier route west, and soldiers on trail blazing and military expeditions all explored the general vicinity of the Crooked River. Prior to development of Bowman Dam in 3960, difficult access provided remote fishing opportunities for local residents. Construction of Bowman Dam for the Crooked River Project dramatically changed lifestyles for those living in Central Oregon by facilitating economic development in the form of agriculture and tourism. State Scenic Highway 27, constructed concurrently with Bowman Dam, parallels the river and provides easy access for local residents as well as those that are sightseeing during their vehicle tour of the river corridor.

D. Public Involvement

Because of the regional popularity of the river corridor, a well rounded public involvement program was developed to make sure that the management plan would consider the concerns of daily users, local residents, landowners, Crook County, the Stnte of Oregon, other federal agencies, and all others having a stake in how the river is managed. The public involvement program consisted of public meetings, a citizen work group, mailings to interested parties, and informational flyers, as well as ongoing informal meetings with any party requesting them.

Public Meetings - Early in the planning process seven public scoping meetings were held to discuss issues and concerns that interested citizens had regarding the Lower Crooked River. In addition to providing interested parties an opportunity to voice their comments and concerns, attendees were given the opportunity to review the draft resource assessment with a 30-day comment period. All seven meetings were advertised in local and regional media.

On July 17, 1992 the Lower Crooked (Chimney Rock Segment) Wild and Scenic River Draft Management Plan and Environmental Assessment was released for a 45-day public review/ comment period. During the same time period, two public meetings were held (August 17 and 27, 1992) to discuss questions and concerns regarding the Draft Plan. A total of 20 interested individuals attended. In addition, eight written comments were received before the 45-day comment period ended on August 28, 1992. Agencies and other interested publics included: local residents, adjacent landowners, ranchers, Oregon Department of Fish and Wildlife, Confederated Tribes of the Warm Springs, Oregon Trout, Trout Unlimited, and other motivated public participants.

Citizen Work Group - To help ensure that diverse viewpoints were considered during each step of the study, a citizen work group was created. The work group served as an integral part of the planning team, helping to identify issues, determine significance of river resources, develop and refine alternatives for designation and management, and keep their fellow interest group members informed about the planning process.

The work group was composed of 10 representatives (and their alternates) from a wide range of interests concerned about the future of the river: private landowners, ranchers, water right holders, commercial outfitters, anglers, Confederated Tribes of Warm Springs, Oregon Department of Fish and Wildlife, Crook County, Prineville Chamber of Commerce, Ochoco Irrigation District, Oregon Trout, and Oregon Rivers Council.

The work group held its first meeting on May 2, 1991, and met monthly until July. After this period, the work group communicated through mail correspondence. The work group became familiar with the Wild and Scenic Rivers Act and helped develop a list of issues, determine the significance of river resources, develop and refine management alternatives, and represented their constituents well.

Interested Parties - A list of about 50 people, agencies, and groups was compiled to make sure that other interests were kept informed of the planning process. Interested parties were mailed copies of draft planning documents, future announcements of work group or interdisciplinary team meetings, and two information flyers.

Information Flyers - Two Wild and Scenic information flyers (High Desert River News) were prepared and mailed to hundreds of local and regional residents, interest groups, and government agencies. The first, published in July 1991 during the issue identification process, let people know about the planning process and how they could get involved. The second, published in April, 1992 was designed to provide an update of the planning process and express the availability of final resource assessments and draft alternatives. Both information flyers also contained information on other rivers located in the central Oregon area.

E. Issue Summary

Six key issues guided the development and evaluation of Lower Crooked River management alternatives. These issues were established during the initial stages of work group participation and later during public scoping meetings. The six key issues presented in this section were formulated by consolidating similar issues into like categories after ensuring that issues were within the legal authority of the managing agencies, that all issues had a variety of options, and that the issues had some kind of public controversy. The Management Plan as defined in Chapter 2 resolves these key issues.

The following list represents the general key issues utilized in the development of the plan. Refer to the Draft Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan and Environmental Assessment for further analysis of these issues.

Issue 1 How shou Id recreation opportunities be managed?

Issue 2 How should camping be managed to best meet public demand while protecting resource values?

Issue 3 How should public access be managed?

Issue 4 How should instream and riparian resources be managed?

Issue 5 How should upland resources be managed?

Issue 6 How should public information and education be managed?

F. Alternative Summary

Five comprehensive alternatives for managing the Lower Crooked River corridor were developed and analyzed in the Draft Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan and Environmental Assessment in accordance with the Wild and Scenic Rivers Act of 1968, Federal Land Policy and Management Act of 1976, and the National Environmental Policy Act of 1969.

Together as a whole, the alternatives represented a reasonable range that addressed issues identified during the planning process. The purpose of the alternatives was to present and evaluate various options for managing, protecting, and enhancing public resources within the river corridor. Themes (general goals) were developed for each of these alternatives and are described below.

Alternative Themes

Alternative 1 (No Action) Continue current management direction for federal lands within the wild and scenic river corridor.

Alternative 2 Management would be much like Alternative 1, except campground, day use, and access development would be minimized to retain natural values. Basic site protection measures would be taken to resolve resource degradation.

Alternative 3 This alternative focuses on increased resource protection and enhancement, centralized use areas, and facilitating for specific high use recreation opportunities. Site protection measures in centralized use areas would protect natural values, resolve resource degradation, and encourage appropriate use in these areas.

Alternative 4 Management would be much like Alternative 3, except most recreation opportunities would be maximized. Those activities that conflicted with the highest and best use of the river corridor would be limited. Development would be the maximum allowable under the “Recreation” classification for wild and scenic rivers.

Alternative 5 (Preferred) The Preferred Alternative primarily focuses on management actions discussed in Alternatives 2 and 3. Development would be minimized to retain natural values. However, specific centralized use areas would be designated and modified to adequately facilitate high use recreation opportunities such as camping and fishing.

The Preferred Alternative (Alternative 5), found in the Draft Lower Crooked (Chimney Rock Segment) Wild and Scenic River Management Plan and Environmental Assessment and in Chapter 2 of this document, was chosen as the best management alternative because it offers the widest range of' beneficial uses of the environment with&t degradation and provides the greatest overall protection and enhancement of the riser corridors outstandingly remarkable and significant resource values.

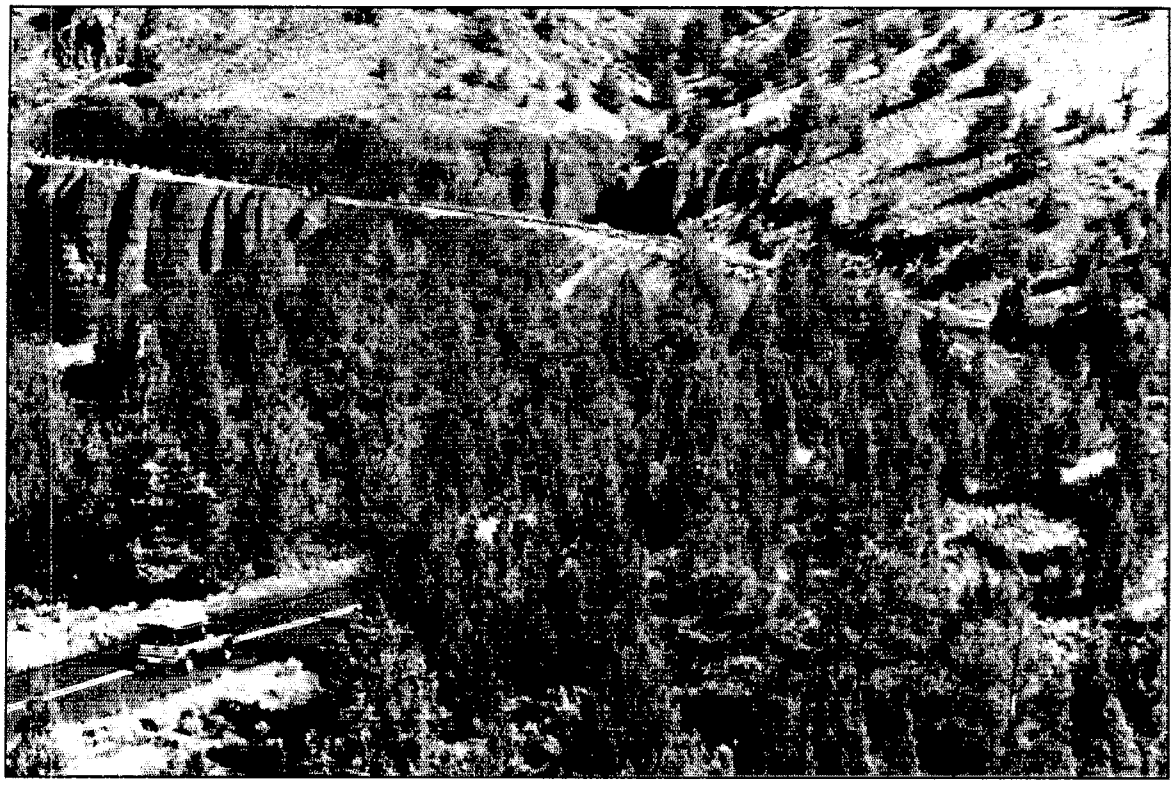
G. Related Federal, State, and Local Planning and Management Responsibilities

The Wild and Scenic River Management Act requires that a comprehensive river management plan. be prepared to provide for the protection of river values. Therefore, it is necessary to insure that all entities that play a role in management of the river are included in the planning process. A variety of federal, state; and local entities have responsibilities to manage resources within the river corridor. Some of these include but are not limited to: BLM, BOR, Oregon Department of Fish and Wildlife, Oregon Department of Transportation, and Crook County. Special emphasis programs, such as noxious weed control, and fish and wildlife enhancement projects are routinely coordinated among agencies, landowners, and other affected publics, It is expected that these resource relationships be strengthened as a result of the management plan implementation.

Bureau of Land Management (BLM)

In 1989, the BLM completed the Brothers/LaPine Resource Management Plan, which was a comprehensive land use or Resource Management Plan (RMP) for all BLM lands and minerals in Crook County, and extending into Deschutes and Jefferson Counties. The total BLM surface acreage at the time of RMP completion was over 1 ,111,100 acres, including all BLM lands within the Lower Crooked River planning area. BLM manages more than 90 percent of the lands within the river corridor. 'The Resource Management Plan included an environmental impact statement which documented the environmental consequences of the plan as well as numerous intergovernmental relationships. The plan established land use goals and objectives for Bureau administered lands, minerals, soils and watershed, rangeland, forest and woodlands, fish and wildlife habitat, recreation, and cultural resources. It incorporated management direction for roads and access, utility and transportation corridors, fire control, noxious weed control, Areas of Critical Environmental Concern, and continued interim management of wilderness study areas. Copies of the approved Brothers/LaPine Resource Management Plan are available from the Bureau's Prineville District Office.

The Lower Crooked River corridor lies within an Area of Critical Environmental Concern (ACEC) and has specific management actions, in addition to interim Wild and Scenic River guidelines, that protects resources within its boundary. These management actions can also be found in the Brothers/LaPine Resource Management Plan.



Visitors enjoy driving for pleasure on the Back Country Byway

Eight of 43 miles of State Scenic Highway 27 within the wild and scenic river corridor were designated a component of the National Back Country Byway system by the BLM in 1989. The Lower Crooked River Back Country Byway extends from the City of Prineville to State Highway 20, It is paved from Prineville for 21 miles, with the remainder an all-weather gravel road.

The BLM byways program meets some of the national demands for pleasure driving opportunities, enhances recreation experiences and helps inform visitors about the values of public lands.

The BLM, BOR, U.S. Forest Service, Oregon Department of Fish and Wildlife, Soil Conservation Service, and other interested groups are working to improve aquatic habitat in the Crooked River watershed. Cooperative work is continuing between these and other agencies in implementing riparian improvement projects.

The U.S. Fish and Wildlife Service administers the Endangered Species Act of 1973 (as amended). The BLM consults with that agency to obtain a formal biological opinion on appropriate courses of action when it is determined that a threatened or endangered species, or its critical habitat, may be affected by a proposed management action. Resulting decisions could mean the proposed action be modified or abandoned.

Bureau of Reclamation (BOR)

In February, 1992 the BOR released the Draft Prineville Reservoir Resource Management Plan and Environmental Assessment for public review. Future management of Reclamation lands adjacent to and within the river corridor is subject to the final outcome of the Reservoir Resource Management Plan. Currently, BOR's resource management policy is to provide a broad level of stewardship to ensure and encourage resource protection, conservation, and multiple use. Management practices and principles, in accordance with existing laws regulations, and policies are to be applied to provide for the protection of fish, wildlife, and other natural resources, cultural resources, public health and safety, public access, and a wide variety of outdoor recreational opportunities to accommodate the increasing public demand to utilize Reclamation's land and water areas.

Reclamation lands under BOR jurisdiction acquired or withdrawn for the construction of Arthur R. Bowman Dam and Prineville Reservoir encompass a total of 9,109 acres. Of this total, 220 acres of BOR lands are located along the Lower Crooked River within the river corridor boundary. BOR proposes to manage this area as defined under the Lower Crooked Wild and Scenic River Management Plan.
The BOR recently completed the environmenta t compliance documents required for the "Safety of Dams" proposed modification of Arthur R. Bowman Dam located directly upstream from the corridor boundary. Construction is scheduled for 1994-95.

Reallocation of the uncommitted storage space in Prineville Reservoir has been an unsettled issue since the late 1970's. Until Congress reauthorizes the Crooked River Project, all of the active storage could be placed under contract for irrigation use as the demand arises. At this time, no reservoir space is specifically allocated for recreation, fish, or wildlife purposes. Under the storage reallocation proposed by Reclamation, 54,700 acre-feet of Prineville Reservoir storage space would be allocated to reservoir and downstream fish, wi ldlife, and recreational purposes.

The Congressionally authorized minimum flow in the Crooked River below Bowman Dam is 10 cubic feet per second (cfs). However, in order to benefit the downstream fishery, Reclamation has been releasing 75 cfs below the Dam whenever there is sufficient water in the reservoir (30 cfs during low water years).

The Confederated Tribes of the Warm Springs Reservation (CTWS)

The entire Lower Crooked River planning area is located outside the Warm Springs Reservation and was ceded to the U.S. Government by the Tribes and Bands of the Middle Oregon through ratified treaty. The treaty reserves to the Indians rights and priveleges expressed in the treatv. The interests of contemporary Native Americans include the protection of Indian burial grounds and other sacred sites and the perpetuation of certain traditional activities, specifically root gathering and fishing.

The Confederated Tribes of the Warm Springs are consulted by Federal, State, and local governments as recommended by the National Environmental Policy Act, the National Historic Preservation Act of 7966 (as amended), and as required by the Archaeological Resources Protection

Act of 1979 (as amended). The BLM, BOR, and State also contact and consult with the appropriate Tribal representatives and Bureau of Indian Affairs agencies on projects or activity planning on BLM, BOR, or State administered lands that may affect Tribal interests, treaty rights, or traditional use areas within Ceded Lands.

Oregon Department or Fish and Wildlife (ODFW)

The ODFW is responsible for the management and wise use of the State's fish and wildlife resources. The Department is charged with maintaining optimum numbers of indigenous fish and wildlife, and to ensure that no species are threatened with extinction. The Department is responsible for developing and administering fish and wildlife regulations. The ODFW, BLM, BOR, and other interested groups work cooperatively in riparian habitat enhancement projects, fish and wildlife enhancement projects, and Crooked. River basin planning efforts. ODFW routinely monitors the Lower Crooked River angling effort and harvest, as well as hunter effort and harvest.

Oregon Department of Transportation (ODOT)

The ODOT is responsible for planning, designing, reconstructing, signing, and maintaining State highways for the safety and use by the public. ODOT is also responsible for the management of motor vehicle use on State Highways. These responsibilities include State Scenic Highway 27, of which a portion is located within the Lower Crooked Wild and Scenic River corridor. ODOT must prepare a section 4(f) evaluation under the Federal-Aid Highway Act of 1968 for any federally funded highway project which requires the use of any publicly owned land used as a recreation area, beyond the existing highway improvement. Since the Lower Crooked Wild and Scenic River is classified as a recreation river, it has been determined that the 4(f) requirement is applicable within its boundaries. Permits are required for all access points along the highway.

Oregon Water Resource Department (WRD)

The WRD is responsible for management and allocation of the State's water resources. The Water Resource Commission typically develops policy through the preparation of basin plans for each of Oregon's 18 river basins. Through basin plans, the WRD classifies streamflow for certain purposes, such as domestic use, industry, municipal, recreation, or irrigation. The plans are adopted as administrative rules which reflect how water is currently used, and how its future use will be allocated. Three State departments may apply for instream rights: Parks and Recreation, Fish and Wildlife, and Environmental Quality. Once granted, the instream water right is held by WRD in trust for the people of Oregon.

Division of State Lands (DSL)

DSL is responsible for the management of the beds and banks of navigable waterbodies. DSL regulates removal, fill, or alteration of 50 cubic yards or more of material in all waterways (including lakes and wetlands) in the State. The DSL is also responsible for managing certain lands for their maximum benefit to the common school fund, consistent with best conservation practices, Refer to Chapter 2 for navigability information.

Department of Environmental Quality (DEQ)

The DEQ is responsible for the implementation of the Statewide Water Quality Management Plan, which establishes standards of water quality for each of WRD's 18 basins in Oregon. Beneficial uses of rivers and streams that are to be protected by DEQ are: public, private, and industrial water supplies, irrigation, livestock watering, anadromous fish passage, salmonid rearing and spawning, resident fish and aquatic life, wildlife and hunting, fishing, boating, and aesthetic quality. Dissolved oxygen is to be kept to the highest possible levels. Temperature, bacteria, dissolved chemical substances, and toxic material are to be maintained at the lowest possible levels. The DEQ anti-degradation policy states that high quality waters are to be protected from degradation unless the Environmental Quality Commission finds it necessary to make an exception based on economic or social needs. DEQ also maintains water quality monitoring stations throughout Oregon.

Oregon State Police (OSP)

The Department of State Police was created to serve as a rural patrol and to assist local law enforcement agencies. This agency is empowered to enforce all Oregon statutes without limitation by county or other political subdivision. State Police activities are coordinated with local and Federal law enforcement agencies and assisted by the general public. For example, the TIP Program (Turn in Poachers) has been established in cooperation with the Oregon Department of Fish and Wildlife and the Oregon Hunter's Association. This program is designed to involve citizens in reporting wildlife law violations.

Crook County

The Omnibus Oregon Wild and Scenic Rivers Act of 1988, the Federal Land Policy and Management Act of 1976, and the National Environmental Policy Act of 1969 (as amended) all encourage or mandate intergovernmental coordination, consultation and, where possible, plan consistency. Since the Wild and Scenic Rivers Act envisioned a high reliance on local comprehensive plans to achieve the objectives of the Act, a review and analysis of the adequacy of the existing plans for Crook County was critical.

The Crook County comprehensive plan was acknowledged by the Land Conservation and Development Commission (LCDC) in 1978 when the original plan was adopted. The required periodic review and amendment process is currently underway and is expected to be completed by January 1993. The BLM and BOR are coordinating efforts with Crook County to ensure consistency between planning efforts. Expected amendments or revisions may include changes in policy statements which have been superseded by Federal or State law. The existing plan acknowledges the areas recreation values and protects scenic resources throughout the corridor. The absence of growth and limited private lands within the corridor has allowed the rims to remain free from development. In summary, the current Crook County plan provides a moderate degree of protection for river-related resource values.

Crook County provides year round enforcement of state and local laws within the corridor. They also provide enforcement of some federal laws and regulations within the river corridor through written law enforcement agreements with the BLM and BOR.

Ochoco Irrigation District (OID)

Although ultimately managed by the BOR, the OID manages flow releases from Prineville Reservoir. The District is key in ensuring that water right holders and users receive their water allotment. OID works closely with the BOR, BLM and ODFW to ensure that river-related resources are not impacted.

Prineville/Crook County Chamber of Commerce

The Prineville/Crook County Chamber of Commerce has identified tourism and recreation as increasing sources of income for the local community. The Chamber helps promote tourism and provides a vital link for visitors from outside the local area. As a result of the designated Back Country Byway the BLM, BOR, and Prineville Chamber of Commerce would enter into a memorandum of understanding to better manage vehicle touring on Highway 27 within the river corridor.

II. Management Plan

A. Introduction

The Wild and Scenic Rivers Act requires that a comprehensive River Management Plan be prepared to provide for the protection of river values. The act requires that the plan address resource protection, development of lands and facilities, user capacities, and other management practices as needed. The Act directs that the River Management Plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands.

The Lower Crooked River Management Plan will serve as a subordinate site-specific activity plan which complements and implements portions of the Brothers/LaPine Resource Management Plan (RMP) and the Prineville Reservoir RMP. These RMP's provide direction for all resource management programs, practices, uses, and protection measures on lands managed by the Bureau of Land Management and the Bureau of Reclamation in the general vicinity of the river corridor.

It has been determined that no significant impact would result from implementation of management actions as defined in this plan. Site-specific project implementation may require further NEPA analysis to insure protection of natural resources.

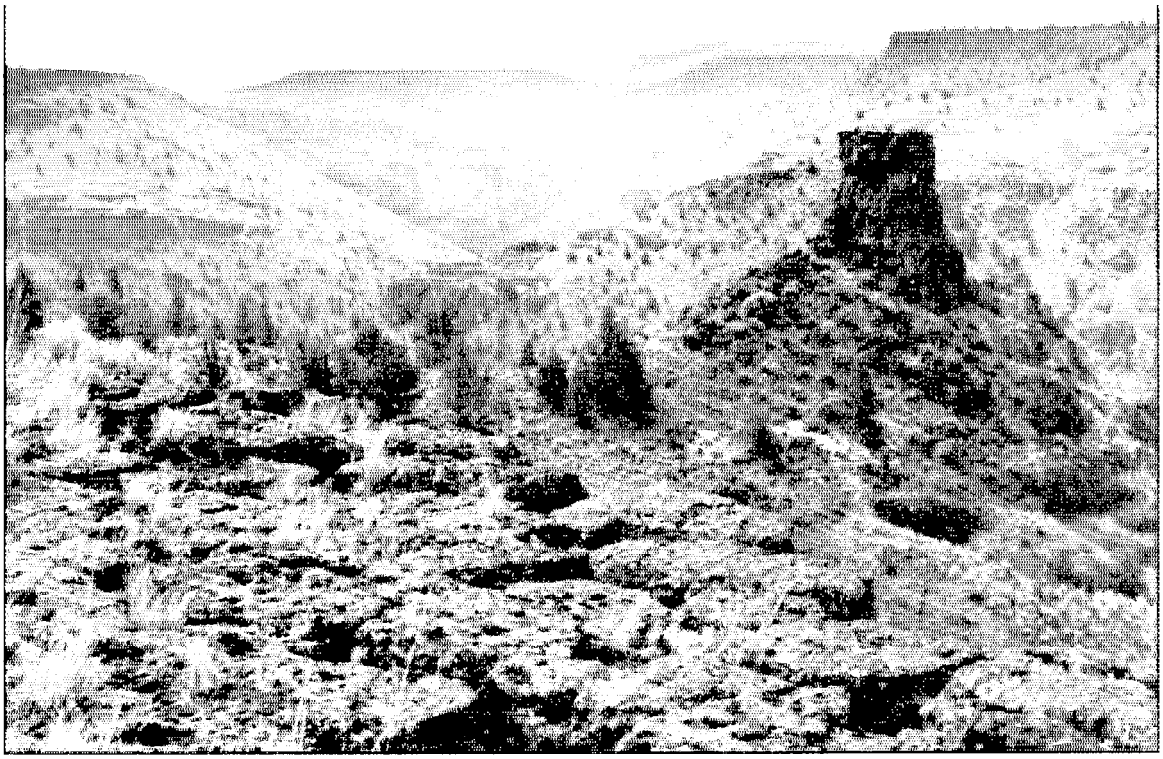
B. Outstandingly Remarkable Values

The Resource Assessment validated the Congressional Record that states scenic and recreation are outstandingly remarkable values. In addition, the Resource Assessment recognized fishery resources as an outstandingly remarkable value within the Lower Crooked River corridor. Other river-related resources such as geology, water quality and quantity, wildlife, cultural, vegetation and ecology are very significant as supporting elements but were not determined to be outstandingly remarkable.

Scenic

This river canyon is unique in that its geologic characteristics represent a smaller, more accessible example of the Lower Deschutes and John Day basin formations. Scenic features within the canyon are generally characterized by a combination of massive walls and escarpments of deeply eroded rust-brown basalt that tower above the meandering blue-green Lower Crooked River, lush green riparian vegetation that changes color with each season, western juniper scattered on the steep hillsides and the excitement of observing eagles, osprey and other wildlife.

State Scenic Highway 27, provides views of the spectacular geologic formations and eroded lava flows throughout the narrow, winding canyon corridor. It has received awards from the Federal Highway Administration for its natural appearing construction and its compatibility with the surrounding environment. The Lower Crooked River, adjacent to the highway, led to the recent designation of the route as a National Back Country Byway.



One of many scenic vistas within the river corridor

Recreation

The area is readily accessible and provides for a variety of year-round river-related recreational opportunities such as fishing, hiking, camping, picnicking, hunting, trapping, photography, wildlife observation, boating, and vehicle touring. A recent BLM survey indicates that the river receives 29,750 visits annually from geographically diverse origins. Recreational fishing is by far the highest engaged in activity on the river. Excellent opportunities exist for catching rainbow trout, mountain whitefish, and an occasional smallmouth bass.

Easily accessible campgrounds within the river corridor are the primary destination for many campers. Each campground offers a unique experience providing opportunities ranging from group interaction to isolation and solitude. These areas are also very popular for those visiting the western end of Prineville Reservoir. The local and regional popularity of these camping areas and the river itself draws numerous fishermen, picnickers, and other day users during spring and summer months. These attractions and others are widely publicized through State Scenic Highway and National Back Country Byway publications.

Fishery

Professional fish biologists have determined that the fish resource in the Lower Crooked River corridor is an Outstandingly Remarkable value based on its genetic diversity and Red Band trout

(T&E Species) adaptability to a wide variety of habitats. A recent BLM survey identified fishing as the number one recreation activity within the river corridor. Stories and pictures of huge catches are found in historical records of the early 1900's. The fishery is not currently in optimal condition, yet has the potential to provide "blue ribbon" fishing opportunities in the future. Although more popular for local residents, fishermen have been known to come from as far away as Russia to experience the excitement of catching a Crooked River trout.

C. Management Goals

The overall goal of the management plan for the river corridor is to meet the intent of the Wild and Scenic Rivers Act by maintaining the current character of the area, and provide long-term protection and enhancement of its outstandingly remarkable scenic, recreation and fishery resource values.

Two additional goals were developed as a result of public involvement. They include:

1. Provide for appropriate recreational use and appropriate public access while maintaining the wild and scenic nature of the river.

2. Foster cooperation among adjacent landowners, managing agencies, and the public to manage and enhance the outstandingly remarkable river values.

D. Desired Future Conditions

Desired future conditions present a vision of the desired future state of a specific area. The desired future conditions that follow were developed for the Lower Crooked River corridor resources after public input by work group and interdisciplinary team members. They help provide a focus for ongoing management.

Scenic

A combination of appropriately screened developments, varied plant communities, seasonal river flows supporting an abundance of wildlife, and varied depths of undisturbed canyon walls leave this corridor in excellent condition for the viewing pleasure of campers and those travelling along the Lower Crooked River Back Country Byway (State Scenic Highway 27).

Recrea tisn

The corridor experiences continued use and enjoyment of a variety of Roaded Natural and Semi-Primitive Non-Motorized recreation opportunities that are compatible with the protection and enhancement of the river's natural resources.

Geology/Minerals

Geologic formations that support scenic river values are protected. Mineral extraction continues to be in compliance with Federal, State, and County ordinance.

Prehistoric, Historic, and Traditional

The river corridor has been surveyed for cultural resources. Preservation through protection, enhancement and interpretation of cultural sites and recognized traditional use locations continue to be managed for their values and religious importance.

Hydrologic

Cooperative efforts among managing agencies ensure compliance to Federal and state water quality standards while water quantity maximizes other resource values as well as agricultural and domestic needs downriver. Unique hydrologic features that support scenic river values are protected and enhanced.

Fishery

Seasonal flows support quality habitat for fish and aquatic organisms. The habitat is in optimum condition for natural diverse fish production.

Wildlife

Native wildlife populations are healthy and abundant. The habitat is in optimum condition for natural diverse wildlife production.

Botanical/Ecological

Native upland and riparian vegetation communities are in outstanding condition lending to significant biological diversity within the corridor.

E. Management Actions

Management actions for the Lower Crooked Wild and Scenic River are derived from Alternative 5 (Preferred) and Management Actions Common to all Alternatives as defined in the Draft Management Plan and Environmental Assessment. These actions are designed to resolve major issues, attain the desired future conditions, and protect and/or enhance outstandingly remarkable values. More specifically, they focus on minimizing development to retain natural values, while designating and modifying specific centralized use areas to adequately facilitate high use recreation opportunities such as camping and fishing. All actions are in conformance with the Wild and Scenic Rivers Act, Brothers/LaPine RMP, and the Prineville Reservoir RMP.

Recreation

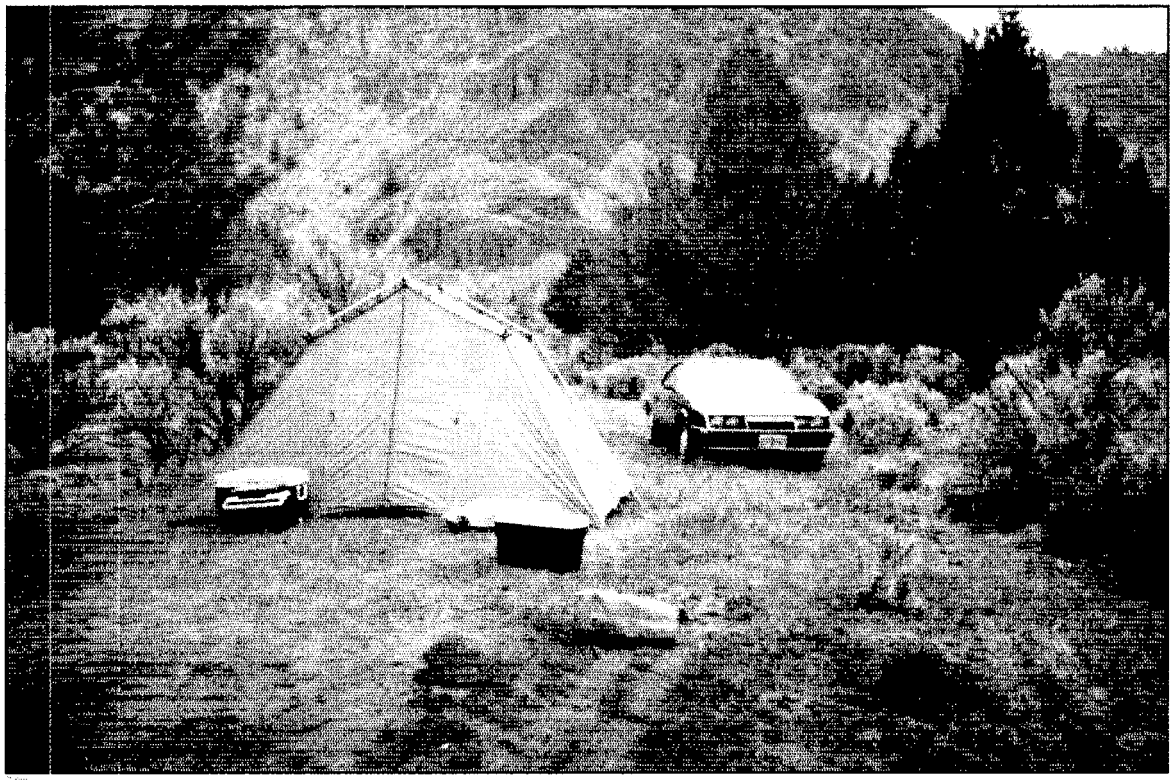
- Manage for a wide diversity of year-round. recreation activities. There are several lesser pursued recreational uses (swimming, boating, rockhounding, and hunting) that are seasonally appropriate within the corridor.

- Designate and stabilize non-motorized river access trails on the east side within the riparian areas. Designate one upland access trail on the east side (Rim Trail). Re-route and rehabilitate all unnecessary trail networking. Other trails will be developed as described under the Public and Administrative Access section to protect resources, promote appropriate use, and create an awareness of public land resources.

- Horses will be limited to designated roads and trails on the east side and encouraged to use user developed trails on the west side. Horse access areas will be identified at Upper Palisades, Rim Trail Trailhead, and Upper Poison Butte.

- Use of bicycles and will be limited to designated roads.

- Limit discharge of firearms and hunting to official state waterfowl, big game, and upland game seasons. BLM and BOR will establish a supplementary rule (43 CFR, part 8360) to prohibit



Car camping is one of many popular recreation activities within the river corridor

discharge of firearms within the wild and scenic river boundaries except during these open hunting seasons. ODF&W will be encouraged to implement a similar rulemaking. Federal and State firearm use rules will remain in affect during these open seasons.

- Implement a fire closure between June 1 and October 15 on all public lands within the river corridor. Campfires will be limited to designated overnight campgrounds within developed fire rings or metal fire pans all other times of the year. Users will be required to provide their own firewood. Rock fire rings will not be allowed.

- Existing Roaded Natural recreation opportunities will be maintained between the cast side of the river and the east edge of Highway 27 using basic sits protection measures to protect those areas experiencing heavy degradation. Conflicts between recreationists will be minimized by designating more specific use areas and utilizing interpretive efforts. Semi-Primitive Non-Motorized recreation opportunities will be maintained on the west side of the river and east of Highway 27.

- BLM will be lead agency managing commercial and competitive recreation use within the corridor. Special land use requests and concessions will require a special land use permit. Commercial guides and outfitters will be required to obtain a Special Recreation Use Permit. The number of permitted guides and outfitters will remain discretionary dependent upon use levels and their impacts on outstandingly remarkable values. All special use permits will be analyzed for their consistency with wild and scenic river management objectives.

- Managing agencies will conduct visitor use, angler preference, and statistical creel surveys to analyze current fishing regulations and related recreational pursuits. Hunting and trapping regulations will continue to be evaluated by the ODF&W for appropriate regulations.

- Low impact animals such as llamas will be allowed in the same areas that people use unless it was determined that the activity created adverse impacts to outstandingly remarkable values.

- Monitor and identify high impact recreation opportunities and create special use limits, use areas, and/or restrictions for them. Recreation opportunities will be limited to specific geographic areas or excluded if resource monitoring determined that recreation use had a significant, adverse impact on outstandingly remarkable values.

Camping and Day Use

- Castle Rock, Stillwater, Lone Pine, Lower Palisades, Chimney Rock, Post Pile, Cobble Rock, Poison Butte, and Big Bend campgrounds will he redesigned and developed with basic site protection measures taken. These areas will receive upgrades such as pit toilets, picnic tables, trash cans, sink water holes, and designated road networks and campsite areas as shown in Appendix D. Existing facilities at Chimney Rock will be rehabilitated. Campground expansion could occur if site monitoring and visitor use data indicate the need.

- Greenwood, Upper Lone Pine, Upper Palisades, Upper Poison Butte, and the Rim Trail Trailhead will be developed as day use areas with basic site protection measures and facilities as defined in Appendix D.

- Overnight camping will be limited to designated campgrounds only. Camping in day use areas and on the west side of the river will not be permitted. Use areas outside of designated campgrounds and day use areas experiencing significant degradation will be closed off and rehabilitated.

- Ail new development will consider barrier free access as law requires. Install challenge level 1 barrier free facilities at Chimney Rock and Big Bend. Two campsites will be developed in each of these campgrounds to facilitate easy access within the use areas and to toilet facilities. An easy access, asphalt surface river access trail with a small fishing dock will be developed within Chimney Rock. All other campgrounds and day use areas within the corridor will have challenge level 2 barrier free facilities incorporated into their design. Challenge level 2 fishing access will remain available within Stillwater campground. Special use facilities for any disability will be installed as determined necessary.

- All campgrounds and day use areas will be identified with appropriate recreation site signs. Signs will be installed within these areas to ensure appropriate use of facilities and use areas as shown in Appendix D.

- Overnight camping fees will be required at Castle Rock, Stillwater, Lone Pine, Lower Palisades, Chimney Rock, Cobble Rock, Post Pile, Poison Butte, and Big Bend campgrounds.

- Facility development will remain within criteria standards for Roaded Natural and Semi-Primitive Non-hlotorized classifications as previously discussed. Construction and management of facilities will require compatibility with corridor landscape characteristics. Future facilities will be developed in upland areas above the high water mark.

- Operations and maintenance of campground facilities will continue at whatever level necessary to meet BLM standards consistent with level of use, development, and maintenance standards.

- The managing agencies will develop a cooperative systetn for gathering and analyzing camping and day use data to ensure that management objectives are met. Visitor use surveys will be conducted to monitor user values and needs.

- Limits of acceptable change criteria will be utilized to evaluate necessary management actions for overnight campsites and day use areas. Degraded campsites and day use areas within both riparian and upland areas needing rehabilitation will be closed until vegetative recovery has occurred. Once rehabilitation is complete, camping or day use may be allowed if the sites are capable of sustaining use and that use is consistent with management objectives.

Public and Administrative Access

- Redesign and harden all campground and day use entrance road aprons with asphalt.

- Vehicle barriers such as treated posts and large rocks will be installed along sections of the highway adjacent to campgrounds to discontinue unnecessary campground and day use area access.

- Campground network roads and campspurs will be redesigned and surfaced with gravel to reduce resource damage, congestion, and safety problems and will consider changes in drainages and user need.

- Designated roads outside of campgrounds and day use areas will be surfaced with gravel where needed to protect resources. Unnecessary access roads within the corridor will be closed and rehabilitated. New road construction will not be allowed on the west side of the river or east of Highway 27. The Quarry area will be closed to public vehicle access. An administrative gate will be installed across the dam access road, south of the cement pad, within Big Bend campground. This gate will be opened to vehicle access between October 1 and May 1 each year.

- The BLM will increase emphasis on implementation and enforcement of decisions in the Brothers/LaPine Resource Management Plan regarding motorized vehicle access within the corridor. Motorized vehicles will be limited to designated roads, parking, camping, and day use areas.

- Day use parking for fishing and sight-seeing access will continue all along Highway 27. Specific day use parking and pullout areas will be identified along Highway 27 and paved with asphalt as shown in Appendix D. These areas will be widened and appropriately signed to encourage use. Other pullout areas and adjacent river access trails experiencing heavy use and degradation will be stabilized using basic site protection measures and surfaced with gravel where needed. Unnecessary trails will be closed and rehabilitated.

- Access along State Scenic Highway 27 will be managed by Oregon State Department of Transportation. Speed limits and parking along the highway will remain subject to state traffic laws.

- All river access areas that involve vehicle traffic will be re-routed to designated roads and parking areas outside the riparian area and rehabilitated.

- Specific areas will be designated for boat launching/landing at Big Bend, Lone Pine, Castle Rock, and just south of the Chimney Rock area. Except for boat launching/landing, vehicles will not be allowed to enter the river. Small boating devices such as rubber inflatables will be allowed to enter the river at any point by means of walk-in access.

- River access areas experiencing significant degradation from foot traffic will be re-routed and rehabilitated. Other river access areas will be maintained to reduce further degradation. Major

river access points originating in campgrounds and day use areas will be stabilized with gravel and have designated/signed trails leading from parking areas.

- No vehicle access will be allowed on the west side. Direct vehicle river access areas that facilitate fording of the river will be re-routed and rehabilitated. The west side will only be accessible by non-motorized traffic across the river or from the rim.. No trail development will occur on the west side.

- User developed trails on the east side of the river that show significant impact to the riparian or upland environment will be re-routed and rehabilitated.

- Chimney Rock campground with have one barrier free designated trail for river access. This trait will be surfaced with asphalt.

- The 4.5 mile non-motorized Rim Trail leading from the Rim Trail Trailhead along the rim and back down to Upper Palisades will be developed. This trail will be identified with trailhead signs and other signs to encourage appropriate use.

- The west side user developed trails will remain in their primitive state and be limited to horse and foot traffic only.

Instream and Riparian Resources

- The Lower Crooked Wild and Scenic River will be preserved in its existing free-flowing condition without impoundment, diversion, channelization, rip-rapping, or other modifications of the river that adversely affect the outstandingly remarkable values for which the river was designated.

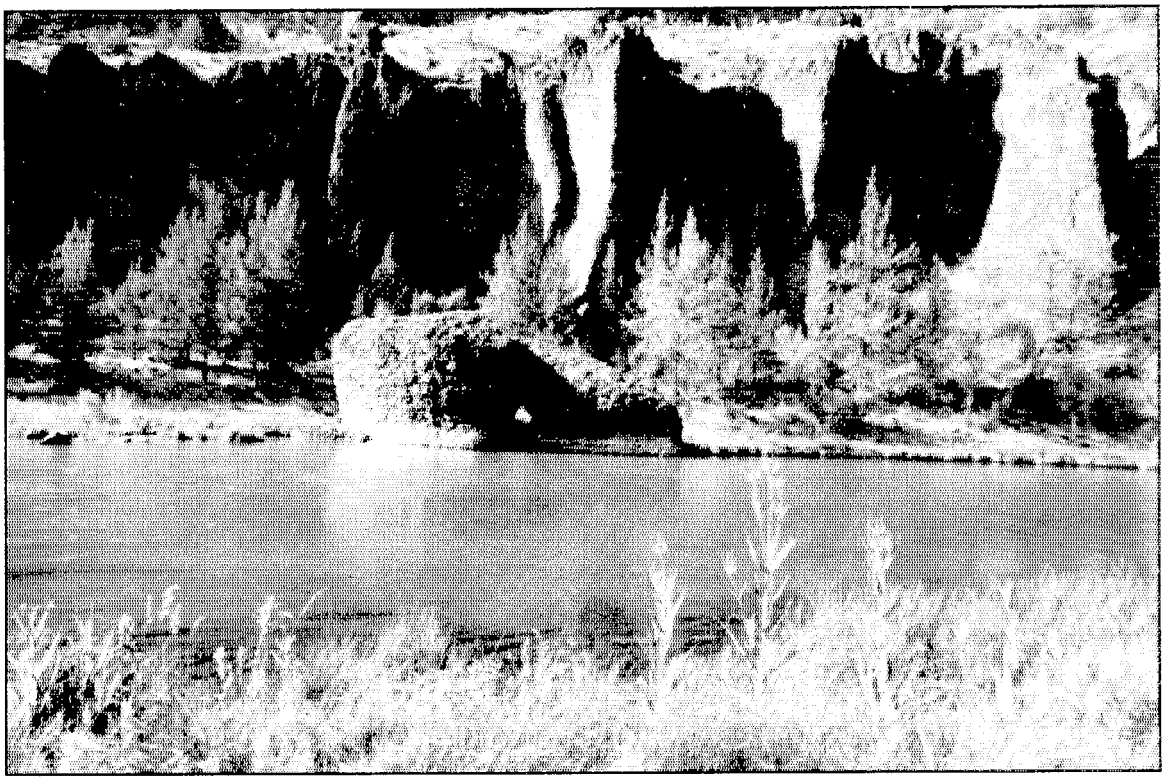
- 'The BOR will continue operations and maintenance of Bowman Dam to ensure non-impairment of outstandingly remarkable values within the river corridor.

- The BOR will continue a minimum flow of 75 cfs during winter months (30 cfs during drought conditions) when feasible. This will occur until an alternative minimum flow is biologically determined or compelling circumstance dictates otherwise.

- The BOR will operate Bowman Dam to ensure that flow releases below 10 cubic feet per second (cfs) do not occur. Flood control operations will limit outflow from the reservoir so as to not exceed 3,000 cfs.

- Coordination will occur with appropriate agencies to allow occasional maximum flood releases up to 3,000 cfs during spring months to resemble natural flooding. Managed flooding will occur during "good water" years unless normal dam operation dictates otherwise.

- The managing agencies will continue the ongoing cooperative effort to conduct an instream flow study that will be used to biologically determine what reservoir flow releases are necessary to protect or enhance the downstream fishery.



Typical view of the Lower Crooked River at river's edge

- The managing agencies will recommend an appropriate flow regime once quantifiable flows can be determined as a result of synthesizing the Prineville Reservoir storage reallocation plan, Deschutes Basin Investigation Report findings, instream flow study results, and other applicable flow information.

- Coordination will occur with DEQ to enforce water quality non-degradation policy.

- The Crooked River below Prineville Reservoir will be managed as a basic yield "wild trout" fishery until ODF&W determines there is a need for change based on monitoring and creel surveys.

- The managing agencies will continue to cooperate with ODF&W in fish enhancement projects.

- The managing agencies in cooperation with ODF&W will continue managing for natural diverse fish production while focusing on resident redband rainbow trout and hatchery fingerlings that enter the river through the dam outlet works and spillway.

- The managing agencies will cooperate with ODF&W and other interested groups to evaluate a long-term restoration strategy to restore anadromous fish.

- When necessary, the managing agencies in cooperation with ODF&W will construct natural. appearing instream structures to enhance fish habitat diversity and other river related resource values. New fish habitat structures or modifications will be allowed within the high water channel only if they enhance river related resources.

- Removal of woody debris will not be allowed.

- The riparian zone will be managed to achieve proper functioning ecological condition. Riparian enhancement projects will be coordinated with ODF&W and other interested groups and analyzed on project by project basis to rehabilitate severe riverbank erosion.

- Natural methods of bank stabilization such as planting native vegetation and placement of downed natural woody debris will be required under most circumstances. Stream bank erosion control, diversions, and other bank protection structures will be allowed if they enhance river resources, reduce existing impacts and are natural in appearance. Juniper rip-rap could be placed in areas where severe cut-bank erosion is occurring. Mechanical means of vegetation management in the riparian area will be encouraged (i.e. hand grubbing of noxious weeds).

- Introduction of non-native plant species will be allowed if found to enhance riparian related values.

- Prescribed juniper cutting could occur in areas where upland vegetation encroachment is adversely affecting the riparian zone.

- Prescribed fire could occasionally take place to encourage native riparian vegetation growth and maintain consistency of natural aesthetics within the canyon.

- The managing agencies in cooperation with ODF&W will develop a consistent and well coordinated inventory, management plan implementation, funding and monitoring program for instream and riparian resources along the river corridor to ensure that management objectives are met.

- Use of chemicals in riparian areas for noxious weed control will be prohibited.

- Livestock grazing within the riparian area will be discontinued by withdrawing the River Pasture from the Prineville Allotment (No. 5137). Short-term spot grazing may be allowable if determined to be the best vegetation management tool to meet plan objectives. Management will occur as discussed in the Scenic and Upland Resources section below.

Scenic and Upland Resources

- The recreation management setting contributing to scenic values will be the Recreation Opportunity Spectrum (ROS) classification of Roaded Natural between the east side of the river and the east edge of Highway 27; and Semi-Primitive Non-Motorized on the west side of the river and east of Highway 27.

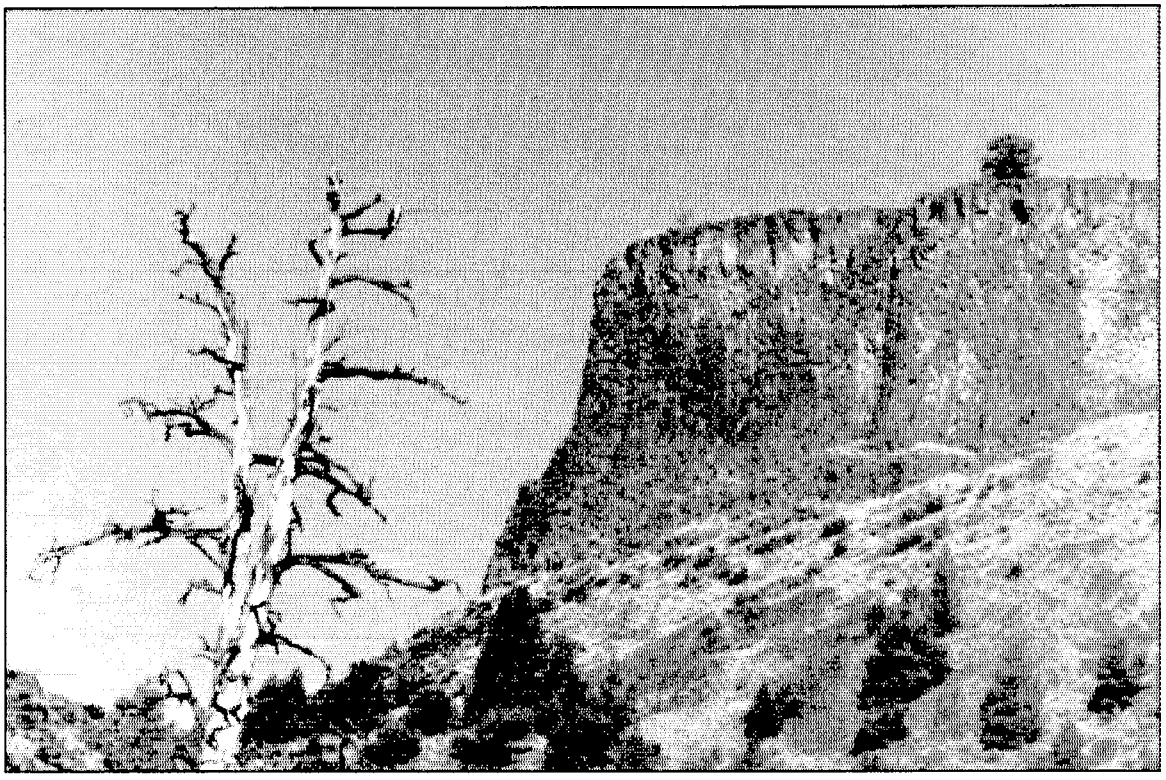
All lands within the wild and scenic river corridor will be managed to protect, or where possible enhance Visual Resource Management (VRM) classifications to retention, primarily on the west side of the river and east of Highway 27, or partial retention within the primary use areas between the east side of the river and Highway 27.

The managing agencies will utilize a combination of mechanical vegetation control strategies while focusing on prescribed fire and juniper thinning to provide maximum wildlife habitat diversity, a healthy ecosystem, and protection of scenic values.

The managing agencies will maintain vegetative diversity with a mix of seral conditions to promote biodiversity while focusing on ecological conditions between mid and late seral status.

Only naturally appearing enhancement projects will be allowed. Mosaic juniper thinning could occur in areas experiencing vegetative health problems and in areas not visible from the canyon floor. Vegetation manipulation mosaics will fully consider landscape characteristics to retain scenic quality.

Wildlife enhancement projects such as installation of nest boxes and platforms for birds will take place to enhance river related values.



Osprey perched in snag near Lower Palisades

- Prescribed fire will be used to allow the upland slopes to return to a natural fire-dependent watershed ecosystem. Fires which do not threaten or damage adjacent private lands or the primary values of the corridor will be allowed to burn, thereby enhancing the natural ecosystem .

- Wildfire suppression will occur at whatever level necessary to protect public facilities with minimal mechanical disturbance.

- Allow chemical management within the corridor in upland areas only when no other vegetation management tools are effective or it is the best technique to meet plan objectives.

- The managing agencies in cooperation with other Federal and State agencies will conduct more detailed inventories for protection of federal and state listed threatened, endangered, and sensitive plant and animal species. Continue monitoring habitats for federal, state listed T & E plant and animal species.

- Introduction of non-native plant and animal species will be allowed if found to enhance species richness and ecological condition while not adversely affecting outstandingly remarkable values.

- The cutting or burning of any dead or down vegetation for campfire use within the corridor will not be allowed. This does not include the potential for permits for harvest of personal use firewood or commercial permits related to prescribed burning or mosaic juniper thinning carried out to achieve vegetation management objectives.

- The quarry area will remain open as a source of fill material for campground stabilization, highway maintenance, and other administrative activities as long as scenic values are not adversely impacted.

- Coordination will occur with appropriate agencies and private individuals to ensure the watershed. remains in proper functioning condition. Adjacent landowners will be encouraged to consider scenic values in their land use and property management activities.

- Livestock grazing within the River Pasture will be discontinued by withdrawing the pasture from the Prineville Allotment (No. 5137). Short-term spot grazing may be allowable if determined to be the best vegetation management tool to meet plan objectives. If livestock grazing did occur, it would take place in small enclosures for short periods, primarily between late winter and early spring before significant visitor use begins. Fencing will be installed in areas where natural boundaries don't exist. Those livestock grazing allotments upon the plateau areas above the rims that finger into the wild and scenic river boundary will be managed as defined under the Brothers/LaPine Resource Management Plan.

Cultural Resources

- The managing agencies will manage archaeological/historical and traditional use resources within the Lower Crooked River canyon through a coordinated plan of goals and objectives common to the BLM and BOR. Private landowners will be encouraged to participate in this process.

- The managing agencies will each maintain a cultural resources database atlas for lands under their jurisdiction. The Tribes will contribute information on significant traditional use sites and materials.

- The managing agencies will conduct an appropriate level of inventory, over lands under their jurisdiction, to identify prehistoric and historic sites or features in areas proposed for surface-disturbing projects. Sites discovered will be evaluated for significance following National Register of Historic Places criteria, in consultation with the State Historic Preservation Office. The managing agencies will consider the effect of any proposed undertaking on sites which meet the National Register criteria by following regulations of the Advisory Council on Historic Preservation or a memoranda of agreement negotiated with the Council.

- Projects with ground-disturbing activities that affect National Register eligible sites will be relocated. Project cancellation or mitigating measures will take place in areas where relocating a planned project is not feasible. Mitigation will usually be an attempt to extract and preserve those attributes of a site which qualify it for the National Register.

- The managing agencies will consult with, and invite the participation of, the Tribes on proposed surface disturbing activities.

- The managing agencies will protect and/or stabilize cultural resource sites from human-caused or natural sources of erosion or deterioration where possible.

- The managing agencies will increase emphasis on enforcement of established laws, regulations, and policies related to the protection and preservation of cultural resource values. A monitoring plan will be developed and implemented to document changes (natural and human-caused) and ensure adequate protection.

- The managing agencies will develop and implement a public information/education program aimed at increasing public awareness of and appreciation for the significance of cultural resources.

Information and Education

- Brochures, signs, and interpretive materials will contain information on rules and regulations, access roads, trails, parking, and camping. In addition, special brochures and pamphlets will be developed that address specific resource protection and education and interpret special resources within the canyon.

- Bulletin boards will be installed at developed campgrounds and day use areas.
- Interpretive displays will be installed at Chimney Rock, Big Bend, Upper Palisades, and at the Rim Trail Trailhead.
- A Back Country Byway kiosk will be installed within the corridor.
- An interpretive walk brochure will be developed for the Rim Trail.
- Campground hosts, recreation technicians, and maintenance personnel will be trained to provide professional visitor contact.
- Install site and facility signs, and distribute information and regulation pamphlets through local vendors and managing agencies.
- The managing agencies will become actively involved in seeking volunteers to assist in public information and education programs, encourage stewardship, and to provide annual care for the area. The managing agencies will also coordinate efforts with local/regional conservation groups to conduct year round protection of the river related resources.
- BLM will begin its Back Country Byway program by seeking a partnership with the local Chamber of Commerce, State Department of Transportation, BOR, and other interested parties to facilitate vehicle touring within the corridor. A memorandum of understanding will be formulated to ensure cooperation among these agencies. The partnership group will determine the level of advertisement to the public. Except for the Back Country Byway Program, tourism efforts will remain limited between the BLM and other local, state and federal agencies. However, the BLM will actively seek coordination with the Local Chamber of Commerce to select other devices that promote tourism.
- Camping and day use regulations and administrative actions will be posted and changed as needed to meet management objectives.
- The managing agencies will develop a strategy to incorporate "Tread Lightly", "Pack It In - Pack It Out", and "Leave No Trace" ethics into the public information and education program.

Law Enforcement and Emergency Services

- Law enforcement efforts will continue with better communications between agencies. Annual meetings will be conducted to facilitate better coordination. A uniform communication network will be implemented. Enforcement patrols will be conducted as defined by the coordination team.
- The managing agencies will continue to coordinate enforcement of regulations and administrative rules.

- Access along State Scenic Highway 27 will be managed by Oregon State Department of Transportation. Speed limits and parking along the Highway will remain subject to state traffic laws.

- The BLM will continue fire suppression responsibilities and implement decisions in the Brothers/Lapine Resource Management Plan regarding the prevention and suppression of wildfire to protect public values and adjacent private property.

- Public land safety regulations will be developed along with an active signing campaign within high use areas.

- The managing agencies will improve response to potential natural and human-caused emergencies by providing "Radio Help" during high visitor use periods.

- The managing agencies will develop a coordinated public information and education program which explains fire regulations, individual liability, and fire hazard within the river corridor.

Utility and Transportation Corridors

- Other than State Highway 27 and a transmission line located on BOR lands just east of Bowman Dam (OR 5799) there are no utility or transportation rights-of-way in the river corridor. Any approved additional utility rights-of-way will be required to be underground and be located in suitable areas adjacent to State Highway 27. Transportation rights-of-way must also be located in suitable areas adjacent to State Highway 27.

Mineral Leases and Land Tenure

- Public lands within the corridor will be retained in public ownership.

- The managing agencies will require that a plan of operation be filed prior to any surface-disturbing activity. The plan will specify the actions necessary to protect and/or enhance outstandingly remarkable values within the corridor. This applies to saleable, leasable, and locatable minerals and materials.

Wild and Scenic River Boundary

- In October 1988, this segment of river was designated by Congress as a National Wild and Scenic River. A preliminary boundary was later developed with public input to include and protect or enhance the outstandingly remarkable values that caused the river to be designated. During the planning process, no information or comments justified boundary changes. Therefore, it has been determined that the preliminary boundary will be used to define the river corridor as shown on Map 2. The Lower Crooked Wild and Scenic River boundary legals can be found in Appendix E.

- The reclamation zone below Bowman Dam, also shown on Map 2, will remain open to future

Ram maintenance or reconstruction needs. Activities inside the boundary, within the reclamation zone, with be evaluated on a case-by-case basis to ensure compliance to wild and scenic river values.

- Sign boundary in heavy conflict areas to reduce trespass onto adjacent private lands. The managing agencies will coordinate with private landowners to ensure proper signing and to resolsre other conflicts as needed.

Navigability

State ownership of the beds of navigable waterbodies was granted to Oregon in 1859 as an incidence of statehood and is an inherent attribute of state sovereignty protected by the U.S. Constitution. The beds of non-navigable waterbodies remained in the ownership of the United States or its grantees, The navigability of the Lower Crooked River has not been established. Currently, both the state, federal government and private property owners, claim ownership of the river's bed and bank. This river plan does not propose to address the issue of navigability. Rather, the river plan is intended to provide a management direction for the Chimney Rock Segment of the Lower Crooked 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, composed of the Governor, Secretary of State, and State Treasurer. tinder constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund. These state-claimed 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 the 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.

DSL has determined that there is sufficient evidence to support a claim of navigability and state ownership for the beds and banks of the Lower Crooked River. The position of the Bureau of Land Management and Bureau of Reclamation is that the navigability of the river has not been established.

For purposes of managing the above portion of this river, any non-federal activities or land uses such as new utility or transportation corridors and boat ramps or similar facilities that impose into or cross a waterway below ordinary high water require an easement from the State Land Board. Existing non-federal facilities will require an easement at such time as they undergo major

structural alteration, replacement, or relocation. In addition, removal of sand and gravel requires a royalty lease and any non-federal use that occupies any area of submerged or submersible land requires a waterway lease.

Further, 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.

Nothing set forth herein shall limit the ability of the Bureau of Land Management or Bureau of Reclamation to administer this river segment.

The Bureau of Land Management, Bureau of Reclamation, State, County, and local governments will continue to work together to assure that the public trust interest and the purpose of the Wild and Scenic Rivers Act are met.

III. Implementation/Monitoring

A. Roles and Interagency Relationships

Successful implementation of the Lower Crooked River Management Plan will require close coordination and cooperation between numerous federal, state, and local government agencies. The primary roles and responsibilities of these management partners are outlined in Chapter 1. Specific roles and responsibilities of the joint management partners beyond those outlined in Chapter 1 are discussed below.

Bureau of Land Management Responsibilities:

Recreation Management

Implement plans, maintain, and manage recreation use facilities on public lands within the river corridor, including: camping and day use areas, roads, trails, parking areas, launch/landing sites, signs, and other information/education facilities.

Jointly manage the Big Bend area with the BOR through a memorandum of understanding that describes how construction, maintenance, and management will take place.

Implement a fire closure between June 1 and October 15 on ail public lands within the river corridor.

Coordinate with BOR to establish a supplementary rule (43 CFR, part 8360) to prohibit discharge of firearms within the wild and scenic river boundaries except during official state waterfowl, big game, and upland game seasons.

Encourage ODFW to change regulations to limit discharge of firearms and. hunting to official state waterfowl, big game, and upland game seasons.

Coordinate all elements of the information and education program within the river corridor.

Facilitate partnerships that promote land stewardship and enhance the Back Country Byway program .

Administer camping fee collection program as well as the commercial special recreation permit system for the river corridor.

Increase law enforcement coordination with Crook County.

Jointly monitor recreation use levels and high impact recreation opportunities with BOR and ODFW.

Coordinate with ODOT to redesign and harden all campground and day use entrance road aprons within the Highway right-of-way and identify specific high use parking and pullout areas along the Highway.

Resource Protection

Act as the lead agency and primary public contact for administration of public lands within the wild and scenic river corridor. The BLM does not have authority to regulate what happens on private land within and outside of the wild and scenic river corridor boundary.

Jointly manage riparian and upland resources within the reclamation zone with the BOR through a memorandum of understanding that describes specific roles and responsibilities for each agency.

Coordinate with BOR, ODFW and U.S. Fish and Wildlife to conduct vegetative management strategies, fish and wildlife habitat projects, and related monitoring studies.

Consult with ODFW and the U.S. Fish and Wildlife Service regarding implication of' proposed management actions on candidate or listed threatened or endangered species.

Coordinate efforts with BOR, ODFW, Ochoco Irrigation District, and other interested parties to conduct an Instream Flow Study that will later be used as a tool to recommend streamflows necessary to protect the outstandingly remarkable values of the Lower Crooked River.

Continue lead fire supprtession responsibilities and coordinate all fire suppression activities within the river corridor.

Conduct cultural resources surveys, increase surveillance, and stabilize known, existing cultural sites on BLM land as needed.

Bureau of Reclamation Responsibilities:

Recreation Management

Jointly manage the Big Bend area with the BLM through a memorandum of understanding that describes how construction, maintenance, and management will take place.

Coordinate with BLM to establish a supplementary rule (43 CFR, part 8360) to prohibit discharge of firearms within the wild and scenic river boundaries except during official state waterfowl, big game, and upland game seasons.

Jointly monitor recreation use levels and high impact recreation opportunities with BLM and ODFW.

Resource Protection

Jointly manage riparian and upland resources within the reclamation zone with the BLM through a memorandum of understanding that describes specific roles and responsibilities for each agency.

Coordinate with BLM, ODFW, and U.S. Fish and Wildlife to conduct vegetative management strategies, fish and wildlife habitat projects, and related monitoring studies.

Consult with ODFW and the U.S. Fish and Wildlife Service regarding implication of proposed management actions on candidate or listed threatened or endangered species.

Coordinate efforts with BLM, ODFW, Ochoco Irrigation District, and other interested parties to conduct an Instream Flow Study that will later be used as a tool to recommend streamflows necessary to protect the outstandingly remarkable values of the Lower Crooked River.

Conduct cultural resources surveys, increase surveillance, and stabilize known, existing cultural sites on BOR lands within the reclamation zone as needed.

Lichen covered juniper snags add greatly to scenic quality

B. Cost Estimates

Management actions have been combined into four main categories for budgeting purposes. The four categories include: 1) Area/Facility Development, 2) Annual Operation and Maintenance, 3) Annual Program Management, and 4) Monitoring Equipment. The management intent is to implement these actions as soon as the necessary funding can be secured through the agency's budgeting process. Priorities are directly tied to available funding. Actual agency funding percentages are directly related to lands under their jurisdiction and cooperative efforts throughout the corridor. Estimated cost figures are derived from both BLM and BOR funding requirements and are based on fiscal year 1992 dollar values. Refer to Table 2 for estimated cost breakdown by alternative.

Table 2 - Estimated Cost

Area/Facility Development (1)	Cost	Agency Responsible
Castle Rock	$ 9,500	B LM
Stillwater	24,500	BLM
Greenwood	6,000	BLM
Lone Pine	20,000	BLM
Lower Palisades	35,000	BLM
Chimney Rock	21,500	BLM
Cobble Rock	13,500	BLM
Post Pile	12,000	BLM
Poison Bu t te	10,500	BLM
Big Bend	47,000	BLM,BOR
Upper Lone Pine	2,500	BLM
Quarry Area	1,000	BLM
Upper Palisades	12,000	BLM
Rim Trailhead	6,000	BLM
Upper Poison Butte	5,500	BLM
Signing	18,000	BLM,BOR
Interpretive Devices	48,000	BLM,BOR
Highway/Campground Access	211,000	BLM,BOR
River Access	20,000	BLM,BOR
West Side Access	5,000	BLM,BOR
Trail Access	5,000	BLM,BOR
Total	$533,000	

Annual Operation and Maintenance (2)	Cost	Agency Responsible
Campgrounds	$45,000	BLM,BOR
Day Use Areas	15,000	BLM
Signs	6,000	BLM,BOR
Interpretive Devices	6,000	BLM,BOR
Access Developments	21,000	BLM,BOR
Total	**$93,000**	

Annual Program Management (3)	cost	Agency Responsible
Resource Management (monitoring, inventory, etc.)	$27,000	BLM,BOR
Information and Ed. Program	21,000	BLM,BOR
Campground Hosts	4,000	BLM
Vehicle Costs	8,500	BLM
Equipment Charges	5,000	BLM
Fire Suppression	25,000	BLM
Law Enforcement	17,000	BLM,BOR
Total	$107,500	

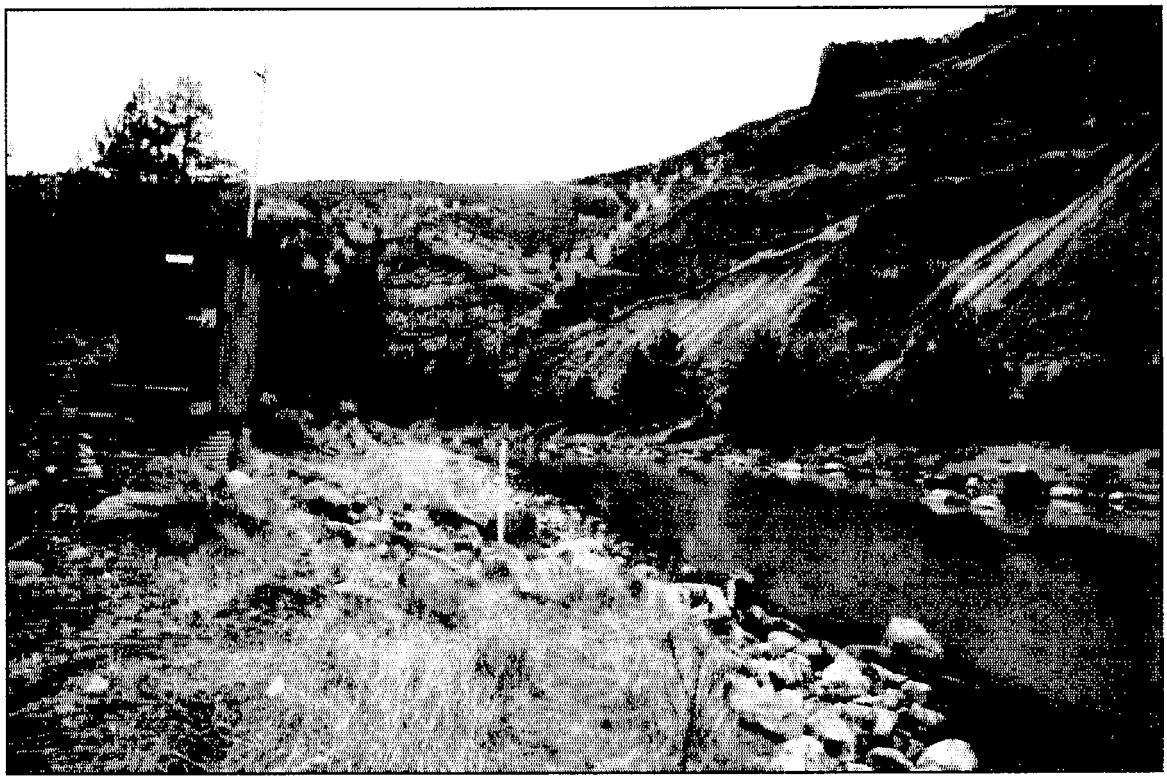
Monitoring Equipment (4)	cost	Agency Responsible
Water Quality Monitoring Equip.	$5,000	BLM,BOR
Fish Habitat Survey Equipment	2,500	BLM
Miscellaneous Equipment	8,500	BLM
Total	$16,000	

1) Costs related to survey, design, and construction are included in these figures.

2) This category includes administrative and labor costs associated with maintenance of facilities within the river corridor.

3) Funding for annual program management includes a variety of elements. The elements described are the most important tools necessary for yearly program management in the Lower Crooked River corridor. Administrative costs associated with annual program management are included in these figures,

4) This category includes equipment necessary to govern implementation of the Lower Crooked River Management Plan.



USGS gauging station adjacent to Big Bend campground

C. Monitoring Plan

The monitoring prescribed in this plan is in addition to the monitoring standards established in the Brothers/LaPine Resource Management Plan and Prineville Reservoir Resource Management Plan. It expands these RMP's to address resource specific issues of the Lower Crooked River Management Plan.

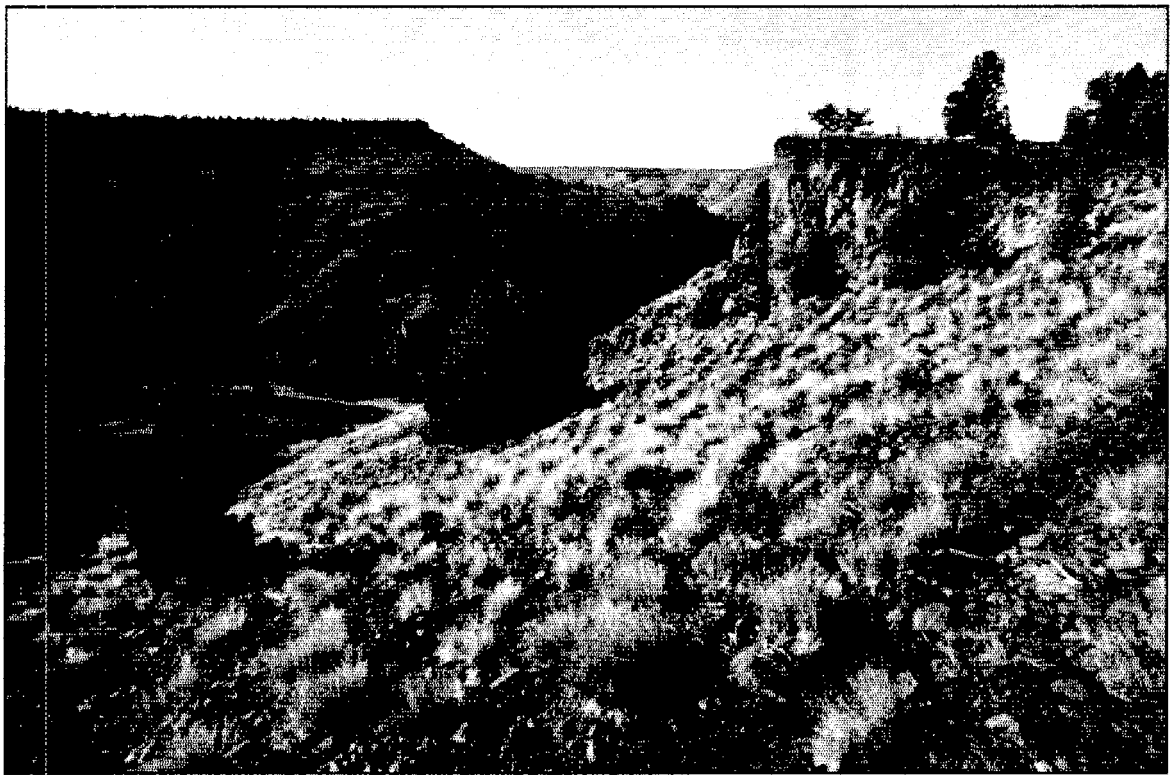
The monitoring and evaluation of this plan will be based, whenever possible, upon the Limits of Acceptable Change concept (LAC). LAC is based on the premise that change to the ecological and social conditions of an area will occur as a result of natural and human factors. The goal of management is to keep the character and rate of change due to human factors within acceptable levels that are consistent with plan objectives and protection of the river's outstandingly remarkable values.

The primary emphasis of the LAC system is on the desired resource condition, rather than on how much use or abuse an area can tolerate. The management challenge is not one of how to prevent any human-induced change in the planning area, but rather one of deciding what changes should occur, how much change will be allowed, what management actions are needed to guide and control it, and how managers will know when the established limits are being or have been reached.

Once in place and functioning, the mechanics of the LAC system can alert the managing agencies to unacceptable change in the river corridor before it is too late to react. For each river value to be monitored, one or more key indicators are selected which allow managers to keep attuned to changes in the ecosystem or social setting. For each key indicator, a standard is set. This is the threshold value which determines the amount of change that is either desired or will be accepted. The purpose of the indicators and standards is to provide managers with a tool to determine if the resource values and opportunities they are managing for are actually being provided. The standards serve as "triggers" which cause predetermined management actions to be implemented when the limit is being approached.

The LAC process is designed to be the foundation for the long-term protection and. enhancement of the primary river-related values in the river corridor. The process must, however, be flexible enough to allow for unique site-specific situation, and to provide ample opportunity for public involvement and adjustment as our resource and social knowledge base increase.

The following section outlines the key indicators, management standards, and monitoring that will be conducted on the Lower Crooked Wild and Scenic River corridor.



Monitoring upland vegetation for ecological condition will ensure protection of wildlife habitat as well as scenic quality

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Water Quality	Fecal Coliform	A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in a 30-day period exceeding 400 per 100 ml.	Locate source of effluent. Inspect all toilets upstream for leakage.	Grab samples taken to a State-Certified lab; samples taken in spring, summer, and fall on a yearly basis.
	Temperature	Temperature equal to or cooler than baseline established during 1993 water years or state standards - which ever is better.	Stop management practices that may be contributing to temperature rise.	Monitor temperatures with continuously recording temperature instruments.
	Turbidity	Turbidity equal to or clearer than 1993 baseline or state standards - which ever is better.	Stop management practices that may be contributing to turbidity rise.	Monitor turbidity with datalogger turbidimeter. Samples taken during flushing flows in fall, winter, spring, and during June, July, and August on a yearly basis.
	pH	Maintain pH between 6.5 and 8.5	Stop management practices that may be contributing to pH rise.	Monitor with a pH datalogger instrument the same frequency as in turbidity.
	Dissolved Oxygen	Maintain dissolved oxygen equal to or greater than 5.0 mg./l.	Stop management practices that may be contributing to a reduction in dissolved oxygen. Negotiate for an increase in flow.	Monitor dissolved oxygen with a datalogger instrument weekly during June, July, and August.
	Gas Supersaturation	Not to exceed gas saturation of 100 percent.	If possible, regulate out-flow parameters of Bowman Dam	BOR would continue monitoring gas supersaturation on an annual basis (reconstruction of Bowman Dam should resolve current gas supersaturation problems).

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Fish Habitat	Quality and Quantity of Spawning Gravel	Locate areas and measure substrate embedeness and frequency distribution during 1993. Maintain quality and quantity of spawning gravel at 1993 baseline.	Identify cause of degradation to quality and quantity of spawning gravel and mitigate impact.	Conduct yearly substrate embedeness and pebble count.
	Rearing Habitat	Maintain pool and habitat quality and quantity at 1991 baseline.	Identify cause of degradation to rearing habitat and mitigate impact.	Conduct annual habitat survey.
	Fish Species Composition	Maintain fish species composition using historical baseline data.	Identify cause of degradation to fish species composition and mitigate impact.	Conduct annual fish census.
Riparian Vegetation	Proper functioning ecological condition as indicated by vegetative and streambank condition.	Riparian vegetation would be managed to maintain or enhance vegetative diversity, biomass, and percent cover using 1992 baseline. Increase streambank area by utilizing 1992 baseline.	Remove/eliminate or modify source of impact (i.e. close campsite, roads, trails, etc.) after inventory assesses the extent of impact.	Continue current riparian resource inventory every three years. Conduct color infra-red aerial reconnaissance every 2 years for the next 10 years. Thereafter, conduct every 5 years.

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Upland Vegetation	Ecological condition and trend as indicated by the composition of western juniper, sagebrush, idaho fescue, and bluebunch wheatgrass.	Upland vegetation would be managed to maintain ecological condition between mid and late seral status.	Utilize a combination of prescribed fire mechanical vegetation strategies, and mosaic juniper thinning strategies that result in reaching the management standard. Short-term spot grazing and chemical management strategies would be used only when determined to be the best vegetation management tool.	Complete ecological site inventory on all public lands on an annual basis. Implement monitoring studies to measure progress in meeting upland management standards.
Wildlife	River corridor use by raptors and other waterfowl Maintenance of unique habitats (cliffs, talus slopes, etc.) and use by associated species. Bald Eagle (Haliaetus Leucocephalus)	Historic records compared with future observations should not indicate downward trends. Significant loss or degradation of these habitats is observed and/or there is a downward trend in associated species. Bald Eagle habitat will be maintained at present standards.	Re-evaluation of river management actions (i.e. campground development, trail placement, etc.). Re-evaluation of river management actions (i.e. vegetation management strategies, trail placement etc.). Identify all Bald Eagle roost sites and protect trees used for roosting from damage. Restrict recreational use levels near roost sites from December through March if necessary to prevent harassment.	Count/record all nests, raptors, and waterfowl sightings on a regularly scheduled basis. Annually inventory habitats in cooperation with ODFW. Associated species will be surveyed during project evaluations. Conduct habitat analysis and Bald Eagle count within the entire corridor on an annual basis.

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Cultural Resources	Cultural Site Integrity	No significant Cultural Resource which is being irreparably damaged by human use or eroded by natural forces to the point that it is in danger of being lost will be acceptable.	Public information and education efforts through brochures, signs, kiosks, and visitor contact points will be implemented. Projects with ground disturbing activities would be relocated or modified. Significant sites experiencing natural degredation would be stabilized if possible. Project cancellation, modification, or mitigating measures would take place where relocating a planned project is not feasible.	Conduct an inventory to identify prehistoric and historic sites or features in areas proposed for surface disturbing projects as needed. Each managing agency would maintain a cultural resources database atlas for lands under there jurisdiction.
Scenic Resources	Projects or modifications which significantly alter landform, vegetation, water, color, or character of the corridor.	Contrasts created by new management activities would not be allowed if they attract the attention of the casual observer within the characteristic landscape. Short-term impacts such as those created by trail building or prescribed fire would be allowed. Natural ecological changes will predominate.	Management actions not consistent with Visual Resources Management (VRM) and Recreation Opportunity Spectrum objectives will be modified or rejected.	Conduct a VRM study every 5 years to ensure projects and other human caused modifications are consistent with management standards. Individual projects will be analyzed on a case-by-case basis to ensure protection of outstandingly remarkable values.

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Recreation	Quality Experience	Maintain or enhance visitor experience using 1991 baseline data derived from the 1991 visitor use survey.	Develop brochures to inform and educate visitors how to avoid peak use periods and reduce conflicts with other recreationists. High impact recreation opportunities would be limited to specific geographic areas or excluded if found to significantly impact other visitors or the resource. Limit length of stay to 7 nights in developed campgrounds. If necessary, recommend management changes to other managing agencies (i.e. ODFW fishing regulations).	Conduct a random visitor use survey every 5 years. Focus on use levels, conflicts, and user need. Coordinate with ODFW to conduct an angler preference and statistical creel survey as needed to analyze fishing regulations.
Roads/Trails	Road erosion and damage related to roadside vegetation and facilities. Trail erosion and damage related to trailside vegetation and facilities.	Confine motorized vehicles to designated roads. Maintain roads to established BLM standards. Encourage use of designated trails. Maintain trails to established BLM standards. Prevent trail networking using indirect methods.	Increase road maintenance frequency. Reconstruct/relocate roads and related facilities (i.e. signs, vehicle barriers, etc.) to resolve unlawful access, resource damage, and road safety problems. Increase trail maintenance frequency. Reconstruct/relocate trails to reduce trail networking and encourage appropriate use. Keep trail maps current.	Monitor routine road maintenance needs twice yearly. Utilize feedback from visitor contact. Monitor routine trail maintenance needs twice yearly. Utilize feedback from routine patrols on high use trails. Establish monitoring points along high use trails to measure trail depth, width, and drainage. Remeasure points every 2 years for the first 4 years, then every 3 years afterward.

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Camp and Day Use Sites	Soil stability Vegetative loss Tree damage Facility damage Litter Accumulation	Impacts to camp and day use sites will range between light and heavy based on subjective judgement regarding erosion, vegetative change, facility damage, and accumulation of litter as follows: Light: Previous ground vegetation in tact allowing natural erosion to occur. Facility damage and litter is not evident. The site has experienced only minimal physical changes. Moderate: Vegetative growth is somewhat retarded allowing minor abnormal erosion to occur. Traces of litter can be found within and adjacent to the site. Minor vandalism, repairable by maintenance, is occurring on facilities such as tables. Physical changes to the site could include: minor tree limbing, movement of rocks and semi-stationary facilities. Heavy: Use area vegetation is gone but adjacent vegetation still intact. Abnormal erosion within the site is correctable through maintenance. Major littering is evident within and adjacent to the site and can be corrected through maintenance. Major vandalism, repairable by maintenance, is occurring on facilities and physical features such as tables, rocks, trees and other site protection facilities. Physical changes to the site could include: moderate tree limbing, beginning tree root exposure, trails radiate from site, human caused changes to the layout of the use area. All impacts to camp and day use sites could be resolved through routine maintenance. (continues)	Using basic site protection measures, harden all sites to maintain sites between light and heavy standards. Campsites which have received extreme impacts will be rehabilitated and closed until levels of impacts have been mitigated to at least moderate. Other actions could include: increased user education efforts in "minimum impact" camping techniques and seasonal closures of entire campgrounds or day use areas if determined neces-	Inventory all existing and new proposed sites within the river corridor upon approval of this plan Remeasure all sites once every 2 years, or when changed conditions indicate the need. Feedback from routine campsite maintenance patrols.

Value to be Maintained and Enhanced	Key Indicator	Management Standard to be Used	Management Actions Triggered if Standard is Not Met	Sampling Procedure and Frequency
Camp and Day Use Sites (cont)		Extreme: Use area vegetation is gone and adjacent vegetative growth is retarded allowing abnormal erosion to occur within and adjacent to the site. Maintenance can no longer correct soil and vegetative impacts without allowing for temporary closure of the site. The site experiences perpetual littering. Major vandalism can be corrected through maintenance of facilities but not for vandalism to physical features such as rocks, trees and other features. Physical changes to the site could include: dead or cut trees, tree roots exposed, heavy erosion, compacted soil restricting reestablishment of indigenous vegetation within and adjacent to the site, changes in species composition, major trails and satellite areas radiate from site. Maintenance can no longer correct impacts and the site can no longer sustain long-term use without temporary closure to allow natural rehabilitation to occur.		

Appendix A
Planning ***Participants***

Management Participation

Jim Kenna, Deschutes Area Manager, Bureau of Land Management
Jim Budolfson, Recreation and Resources Branch Chief, Bureau of Reclamation

Technical Planning Team Members

Ed Perault, Outdoor Recreation Planner/Team Leader, Bureau of Land Management
Shaaron Netherton, Supervising Outdoor Recreation Planner, Bureau of Land Management
Steve Dunn, Resource Management Planner, Bureau of Reclamation
Steve Jakubowics, Resource Management Planner, Bureau of Reclamation
Bob Adair, Environmental Planning, Bureau of Reclamation

Agency Associates, Staff, and Volunteers

Amy Stuart, Fish Biologist, Oregon Department of Fish and Wildlife
Brian Ferry, Wildlife Specialist, Oregon Department of Fish and Wildlife
Scott Stuemke, Confederated Tribes of the Warm Springs Reservation
Louie Pitt, Confederated Tribes of the Warm Springs Reservation
Chester Schmidt, DTP Specialist, Bureau of Land Management
James Sippel, Recreation Technician, Bureau of Land Management
John Heilmeyer, Riparian Coordinator, Bureau of Land Management
Jan Hanf, Wildlife Biologist, Bureau of Land Management
Dave Young, Fish Biologist, Bureau of Land Management
Ron Halvorson, Botany/T&E Coordinator, Bureau of Land Management
Marci Todd, Archaeologist, Bureau of Land Management
Larry Thomas, Soil/Water/Air, Bureau of Land Management
Dennis Davis, Geologist, Bureau of Land Management
Steve Lent, Fire Management Officer, Bureau of Land Management
Ron VanDomelen, Technical Advisor, Bureau of Land Management
Teal Purrington, Range Conservationist, Bureau of Land Management
Tharen Jackson, Maintenance Worker, Bureau of Land Management
Steve Castro-Shrader, Law Enforcement, Bureau of Land Management
Hugh Moore, Work Group Member, Ochoco Irrigation
Joyce Barney, Work Group Member, Local Broker
Be Be Schindler, Work Group Member, Prineville Chamber of Commerce
Gordon Chandler, Work Group Member, Central Oregon Flyfishers
Craig Lacy, Work Group Member, Oregon Trout
Gordon hloore, Crook County Planner

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Appendix C
Glossary

Access - The ability of recreationists to reach the areas in which they wish to recreate.

Allotment - An area of land where one or more livestock operators graze their livestock.

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.

Aquatic - Living or growing in or on the water.

Archaeological Site - Geographic locale containing structures, artifacts, material remains and/or other evidence of past human activity.

Artificial Structures - Constructed cavities which provide shelter for wildlife, such as bird houses.

Basic Site Protection Measures - Engineering techniques designed to reduce or control recreation impacts. In campsites it could include natural or man-made vehicle barriers, graveled surfaces, toilets, footpaths, steps and vegetative plantings. (Also see campsite stabilization.)

Bike - A non-motorized form of transportation normally with two wheels and pedals, many are referred to as mountain bikes.

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

Campground - One or more developed campsites in a specific area.

Camping - Outdoor living for recreation.

Campsite - Individual unit for camping.

Campsite Stabilization - Measures taken to reduce camper impact on the natural resources, such as hardening a footpath. Also see Basic site protection measures.

Campsite Rehabilitation - Measures taken to restore damaged campsites and, to prevent further damage to natural resources, such as planting grass and shrubs.

Ceded Lands - Lands and certain rights ceded to the United States of America by the Confederated Tribes of the Warm Springs under the treaty of 1555.

Challenge Level - We want to offer persons with disabilities the chance to experience a full range and variety of recreation opportunities. The three accessibility levels created to provide for this variety include:

Accessible (Easy) - All programs, services, and facilities that are provided are fully accessible. Generally, these sites are usable without assistance by all but the most severely disabled persons.

Challenge Level 1 (More Difficult) - These sites have a greater degree of difficulty and are a more challenging experience than an Accessible site. Parking, restrooms, visitor centers, and interpretive exhibits are all fully accessible. Some disabled users may need assistance.

Challenge Level 2 (Most Difficult) - These sites are indeed most difficult and offer a higher level of risk and challenging experience to all those seeking such. They are usable by the more athletic person with a disability without assistance but, generally, a person with limited mobility would probably need assistance. Physical improvements such as grades and surfacing materials on trails are limited to preserve the natural surroundings, but with some safety considerations designed into the site. Buildings such as restrooms are accessible.

Compaction - The process of packing firmly and closely together; the state of being so packed, (ie. compaction of soil from intense human use or vehicular activity). Soil compaction results from particles being pressed together so that the volume of soil is reduced. It is influenced by the physical properties of the soil, moisture content, and the type and amount of compactive effort.

Crucial Wildlife Habitat - Parts of the habitat needed to sustain a wildlife population at critical periods of its life cycle. This is often a limiting factor on populations, such as breeding habitat and winter habitat.

Cumulative Effects - Effects on the environment resulting from actions that are individually minor, but that add up to a greater total effect as they take place over a period of time.

Cultural Resources - Remains of human (historical and archaeological) activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture and natural features that were of importance in past human events. Cultural resources consist of: (1) physical remains; (2) areas where significant human events occurred, even though evidence of the events no longer remains; and (3) the environment immediately surrounding the actual resource.

Day Use Area - An area primarily set aside for day use parking, picnicking, and/or access to a variety of day use recreation opportunities.

Desired Future Condition - A vision of the desired future state of a specific area. Desired future condition gives managers goals for the area, but recognizes the dynamic state of the ecosystem, instead of listing numerical outputs as goals.

Developed Campground - Accessible by motor vehicle and contains improvements for camper comfort and sanitary facilities such as toilets, drinking water, tables and trash receptacles.

Early Seral - Ecological status that corresponds to 0 to 25 percent of the plant composition found in the potential natural community. Synonymous with poor range condition.

Ecological Status - Four classes of successional stage (or range condition) used to express the degree to which the composition of the present plant community reflects that of climax. The four classes (followed by the percentage of plant community that is climax for the site) are: Potential Natural Community, 76-100; Late seral, 51-75; Mid-seral, 26-50 and Early seral, O-25.

Ecosystem - An interacting system of living organisms considered together with their environment; examples include talus ecosystems or river ecosystems.

Endangered Species - A plant or animal species whose prospects for survival or reproduction are in immediate danger as designated by the Secretary of the Interior and as further defined by the Endangered Species Act of 1973, as amended.

Environmental Assessment - A concise public document that evaluates a proposal for the possibility of significant environmental impacts; the analysis is required by NEPA laws. An environmental assessment results in either a FONSI (Finding of No Significant Impact) and decision notice; or, if impacts will be significant, the agency must then go on to prepare an environmental impact statemen t.

Erosion - Detachment and movement of soil or rock fragments by water, wind, ice or gravity,

Fecal Coliform - A bacteria found in the human colon; a fecal coliform count is use as an indicator of fecal contamination, if any, in water.

FONSI - Finding of No Significant Impact. Required by NEPA when a federal agency prepares an environmental assessment; documents the reasons why the impacts of the proposed action are not significant, and therefore, the agency is not preparing an environmental impact statement.

Forage - All browse and herbaceous plants that are available to grazing animals including wildlife and domestic livestock.
Gray Water - Sink or other non-sewage waste water.

Ground Cover - Grasses or other plants that keep soil from being blown or washed away.

Guide - A person who provides services by leading one or more other persons in outdoor recreation activities for a fee.

Guide Permit - A license to carry out the activities of a guide.

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.

Historic Site - Locales used by immigrants from the 1820s to l930s.

Impact - A change in the environment caused by the activities of humans.

issue - A subject or question of widespread public discussion or interest regarding management of a geographic area which has been identified through public participation.

Late Seral - Ecological status corresponding to 51 to 75 percent of the plant composition found in the potential natural plant community. Synonymous with good range condition.

Launch Site - The riverbank location where boats are placed in or removed from the river.

Limits of Acceptable Change - A process for establishing acceptable and appropriate conditions based on the premise that change to the ecological and social conditions of an area will occur as a result of natural and human factors. The goal of management is to keep the character and rate of change due to human factors within acceptable levels.

Lower Crooked Wild and Scenic River Corridor - The area within the proposed wild and scenic river boundaries originating at Bowman Dam and ending 8 miles down river near Highway 27 mile marker 12. The area averages not more than 320 acres per rivermile.

Major Site Protection Measures - Engineering techniques designed to physically restrict use to control recreation impacts. In campsites it could include natural or manmade vehicle barriers, graveled or asphalt surfaces, toilets, tent pads, footpaths, steps and vegetative plantings on a much larger scale than basic site protection measures. (Also see campsite stabilization,)

Management Objectives - Parameters or goals to be used as standards to measure the success oh the management plan.

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

Mid-Seral - Ecological status that corresponds to 26 to 50 percent of the composition found In the potential natural plant community. Synonymous with fair range condition.

Minimum Instream Flow - Flows released from Prineville Reservoir that are required by law (10 cubic feet per second). This minimum flow was established to help protect instream resources such as fish and aquatic habitat.

Mitigation - Steps taken to avoid or minimize negative environmental impacts. Mitigation can include: avoiding the impact by not taking a certain action; minimizing impacts by limiting the degree or magnitude of the action; rectifying the impact by repairing or restoring the affected environment; reducing the impact by protective steps required with the action; and, compensating for the impact by replacing or providing substitute resources.

Monitoring -The orderly collection of data to evaluate the effects or changes that result from management actions.

Multiple Use - The harmonious use of land or water resources for more than one purpose.

National Register of Historic Places (NRHP) -The official list, established by the Historic Preservation Act of 1966, of the nation's cultural resources worthy of preservation.

National Environmental Policy Act - Commonly known as NEPA; became law in 1969. NEPA is the basic national charter for protection of the environment. The Act requires all federal agencies to consider and analyze all significant environmental impacts of any action proposed by those agencies; to inform and involve the public in the agency's decisionmaking process; and to consider the environmental impacts in the agency's decisionmaking process.

National Wild and Scenic Rivers System - A system of Congressionally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural and/or other values and are preserved in a free-flowing condition. The system is of three types: (1) Recreation-rivers or sections of rivers 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; (2) Scenic-rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped but accessible in places by roads; and (3) Wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Native Species - Plants or animals that are indigenous to an area.

Non-Commercial - Activities in which there is a bona fide sharing of the cost of the activity between all participants.

No-Trace Camping - The art of camping without leaving signs of use.

Noxious Weed - A plant specified by law as being especially undesirable, troublesome and difficult to control.

Off-Highway Vehicle (OHV) - Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding (1) any nonamphibious, registered motorboat; *(2j* emergency vehicles; and (3) vehicles in official use.

Outfitter - A person who for compensation or other gain, provides equipment, supplies or materials for the conduct of outdoor recreational activities.

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

Partial Retention - Management activities remain subordinate to the characteristic landscape.

Permittee - One who holds a license to use public lands or waters for financial gain.

Plan Objectives -Guiding statements or goals that present the purposes and overall intent of the planning effort.

Planning Area - The Lower Crooked River and its immediate environment within the National Wild and Scenic Rivers boundary between Bowman Dam and Highway 27 mile marker 12.

Prehistoric - The period of time before written records.

Public Lands - Any land and interest in land managed by the United States Government and administered by the Secretary of the Interior through the Bureau of Land Management or Bureau of Reclamation.

Recreation Opportunity Spectrum - A framework for understanding and defining various classes of recreation environments, activities, and experiences. The classes are defined in terms of the opportunities to have different kinds of experiences; examples are "roaded natural" and semi-primitive.

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 determines the level of significance of river-related values.

Retention - Management activities should not be evident to the casual river user.

Right-of-Flay - A permit or easement which authorizes a specific use of a specific area of land.

Riparian Area - The land adjacent to water, where water, soil and vegetation interact to form a unique microclimate.

Roaded Natural - One category on the recreation opportunity spectrum (ROS). "Roaded Natural" describes an environment where natural characteristics remain dominant, but there is moderate evidence of human development, and moderate amounts of contact with other people is expected during recreation.

Scoping - The process by which significant issues relating to a proposal are identified. It includes eliciting public comment, evaluating concerns and developing issues and alternatives for consideration.

Sediment - Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

Sedimentation - A process rvhere material carried in suspension by water flows into streams and rivers, increasing turbidity and eventually settling to the bottom.

Semi-Primitive Non-Motorized - One category on the recreation opportunity spectrum (ROS). "Semi-Primitive Non-Motorized" describes an environment where the natural environment dominates the characteristics of the area and development is very limited. Motorized use is prohibited and interaction among users is low.

Special Status Species = A threatened, endangered or sensitive plant or animal species.

Stewardship = The exercise of responsible care of land, water or other natural resources, or recreational resources such as a campsite.

Succession = The process of vegetative community change towards climax or potential natural community.

Threatened Species = A plant or animal species the Secretary of Interior has determined to be endangered in the foreseeable future throughout all or most of its range.

Treaty Rights = Legal rights of the Confederated Tribes of the Warm Springs Indians, established in their treaty with the United States Government in 1855.

Turbidity = A measure of water clarity.

Upland = All rangelands other than riparian or wetland areas.

Vegetative Manipulation = Alteration of present [vegetation using fire, plowing or other means to manipulate natural successional trends.

Visual Resources Management (VRM) = VRM has dual program purposes: to manage the quality of the visual environment, and to reduce the visual impact of development activities while maintaining the effectiveness of the management plan objectives. It is a specific process that can be mapped and incorporated into design planning for projects ranging from prescribed burning to campground development,

Water Quality = The chemical, physical and biological characteristics of water with respect to its suitability for a particular use.

Watershed = Lands which are enclosed by a continuous hydrologic drainage divide and located upslope from a specified point on a stream.

Wild and Scenic River = Those rivers or sections of rivers designated as Wild an Scenic by Congressional action, either under the 1968 Wild and Scenic Rivers Act, or under supplements and amendments to that act. The Lower Crooked (Chimney Rock Segment) is one of 40 river segments designated in the Omnibus Oregon Wild and Scenic River Act 1988.

Appendix D

Campground and Day Use Area /Parking and Pullout Matrices

	Overnight Campsites	Day Use Sites	Day Use Parking	Fees Charged	Group Campsites	Picnic Tables	Pit Toilets	Sink Water Holes	Garbage Cans	Fire Grates	Water	Access Surface	Barrier Free Level
Castle Rock	5	●	●	●		●	●	●	●	●		G	2
Stillwater	10		●	●	●	●	●	●	●	●	●	G	2
Green wood		●	●			●		●		●		☝	2
Lone Pine	8			●		●	●		●		●	☝	2
Lower Palisades	15	●	●	●	●	●	●	●		●	●	G	2
Chimney Rock	20	●	●	●	●	●	●	●	●	●	●	G/O	1
Cobble Rock	15			●		●	●		●		●	☝	2
Post Pile	10			●		●	●		⚑	✎	⚑	☝	🗎
Poison Butte	6			●	□	□	□	☒	□	✎		☝	🗁
Big Bend	30	●	●	●	●	●	●	●	●	●	●	☝	🗁
Upper Lone Pine		●	●			●		●		●		☝	2
Quarry Area													
Upper Palisades		●	●			●		●		●		G	2
Rim Trailhead		●	●			●	●					☝	2
Upper Poison Butte		●	●			●		◗	●		◠	G	2

G gravel
O oil
1 Most facilities accessible
2 Difficult accessibility

Highway Mile	Highway Side	No. Aprons	Site Name	Parking	River Trail Access
11.95	W			semi-developed	semi-developed
12.15	W			semi-developed	semi-developed
12.28	W			semi-developed	semi-developed
12.30	W	1	Castle Rock	developed	semi-developed
12.45	W			semi-developed	semi-developed
12.65	W			semi-developed	semi-developed
12.90	W			developed	semi-developed
13.30	W			undeveloped	undeveloped
13.50	W	1	Stillwater	developed	semi-developed
13.90	W			semi-developed	semi-developed
14.00	W			semi-developed	semi-developed
14.30	W	2	Greenwood	developed	semi-developed
14.65	W	1	Lone Pine	developed	semi-developed
14.70	W	2	Upper Lone Pine	developed	semi-developed
14.90	E			undeveloped	no trails
15.20	W	1	Lower Palisades	developed	semi-developed
15.40	E	1	Quarry Area	closed	upland trail access
15.40	W	2	Upper Palisades	developed	semi-developed
16.00	E			semi-developed	no trails
16.25	E			semi-developed	no trails
16.50	W	1	Chimney Rock	developed	developed
16.55	E	1	Rim Trailhead	developed	upland trail access
16.60	W			developed	semi-developed
16.85	E			semi-developed	semi-developed
17.00	W			semi-developed	semi-developed
17.10	W	1	Cobble Rock	developed	semi-developed
17.40	E			developed	semi-developed
17.60	W	1	Post Pile	developed	semi-developed
17.65	W			semi-developed	semi-developed
17.85	W			semi-developed	semi-developed
17.90	E			semi-developed	no trails
18.00	W			semi-developed	semi-developed
18.10	W	1	Upper Poison Butte	developed	semi-developed
18.30	W	1	Poison Butte	developed	semi-developed
18.45	E			developed	semi-developed
18.80	W			semi-developed	semi-developed
18.85	W			semi-developed	semi-developed
18.89	E			semi-developed	semi-developed
19.00	E			semi-developed	semi-developed
19.10	W	1	Big Bend	developed	semi-developed

P parking
A river trail access
E East
W West

undeveloped (parking-soil/gravel, trails-soil)
semi-developed (parking-stabilized w/gravel, trails-gravel if needed)
developed (parking-asphalt, trails-asphaitj

Appendix E
Lower Crooked Wild and Scenic River Boundary Legals

Legal description of the administrative boundary commencing at the east-west centerline of the southeast 1/4 section of section 20, T. 16 S., R. 16 E., W.M. and extending upstream to Bowman Dam. Refer to maps in Appendix G for visual representation of boundary legals.

T. 16 S., R. 16 E., W.M.

Section 20:

Beginning at the center south 1/16 corner, thence southerly to the 1/4 comer common to sections 20 and 29.

Section 29:

Thence southerly to the center 1/4 corner, thence easterly to center east 1 /16 comer, thence southerly to the east 1/16 corner common to sections 29 and 32.

Section 32:

Thence southeasterly to center west 1/16 corner, thence southerly to west 1/16 corner common to section 32, T. 16 S., R. 16 E. and section 5, T. 17 S., R. 16 E.

T. 17 S., R 16 E., W.M.

Section 5:

Thence southerly to center west 1/16 corner, thence easterly to the 1/4 corner common to section 4 and 5.

Section 4:

Thence northeasterly to the northwest 1/16 corner, thence easterly to the center north 1/ 16 corner, thence southeasterly to south 1/16 comer common to sections 3 and. 4.

Section 3:

Thence easterly to southwest 1/16 corner, thence southerly to west 1/16 comer common to sections 3 and 10.

Section 10:

Thence southeasterly to the center south 1/16 comer, thence easterly to the south 1/ 16 corner common to sections 10 and 11.

Section 11:

Thence northeasterly to a point on the centerline at the south end of the Bowman Dam, thence northwesterly along said centerline to the north end of the dam, thence northeasterly to west 1/16 corner common to sections 2 and 11.

Section 2:

Thence northwesterly to south 1/16 corner common to sections 2 and 3.

Section 3:

Thence westerly to southeast 1/16 comer, thence northerly to northeast I /16 corner, thence northwesterly to 1/4 comer common to sections 3, T. 17 S., R. 16 E. and section 34, T. 16 S., R. 16 E.

T. 16 s., R. 16 E., W.M.

Section 34:

Thence northwesterly to south 1/16 corner common to sections 33 and 34, thence northerly to 1/4 comer common to sections 33 and 34.

Section 33:

Thence northwesterly to northeast 1 /16 comer, thence westerly to northwest 1 /16 comer, thence northerly to west 1/16 corner common to sections 28 and 33.

Section 28:

Thence northerly to center west 1/16 comer, thence northwesterly to north 1/16 comer common to sections 28 and 29, thence northerly to the section corner common to sections 20, 21, 28, and 29, thence easterly to west 1/16 corner common to sections 21 and 28.

Section 21:

Thence northerly to the southwest 1 /16 corner, thence westerly to Point of Beginning.

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