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

Oregon State Parks and Recreation Department
Clackamas and Multnomah Counties

September 1993

Sandy Wild and Scenic River and State Scenic Waterway 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 for the 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.

BLM/OR/WA/PL-93/34+1792

Bureau of Land Management
Salem District
1717 Fabry Road SE
Salem, OR 97306
(503) 375-5646

Oregon Parks & Recreation Dept.
State Scenic Waterways
525 Trade Street SE
Salem, OR 97310
(503) 378-6378

Dear River Constituent:

Enclosed is the Sandy Wild and Scenic River and State Scenic Waterway Management Plan. This document is a result of the federal and state planning process for the 12.5-mile section of the Sandy River from Dodge Park to Dabney State Park. The plan offers a framework for cooperative management of the river. The plan provides overall management guidelines and outlines actions to be taken to enhance and conserve river resources, better manage recreation use, and assist landowners in river stewardship efforts.

The Plan has been developed jointly by the Bureau of Land Management, Oregon State Parks, Clackamas County and Multnomah County in consultation with landowners, interest groups, other local/state and federal agencies, and interested members of the public. The information contained in this final plan contains a number of minor revisions based on public input and comment received on the draft plan that was published with the Sandy River environmental assessment in July of 1992.

We take this opportunity to thank you for your interest, involvement, and most of all, your patience with this planning process. This plan will protect and enhance the important values of the Sandy River into the 21st Century, largely because of the commitment and participation from people like you. Reflecting public desires, the plan strives to keep the river similar to the way it is today for the enjoyment of future generations. We look forward to managing this very special resource with your help and support.

If you have any questions concerning the Sandy Wild and Scenic River, please contact Bob Ratcliffe (503-375-5646) in the Bureau of Land Management, Salem District Office. Questions specific to the State Scenic Waterways Program can be directed to Gary Miniszewski at Oregon State Parks (503-378-6378, ext. 276).

We appreciate your interest in the Sandy River and look forward to working with you.

Van E. Manning
District Manager
Salem District Office

Robert L. Meinen
Director
Oregon State Parks

SANDY WILD AND SCENIC RIVER

and

STATESCENICWATERWAY

MANAGEMENT PLAN

September 7, 1993

MANAGEMENT PLAN

SANDY RIVER

NATIONAL WILD AND SCENIC RIVER
Salem District
Bureau of Land Management

STATE SCEINIC WATERWAY
Oregon State Parks and Recreation Department

- Lead Agency: USDI - Bureau of Land Management
- Cooperating Agencies: Oregon State Parks and Recreation Department, Multnomah County, and Clackamas County
- Responsible Bureau of Land Management Official
  Van Manning, Salem District Manager
- Responsible State Parks and Recreation Department Official
  Bob Meinen, Director
- River Planning Team Leader: Bob Ratcliffe,
  Clackamas Resource Area
- Prepared By: Duane Lewis, writer-editor
- State Scenic Waterway Planner: Gary Miniszewski

Table of Contents

List of Maps

Decision Notice and Finding of No Significant Impact (FONSI)

Sandy Wild and Scenic River

Environmental Assessment and Management Plan

Clackamas County and Multnomah County, Oregon

Bureau of Land Management
Clackamas Resource Area
Salem District
1717 Fabry Road SE
Salem, Oregon 97306

Decision Notice

and

Finding of No Significant Impact (FONSI)

Clackamas County and Multnomah County, Oregon

Bureau of Land Management
Clackamas Resource Area
Salem District

In October of 1988, the Sandy River, from Dodge Park near its confluence with the Bull Run River to Dabney State Park near the Stark Street Bridge, was added to the National Wild and Scenic Rivers System by the passage of the Oregon Omnibus National Wild and Scenic Rivers Act.

The Bureau of Land Management (BLM), Salem District, was directed by Congress to develop a management plan for the river in coordination with the Oregon Department of Parks and Recreation, Multnomah County and Clackamas County. The Environmental Analysis for the Sandy Wild and Scenic River and State Scenic Waterway Management Plan (July 1992) documents the results of the analysis of alternatives for managing the designated segments of the river, including the effects of each alternative. This Decision Notice establishes the final boundaries for the designated segments of the river and adopts a plan for management of the area within those boundaries. The management plan is designed to protect and enhance the river's values.

Although the Plan establishes standards and guidelines, monitoring elements and potential projects, accomplishment and implementation will depend on budget allocations. If budget allocations are insufficient, activities proposed in the Plan may need to be rescheduled. Insufficient budgets over a period of several years could cause an inability to implement proposed activities, to apply standards and guidelines and to achieve some of the desired conditions.

This decision notice concerns 12.5 miles of the Sandy River from Dodge Park to Dabney State Park through the Sandy River Gorge. The following segments are affected:

> ***Segment 1.*** *The upper 3.8 miles, from the east boundary of sections 25 and 36, township 1 south, range 4 east in Clackamas County near Dodge Park to the north boundary of section 23, township 1 south, range 4 east, in Multnomah County (downstream of Indian John Island) as a* ***Scenic River.***
>
> ***Segment 2.*** *The lower 8.7 miles, from the north boundary of section 23, township 1 south, range 4 east, (downstream of Indian John Island) to the west line of the east half of the northeast quarter of section 6, township 1 south, range 4 east, in Multnomah County at Dabney State Park as a* ***Recreational River.***

Summary of Management Alternatives

The BLM in coordination with Oregon Parks and Recreation Department and the counties have analyzed four alternative strategies, including a no action alternative, for managing the Sandy River as a National Wild and Scenic River and State Scenic Waterway under a jointly developed and implemented management plan. The alternatives and associated analyses were described in the Environmental Assessment (EA) completed and made available for public review in July, 1992.

Below is a brief summary of the four alternatives analyzed in the Sandy River EA.

Alternative A: No Action

INTENT: This is the "no action" alternative required by National Environmental Policy Act (NEPA) from which environmental and socio-economic effects were assessed. Alternative A would have provided for the continuation of the existing management situation. Under this alternative, county, state and federal agencies, and private land owners would continue to exercise their existing authorities within the corridor. No new visitor facilities or programs would be developed. Resources would be managed under existing management policies and no additional resource enhancement or monitoring projects would be initiated. No new efforts for interagency cooperation, either within or outside the river corridor boundary, would be made. Management of resources would continue as it has in the past under a variety of jurisdictions and administrations. Current rules, regulation, management and enforcement efforts would be maintained. No additional federal funding or management would occur within the corridor. Existing jurisdictions and authorities would remain in place. No change to the existing state, city or BLM land uses or activities or county planning and zoning.

Alternative B: Recreation Enhancement Emphasis

INTENT: This alternative would have sought to enhance existing and develop potential recreation opportunities within the river corridor. Recreation opportunities would be encouraged and enhanced. Recreation management would be coordinated among agencies, facilities upgraded, information and education programs improved, river access and trails improved or developed, viewshed protection would be increased to the fullest extent possible under each river classification (scenic & recreational). A more developed recreation experience would evolve focusing on visitor comfort, safety, security, and social opportunities. Access and facilities would be improved substantially in key locations to meet the demands of the public. Interagency cooperation would play a key role in developing recreation facilities, visitor services and enforcing regulations within and outside the river corridor boundary, Law enforcement and interpretation efforts would be higher to accommodate increased river use. Fisheries would be managed to provide a sizable sport fishery on some sections of the river but would emphasize native runs in other areas. Land acquisition efforts would focus on providing additional recreational opportunities and public access. New trails and public access sites would be developed as long as they would not significantly or permanently degrade other natural resources.

Alternative C: Resource Protection Emphasis

INTENT: The purpose of this alternative would have been to enhance scenic and ecological values of the river corridor. It would provide public access and recreation opportunities only when they are not in conflict with natural values. The focus of management would be to enhance natural values and characteristics while exercising

greater control over recreation use to ensure resource protection. Alternative C emphasized resource protection and enhancement of natural ecosystems within the river corridor specifically scenic, ecological and other outstanding river values other than recreation. Fish, wildlife, plants, hydrology and scenic values would be protected and enhanced. Fisheries management would emphasize wild stocks. Recreation and other management activities would receive secondary consideration. No new facilities would be developed and overnight use in the river corridor would be limited to existing developed parks. Recreation activities would continue to occur, but would become more day use oriented and be restricted to a greater extent including the closure of some access points, dispersed camping areas and other areas to reduce conflicts with or impacts to wildlife, fisheries or botanical values. No additional law enforcement, resource protection patrols or interpretive efforts would be made. Resource monitoring and enhancement projects and programs would be of primary importance. Coordinating with neighboring agencies and private landowners would focus on resource protection and enhancement on lands within and outside the river corridor boundary. Aggressive land acquisition efforts would focus on improving resource protection and the BLM's ability to manage resources more consistently within the river corridor.

Alternative D: Recreation and Resource Protection Mix - (Proposed Action)

INTENT: This alternative will seek to maintain and enhance important river related values such as fisheries, wildlife, and water quality while improving management of current recreation sites and activities. Some existing recreation sites would be improved to a limited degree for the purpose of channelling existing recreation use to appropriate areas to reduce impacts and crowding. This alternative would provide a management strategy that would strive to conserve and enhance natural values while recognizing private property and land use rights and resource uses. It also would provide appropriate but limited recreation development, access and increased management presence. This preferred alternative would attempt to balance resource protection with recreational use. Maintaining the natural character, resource values and recreational opportunities the Sandy River provides would be emphasized. Some recreational development would occur to accommodate current and future public needs at key locations. Undeveloped camping would continue but some areas would be closed and in others minimal improvements to help reduce user impacts would be made to protect riparian and other fragile areas. Resource monitoring programs and enhancement projects would be developed to improve resource protection and understanding of recreation management needs. Coordinating with federal, state and county agencies as well as private landowners on providing recreation services, opportunities, and resource protection would be a key component of this alternative. Fisheries management would emphasize of similar (to what currently exists) sport fishing opportunities while providing protection measures to enhance wild stocks. Land acquisition efforts would focus on providing resource protection or conservation and providing limited additional public access from willing sellers.

Public Involvement

Extensive efforts were taken to involve the public in the development of the alternative for the management plan and to insure a high level of public participation in the planning effort. Numerous steps were taken during all stages of the river management planning process to ensure that the viewpoints of interested individuals and groups were considered. This process is fully described in the Sandy River Environmental Assessment and this plan. A mailing list of key interest groups, individuals, elected officials, community organizations, government agencies, and all landowners adjacent to the river was compiled. Information about the planning process, public meetings, workshops, newsletters and planning updates was mailed to keep all interested citizens informed of the planning efforts. In addition numerous public meetings, open houses, workshops, on-site field reviews, meetings with community planning organizations and

other groups and individuals have been held over the past three years. The planning team worked cooperatively with an interagency planning group representing various agencies and key river landowners to help guide the formulation of the alternatives and develop the final plan.

Finding of No Significant Impact and Compliance with Laws

Based upon the information and analysis contained in the environmental assessment and all other information available to me and referenced herein, it is my determination that none of the alternatives constitute a major federal action significantly affecting the quality of the human environment (a finding of no significant impact). Therefore, an environmental impact statement is unnecessary and will not be prepared. In addition, the new proposed action is in conformance with the BLM Salem District's Management Framework Plan and does not require a land use plan amendment. The proposed action will also be in conformance with the BLM Salem District's Resource Management Plan which is being prepared for approval in late 1993.

Under the alternatives analyzed, significant impacts on the quality of the human environment would not occur based on the following considerations:

1. Analysis indicated that no significant adverse impacts are expected on society as a whole, the affected region, the affected interest, or the locality.

2. Public health or safety would not be significantly adversely affected.

3. Protection of cultural resources eligible for the National Register of Historic Places would be provided.

4. The alternatives would not significantly affect endangered or threatened species, or the habitat determined to be critical to any of those species, as provided for in the Endangered Species Act of 1973.

5. The alternatives do not violate federal, state and local law requirements imposed for environmental protection. There are no known inconsistencies with officially approved or adopted federal, state or local natural resource-related plans, policies or programs.

6. Adverse impacts identified are minimal. Continued resource monitoring would ensure that no significant adverse impacts occur. As needed, appropriate management would be instituted to protect important natural and cultural resource values.

Decision Notice

I recommend adopting the Proposed Action (Alternative D) of the environmental assessment as it is fully described in this Sandy River Management Plan, with the following modifications:

Recreation Management

1. Control and permit of commercial river running activities.
Rationale: Public input indicates the need for controls and restrictions of commercial boating activities on the Sandy River. Currently very little commercial float boating of any kind has been documented as to taking place on the river. The river is suitable and has been used in the past for commercial or outfitted floating and guided fishing activi-

ties. The river does have boat ramps and other public boating access and its water flows are sufficient for commercial floating activities during most of the year. Commercial river use activities will be managed in accordance with federal guidelines for Commercial Special Recreation Use Permits. Commercial permits will be issued and monitored annually. This decision in no way restricts boating use of the river for individuals. When and if restrictions on recreation use levels are needed and an allocation system is subsequently developed, the BLM shall consider a full range of alternative allocation options including the "Freedom of Choice" system.

Land Acquisition and Administrative Boundaries

2. Initiate land exchanges (on a willing seller basis) for private and other public land within the corridor. Using Public Domain lands in the exchange will be emphasized where possible. The administrative boundary in the proposed action (Alternative D) would vary from 1/8 mile to 1/2 mile from each bank following legal lots of record where possible and providing a resource based rim to rim river management corridor. The acreage within the administrative boundaries will remain the same as the interim 1/4 mile each side corridor and include 680 acres of BLM lands and 3,320 acres of state, county and private lands. As evaluated under Alternative D in the Sandy River Environmental Assessment, resource and topographical based boundaries will better incorporate the resource, recreational and scenic values within the corridor. A legal description of the boundary is available from the Salem District Office of the BLM. As required by the Wild and Scenic Rivers Act, notification of the availability of final corridor boundary description will be published in the Federal Register following the final approval of this plan.

Rationale: It is beneficial to include all related BLM lands within the corridor and the Sandy River Gorge ACEC in the Sandy Wild and Scenic River boundaries for consistency and uniformity in management.

The viewshed and resources in the upper portion (Scenic classified section) of the designated river segment have had considerable modification to the natural landscape from management activities in the past. However, as these areas re-vegetate and mature, scenic, water quality and habitat values will improve. Much of the designated river segment under private or county ownership has been modified by recent and historic timber harvest. Portions of these areas are in the immediate viewshed or contain resources important to maintaining and enhancing river values such as water quality and fish and wildlife habitat. Several of these areas were outside the interim administrative boundary (and the State Scenic Waterway boundary as well) in the original proposed action. The final boundaries also exclude several areas that were within the interim boundaries but were beyond the gorge rim and contained resources that are not critical to the natural functioning of the river or directly river-related. The final boundary proposed in this plan would more fully incorporate important river-related values within the corridor. Inclusion within the administrative boundaries allows for the potential of federal involvement through technical assistance in management or opportunities for willing seller acquisition or exchange. Legal description of boundary adjustments will provide for easier on the ground location and identification, following legal lots of record when possible.

3. All Federal lands within the corridor will be withdrawn from mineral entry. The BLM will initiate the administrative withdrawal process and prepare necessary environmental documentation.

Rationale: The Sandy River has little or no commercial value for saleable, locatable and leasable minerals. No proof of discovery has been offered previous to Wild and Scenic Designation and no valid mineral claims exist within the designated river

corridor on BLM lands. The outstandingly remarkable resource values will be best protected by withdrawing all federal lands within the corridor from mineral entry. Such an administrative withdrawal will provide consistently in regulations between state and federal designations.

Decision Rationale

It is my decision to implement this plan because it provides the best combination of management options to meet the requirements of protecting and enhancing the Sandy River's outstandingly remarkable values, appropriately managing recreation resources, responding to public interest and need, coordinating management of federal, state, local managing agencies and facilitating cooperative management with private landowners.

The plan maintains the character of the river corridor, protects it's free-flowing condition and provides for the maintenance and enhancement of important river values. Under this plan, a wide range of non-motorized recreation opportunities as well as accessible recreation facilities are maintained. In addition, scenic values, riparian vegetation, and water quality are protected. Resource monitoring will insure that river conditions and natural character are maintained over time. Interagency coordination will improve the efficiency and continuity of management actions.

Implementation

Implementation of this decision may begin 30 calendar days after the Decision Notice appears in the Oregonian newspaper.

Each project on federal lands which would disturb the ground or would have the potential to affect any of the river's outstandingly remarkable values identified in the Management Plan will require additional environmental analysis prior to implementation with the appropriate levels of analysis in compliance with the National Environmental Policy Act and BLM requirements.

Right to Protest

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 Code of Federal Regulations, Part 4 and the Form 1842-l. If an appeal is taken, your notice of appeal must be filed in this office within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (pursuant to regulation 43 Code of Federal Regulations 4.21, 58 Federal Register 4939, January 19, 1993) (request) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below, Copies of the notice of appeal and petition for a stay must also be submitted to each party named in the decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 Code of Federal Regulations 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

(1) The relative harm to the parties if the stay is granted or denied,
(2) The likelihood of the appellant's success on the merits,
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether the public interest favors granting the stay.

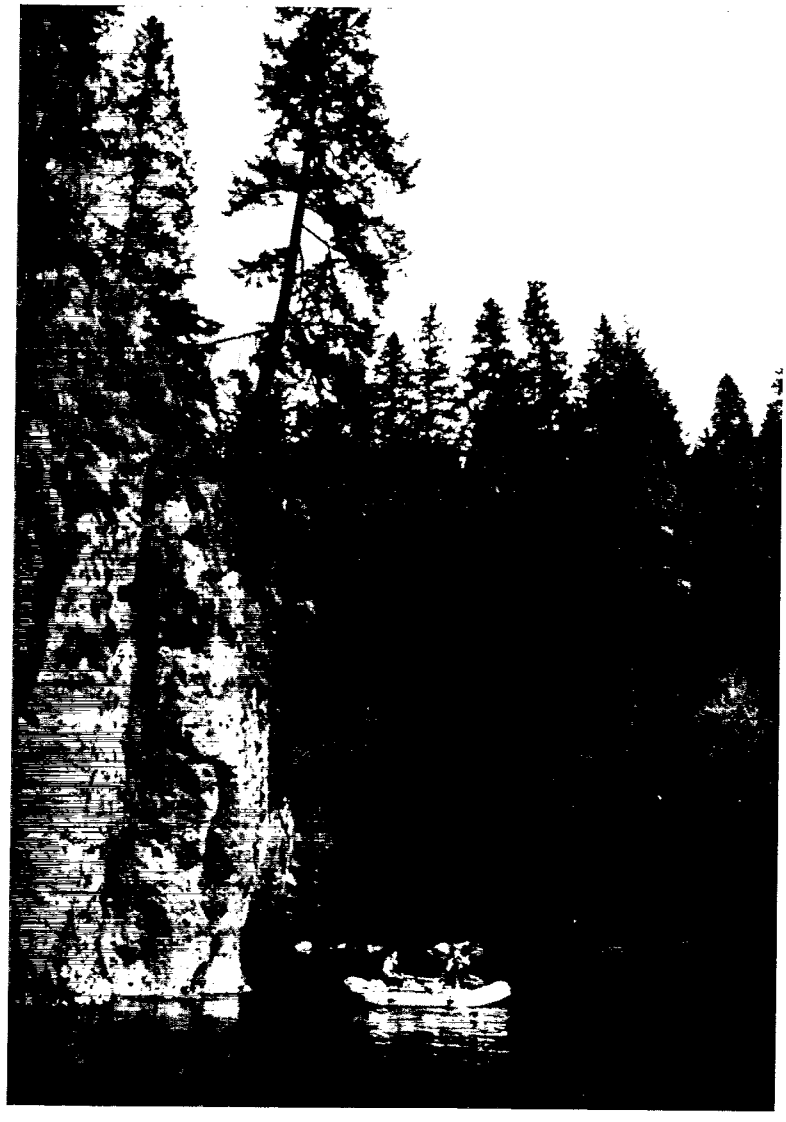
Responsible Official _____ 9/13/93
Date

Van Manning
District Manager, Salem District
Bureau of Land Management
17 17 Fabry Road SE
Salem, Oregon 97306

map 1

LOCATION OF SANDY RIVER BASIN

Summary



Summary

The Sandy Wild and Scenic River Final Management Plan was developed jointly by the Salem District office of the Bureau of Land Management (BLM) and Oregon State Parks and Recreation Department (OPRD). The plan describes specific actions the BLM and other government agencies will undertake to manage the Sandy Wild and Scenic River and State Scenic Waterway for the next 10 to 15 years.

While the plan will be used to manage the Sandy for the next decade or so, its effects on the river will be felt for a far greater length of time. The BLM recognizes the fact that the way the Sandy is managed today will be evident for the next 50 years or longer. With planning for the long-term future in mind, the Sandy River Management Plan provides guidance to protect, restore and enhance resources within the river corridor while maintaining existing landowner and public use of this valuable resource. This document describes river management goals, objectives and actions described and assessed under Alternative D as contained in the Sandy River Management Plan Environmental Assessment (1992).

How The Document Is Organized

This document is presented in four chapters:

Chapter I explains the method of plan preparation and the plan's relationship to existing federal, state, and county regulations. It provides background on the Federal Wild and Scenic Rivers Act and reviews river classifications and final boundaries. The chapter also discusses the effect of Federal and State designation on private lands as well as cooperative stewardship and conservation opportunities.

Chapter II identifies and discusses outstandingly remarkable values found within the Sandy River corridor and the key issues the public raised that have driven the development of the plan. It provides an overview of general management direction, goals, and objectives for the Sandy River corridor. This chapter also outlines the standards the BLM will use to assess any proposed land or resource use activities and guidelines it will apply when implementing various management actions.

Chapter III outlines specific management objectives and actions for each resource. The chapter first discusses overall goal and intent of the plan and provides a brief summary of the plan's recommendations for each resource. The subsequent section describes management objectives and actions for each resource value by stating management guidelines affecting the resource and presenting the desired future condition of each resource in narrative format. Specific management actions and objectives are then detailed, including actions to be implemented for monitoring and inventory. Interagency agreements and recreation opportunities and facilities management and development are also highlighted. At the end of each section is a timetable for accomplishing management actions and objectives, followed by the names of agencies responsible for or involved in implementation of the actions. Associated costs identified are only those costs estimated to be incurred by the BLM, not necessarily the total cost of implementing or completing the management action.

Chapter IV reviews the monitoring plan for the river. A table reviews and summarizes resource monitoring actions, inventories and surveys. The chapter also provides a discussion of the Limits of Acceptable Change management process.

Chapter I: INTRODUCTION

Chapter I: INTRODUCTION

This chapter describes how the management plan was prepared and how it relates to existing federal, state, and county regulations. It provides background on the Federal Wild and Scenic Rivers Act and reviews final river classifications and boundaries. The chapter also discusses the effect of Federal and State designation on private lands as well as cooperative stewardship and conservation opportunities.

Method of Plan Preparation

The Sandy Management Plan was developed from management alternatives analyzed in the Environmental Assessment and public comments received about the document. Released in July 1992, the Environmental Assessment, or EA, described in detail the river planning process, river resources, and management issues and opportunities. It also presented four alternative scenarios for managing the Wild and Scenic segment of the Sandy. Additionally, the EA weighed environmental consequences of management alternatives. Based on public input and suggestions from organizations and agencies responsible for managing the Sandy, a preferred alternative-Alternative D-was identified. The preferred alternative and public comment regarding changes to the preferred alternative paved the way for drafting this Sandy River Management Plan.

Where the EA describes planning for the Sandy in general terms and assesses environmental impacts, this final management plan lists specific actions to be taken to manage the Sandy. The final plan sets management direction, stipulates management standards and guidelines, identifies actions, establishes monitoring programs, lists responsible agencies, sets time schedules and estimates costs for implementation.

Purpose and Need

The lower Sandy River was designated a National Wild and Scenic River by the Omnibus Oregon Wild and Scenic Rivers Act of 1988. By designating the lower portion of the Sandy a National Wild and Scenic River, Congress directed the Department of Interior through the BLM to work cooperatively with the Oregon State Parks and Recreation Department and Clackamas and Multnomah Counties to develop a joint river management plan for the designated river segment within three years of designation. The Sandy River Management Plan will provide general direction and guidance for the protection, restoration and enhancement of resource values within the river corridor and accommodate public uses consistent with the Wild and Scenic Rivers Act.

Wild and Scenic River Legislation

In 1968, Congress passed the National Wild and Scenic Rivers Act. This Act established a nationwide system of outstanding free-flowing rivers, with the purpose of balancing river development with river protection and conservation.

The lower Sandy River became a Wild and Scenic river through the Omnibus Oregon Wild and Scenic Rivers Act of 1988. This act added segments of 40 Oregon rivers to the National Wild and Scenic Rivers system. To be included in the Wild and Scenic Rivers System, a river must be free-flowing and possess at least one outstandingly remarkable value. The lower Sandy River met these criteria and was designated a component of the National Wild and Scenic River System.

Relationship to Bureau of Land Management Planning

The Wild and Scenic Rivers Act requires that a comprehensive river management plan be prepared to provide for the protection of the river's outstandingly remarkable values. The Act requires that the plan address resource protection, development of land and facilities, user capacities and other management practices as needed. River management

plans must complement existing federal land use plans for the area. The existing federal land use plan which encompasses the Sandy River corridor is the Salem District Management Framework Plan (MFP). The MFP provides direction for all resource management programs, practices, uses and protection measures for the Eastside Salem District. The Sandy River Management Plan will be considered a modification to the BLM Salem District MFP.

The Salem District MFP recognizes and addresses the special river designation and does not conflict with actions proposed in the Sandy River Management Plan. In addition, the Sandy River Management Plan conforms to the preferred alternative contained in the new district-wide draft Resource Management Plan/EIS.

Relationship to State Scenic Waterways and State Parks

Through the Oregon Scenic Waterways of Act of 1969, state administrative rules have been adopted for managing the Sandy. The lower Sandy, from Dodge Park to Dabney State Park, is a State Scenic Waterway in addition to its designation as a Wild and Scenic River, A State Scenic Waterway is a river, or river segment, that has been designated by the Oregon legislature, by Governor's Declaration or by voter referendum as a scenic waterway under the provisions of the Oregon Scenic Waterways Act of 1969. Former governor Tom McCall proclaimed the lower Sandy River a State Scenic Waterway in 1972, the first and only river in Oregon to be designated a State Scenic Waterway by governor's declaration.

The State Scenic Waterways Program is administered through the Oregon State Department of Parks and Recreation under the authority of the Oregon State Parks and Recreation Commission (ORS 390.805 to 390.925). In addition to general rules governing the program, specific rules have been written for management of each river segment in the system. The State's administrative rules for the Sandy have been in place for almost 20 years. These administrative rules establish classifications tailored to maintain the existing character of the river (see boundaries and classification section for description later in this chapter).

Any conflict between the Sandy River Management Plan and State administrative rules will be resolved between State Parks and the BLM. Where state and federal regulations differ, the more restrictive of the two will apply. For example, the management guidelines for the state's 'natural' classification of the river corridor from Dodge Park to Indian John Island is generally more restrictive than the federal 'scenic' classification and would have precedence.

Relationship to County Land Use Planning

The designated river corridor lies within Multnomah and Clackamas counties. Zoning, land use controls and regulations are discussed further in the County Comprehensive Planning and Zoning Ordinances section and Effects on Private Lands section below. For reference, the special river zoning ordinances for both counties are found in the appendix.

The upper two miles of river from Dodge Park downstream to about one mile above Indian John Island (RM 18.6 to RM 16.5) lie within Clackamas County. The remaining 10.5 miles, from above Indian John Island to Dabney Park (Stark Street Bridge) is in Multnomah County. About 15 percent of the corridor (520 acres) lies within Clackamas County. Approximately 10 percent of the land within the corridor is zoned for residen-

tial use. The majority of land is contained in larger parcels that are zoned for timber or agricultural uses. *(Note: For nwre information on land use andplanning see the effects on private lauds section below)*

Final Administrative Boundaries and River Classifications

The Wild and Scenic Rivers Act (Section 3b) specifies that after a river is designated, the agency charged with its administration must establish an administrative boundary delineating the land area within the river corridor that will be managed under the Act. The Act specifies that the area within the corridor should not average more than 320 acres per river mile (an average of 1/4 mile from each bank). The interim administrative boundary for the Sandy River was submitted to Congress within one year of designation, and was the same as the State Scenic Waterway boundaries- 1/4 mile from the ordinary high water mark on both sides of the river. This boundary incorporates about 4,000 acres of which about 1,700 acres are in public ownership. These boundaries appeared as the Alterative A, or the 'no action' alternative boundaries contained in the EA. This interim boundary was modified due to additional resource information and data, planning issues, management jurisdictions, and public comment identified and collected during the planning process.

Final boundaries must be established with the completion of the final management plan. The final boundary was subject to change during the development of the EA and management planning process. During the planning process inadequate protection of certain river values such as scenery, fish, and wildlife were identified. Other management inconsistencies such as gaps in development review and jurisdiction between the state and county were also noted. The final federal Wild and Scenic River boundaries were modified in an effort to address these discrepancies in management as well as to alleviate concerns voiced by landowners. However, as directed by state law, the State Scenic Waterway boundaries can not be changed and will remain 1/4 mile on each side.

The final Wild and Scenic River boundary is a result of some minor modifications of the boundary as described under alternative D in the EA. Some changes to that boundary were made to follow legal lots of record and easily identifiable topographic features. The final boundaries provide consistent protection for river related values and better reflect land use and ownership patterns. The final boundaries are irregular in shape to include as many of the areas as possible that contain or directly support important river related values such as wildlife, fish and vegetation habitat as well as visual resource needs. In general, the federal boundaries follow a logical, river related, rim-to-rim corridor. Boundaries vary from l/S to 1/2 mile from each side of the river. They incorporate parts of major tributaries and viewshed in critical areas. The average width of the corridor remains approximately 1/4 mile from each bank of the river. The boundary reflects the realities of topographic features, easily identifiable roads and landmarks as well as considering contiguous land ownership and complexities of legally definable descriptions as much as possible. A final boundary is shown on the plan map and the complete legal description is available from the Salem District Office of the BLM upon request (the actual boundary location may vary slightly from the boundary shown on the map).

The final boundary establishes a total management area of approximately 4,000 acres or approximately 320 acres per river mile. The final boundary approximately includes:

Public Lands

680	acres of BLM and federal lands
420	acres of state lands (ODFW, State Parks)
480	acres of Multnomah County lands
110	acres of Clackamas County lands
40	acres of Portland Water Bureau lands
1730	total acres of public lands

Private Lands

450	acres of lands owned by The Nature Conservancy
300	acres of lands owned by private camps, churches, and youth organizations
1520	acres of other private lands
2270	total acres of private lands

Federal Wild and Scenic River Classification

Segments of rivers designated as components of the Wild and Scenic River System are classified by Congress into one of three categories depending on the extent of development and access along each segment. The classification terms *Wild, Scenic,* and *Recreational* refer to the degree of access or development that exists along the river area at the time of designation. The classifications are used as general guidelines for use in river management. The different classifications allow for a wide range of rivers, (primitive to highly developed), which can be included as components of the system.

Rivers or river segments classified as *Wild are* generally inaccessible except by trail, and are essentially primitive in character. *Scenic* rivers are largely primitive and undeveloped, but accessible in places by roads and may have some residential development and resource activities such as agriculture or timber harvest occurring within the corridor. *Recreational* rivers are readily accessible by road or railroad and have a greater degree of development along their shorelines. These terms can be misleading. For example, a Recreational river may have been designated for reasons other than recreation, and the primary values of a Scenic river may not necessarily be scenery. Designated 'Recreational' rivers are not necessarily managed primarily for recreation and 'Scenic' rivers are not necessarily managed only for protection of scenery.
The entire designated segment of the Sandy is free-flowing and has no dams, impoundments or major water diversions along its course. The shoreline throughout the segment is in a natural condition.

Based on the existing level of corridor development and the natural condition of the shoreline, Congress has determined that the designated 12.5mile lower Sandy River reach be divided into two classified segments:

> ***Segtnenf 1.*** *The upper 3.8 miles, from the east boundary of sections 25 and 36, township I south, range 4 east in Clackamas County near Dodge Park to the north boundary* of *section 23, township 1 south, range 4 east, in Multnomah County (downstream of Indian John Island) as a* ***Scenic River.***
>
> ***Segment 2.*** *The lower 8.7 miles, from the north boundary of section 23, township 1 south, range 4 east, (downstream of Indian John Island) to the west line of the east half of the northeast quarter of section 6, township I south, range 4 east, in Multnomah County at Dabney State Park as a* ***Recreational River.***

State Scenic Waterway Management Classification

The 12.5-mile segment of the Sandy (Dodge Park to Dabney Park) designated as a federal Wild and Scenic River is also a State Scenic Waterway. A State Scenic Waterway is a river or river segment designated by the Oregon legislature, by Governor's Declaration, or by voter referendum as a Scenic Waterway under the Oregon Scenic Waterways Act of 1969. Due to the lower Sandy's designation as a State Scenic Waterway, state administrative rules have also been adopted for management of the Sandy River. (See Appendix A). The river was classified into two segments similar to the federal classifications. The upper 3.8-mile portion, from Dodge Park to Indian John Island, is classified as a **Natural River Area.** The lower 8.7 miles, from Indian John Island to Dabney State Park is classified as a **Scenic River Area.**

As contained in the **State Scenic Waterway Program: A Landowners Guide,** these classifications are defined as follows:

Natural River Area

A Natural River Area is undeveloped, and generally in pristine or near pristine condition. It is accessible only by trail, boat or airplane. While the landscape of a Natural River Area can vary from steep-walled canyons to forested foothill, its character is consistent -primitive, very scenic, conveying a sense of solitude. Human use in a Natural River Area is usually limited; any structures or indication of settlement is rare or scattered.

Management Goal: Because a Natural River Area is undeveloped, any change has great potential to affect its natural beauty. A Natural River Area is managed to preserve and protect the scenic waterway corridor in its primitive natural condition. This means that stringent standards for concealing all activities compatible with a primitive setting and with very low visual impact are allowed.

Conditions for Use: The natural, primitive character of a Natural River Area is its dominant feature. To assure adequate protection within the corridor: All new structures and development must be completely hidden (screened) from the river, usually by topography (landform); Approved public recreation facilities and natural resource protection measures (e.g.. stream bank protection) may be visible from the river if their appearance blends into the natural landscape.

Scenic River Area

A Scenic River Area is for the most part undeveloped and natural appearing in character. Agriculture and grazing may be dominant land uses. Roads through a Scenic River Area are generally lightly travelled and not easily seen from the scenic waterway, A typical Scenic River Area could be cropland surrounded by forest or open rangeland.

Management goal: *A Scenic River Area is managed to protect the scenic quality created by the combination of agricultural and natural features. Undeveloped areas are maintained, agriculture is encouraged, and recreation activities compatible with existing land uses are allowed.*

Conditions for *use: Along the Sandy Scenic River Area, conditions for development are determined by location. Within the river canyon, which is considered to be the area of "greatest visual effect," new structures or improvements must be*

sited so that they are less visible from within the canyon than from the upland side of the canyon. Above the rim of the canyon, they may be visible as long as they meet county zoning regulations.

The State Scenic Waterways Act and Commission's rules require the evaluation of proposed land use changes within 1/4 mile from each side of the river for their potential impacts on aesthetic and scenic values, as viewed from the river. Property owners wanting to build roads or houses, harvest timber, or undertake other similar projects, must provide written notification to the Oregon State Parks and Recreation Department. State Park's evaluation of the project will be coordinated with other natural resource agencies having regulatory responsibility and with local (county and city) jurisdictions. The department relies on river classifications and administrative rules to determine whether a proposed project is compatible with the Scenic Waterway protection program for the given segments of the Sandy River. State Parks will work with the landowner to reach mutually satisfactory resolution of any conflicts. Where such a resolution cannot be reached, the Commission must decide, within one year of the original notification, whether to pay the property owner for the lands or the development rights. If State Parks does not purchase the land or reach agreement with the landowner within one year of the original proposal, the landowner may proceed with the original proposal, unless the commission has instituted proceedings to acquire the land.

Effects of Federal and State Designation on Private Lands within Sandy Wild and Scenic River and State Scenic Waterway corridor boundaries.

Zoning and Land Use

The authority to regulate and control land use and development activities on private lands rests with local, county, and state governments and not the federal government. ***The federal government does not have the authority to zone or regulate uses of private lands under the Wild and Scenic Rivers Act.*** However, Oregon state law requires individual counties to adopt comprehensive plans that are compatible with specially designated natural areas including federally designated Wild and Scenic Rivers and State Scenic Waterways. Goal 5 directs counties and cities to resolve conflicting land uses in natural areas such as State and Federal wild and scenic rivers. State land use laws and applicable county zoning regulations are discussed in other sections of this plan. The special river corridor management planning zones (PRCA for Clackamas County, SEC for Multnomah County) for the respective counties already address specific restrictions and regulations for development and land use along the rivers. These regulations establish setbacks, house color, slope, height, screening, septic, access, and other restrictions and requirements (see appendix). The federal agencies have reviewed these requirements and found them to be compatible with designation and adequate to protect river ***resources*** if effectively enforced.

In the case of the Sandy River, the BLM and State Parks will work with local and county planning departments in reviewing proposed land use or development permit applications. This will usually occur when the landowner requests a building permit, variance, or conditional use for a development proposal or zoning change. After the county

planning department receives the permit application, the BLM and State Parks, as well as other interested parties are contacted for their input on the proposed project. For all development or land use proposals involving lands within 1/4 mile of the river, landowners must complete and file a *Notification of Intent* for any land use change or development with the State Parks Scenic Waterways Program. After review of the Notification of Intent application, the agencies, through the State Scenic Waterway enforcement program, must provide the county and the landowner with information about potential conflicts with designation or the river management plan and outline concerns about potential river impacts of the proposal. State Parks will then approve or deny the permit and offer recommendations for mitigating measures or changes to the proposal. *(See State Scenic Waterway boundaries and management process as described in previous section, State Scenic Waterway Administrative Rules in the appendix or refer to State Scenic Waterways Program publication "A Landowner's Guide").*

For developments and land use on lands outside of the State Scenic Waterway Boundary but inside the Federal Wild and Scenic River corridor boundary, the county considers State Parks and BLM review comments, resource information, and existing regulations, and then makes a determination as to whether or not to approve the permit application or request. As with all land use requests if the land owner is not satisfied with the decision they have the right to appeal.

Land Acquisition, Exchanges and Easements

In the case of the Sandy River, ***the Wild and Scenic Rivers Act specifically prohibits the use*** *of* ***condemnation*** *of* ***land in*** *fee* ***simple or title*** when more than 50 percent of the entire designated river segment (or segments) is in public ownership (county, state or federal). However, the Federal government can assure compliance with the Act through a variety of fair market value compensation options including scenic or access easements, land trades or exchanges and willing seller acquisition if funding or exchange lands are available. The primary source of funding for Wild and Scenic River land acquisition comes from the Land and Water Conservation Fund. Either the landowner or the federal or state government may initiate the acquisition or exchange process.

Types of high priority lands identified for potential acquisition, easement or exchange are listed in the river plan implementation summary (Chapter III). Lands are prioritized on the basis of their high scenic, wildlife, fisheries or recreation access values. Other lands within the corridor could also be acquired or exchanged based on owner interest and relative resource values. If a landowner is interested in selling, exchanging or donating their land they should contact the State Parks or BLM river planner.

State Parks may condemn land in fee simple (purchase) in order to: 1) support a project denial; 2) when the land is used in violation of the scenic waterway law or rules, or; 3) for park and recreation purposes. Under #1 and #2 both the Parks Commission and the Water Resources Commission must approve. Only the Parks Commission need approve under # 3. Only two scenic waterway condemnations have occurred in 20 years. The state, under the scenic waterway law, may not condemn for a scenic easement.

State Parks can also purchase a scenic or use easement from the landowner for fair market value. Such a purchase would be entirely voluntary and at a price negotiated with the landowner. The easement could, for example, protect a certain visual quality while the landowner continues to own and use the land.

What does it mean for private landowners inside the boundary of the Sandy Wild and Scenic River and State Scenic Waterway corridor?

There are several distinct differences and opportunities for landowners within the Wild and Scenic River's boundaries as opposed to landowners outside of the boundaries. ***However, the designation of a river into the Wild and Scenic Rivers System does not change landowner rights unless all or a portion of these me rights are acquired from the landowner.*** Non-federal landowners with all or part of their lands within the boundaries are:

- eligible to have their land acquired by the federal government in fee title through sale or exchange *on a willing seller basis* if land resources warrant public ownership and funding is available.

- eligible to have interests in lands acquired by the federal government in the form of scenic, conservation, or public access easements to insure protection and conservation of outstandingly remarkable river resources.

- provided incentives for good river stewardship and land management practices such as:
  - offers of technical assistance from BLM and USFS resource specialists such as hydrologists, fisheries and wildlife biologists and foresters
  - opportunities to partner with federal and state agencies to receive financial assistance and grants for resource enhancement projects
  - options of getting assistance from federal agency recreation personnel to address recreation management problems such as trespass, litter and vandalism
  - riparian tax incentives, habitat enhancement project opportunities and access to other state and federal voluntary resource enhancement or restoration programs.
  - receives a river stewardship handbook outlining assistance opportunities and management options as well as offering guidelines and recommendations for sound river management techniques

Landowners within 1/4 mile of the river must also abide by State Scenic Waterway Administrative Rules (see appendix).

Owning land within the boundaries *does not* mean:

- the public has the right to trespass on private lands.

- federal land management agency or State Parks personnel have the right to enter private lands without permission.

- there is any change in the State's claim to the bed and banks of navigable waterways.

- there is any change to existing county zoning or state land use laws.

- there is any change to valid existing water rights.

- there is any change to the application of other state or federal water quality laws, wetland protection laws, waterway removal or fill requirements or other existing river related laws, ordinances, regulations or acts.

- there will be any direct change in property values or taxes.

Owning land within the boundaries *does* mean that landowners:

- can not develop or construct hydropower project dams or reservoirs requiring Federal Energy Regulatory Commission licensing.
- can not construct or develop water resource projects such as diversions, dikes, dams, or other instream structures which would have a direct and adverse effect on important river resources. Each proposed water resources project will be evaluated on its potential effects or impacts on attributes for which the river was designated (i.e. fisheries).
- are allowed to maintain existing roads, bridges, instream structures (dams, diversion structures, etc.) and erosion or flood control structures.
- must still abide by county and state zoning and land use laws or regulations.

Zoning and Residential Development

Land uses and residential development will continue to be regulated according to existing county zoning and land use planning regulations. The county may not approve zoning changes and variance or conditional use requests within the Wild and Scenic River and State Scenic Waterway corridor if the proposal is not compatible with management guidelines or if the activity would directly and adversely effect river values.

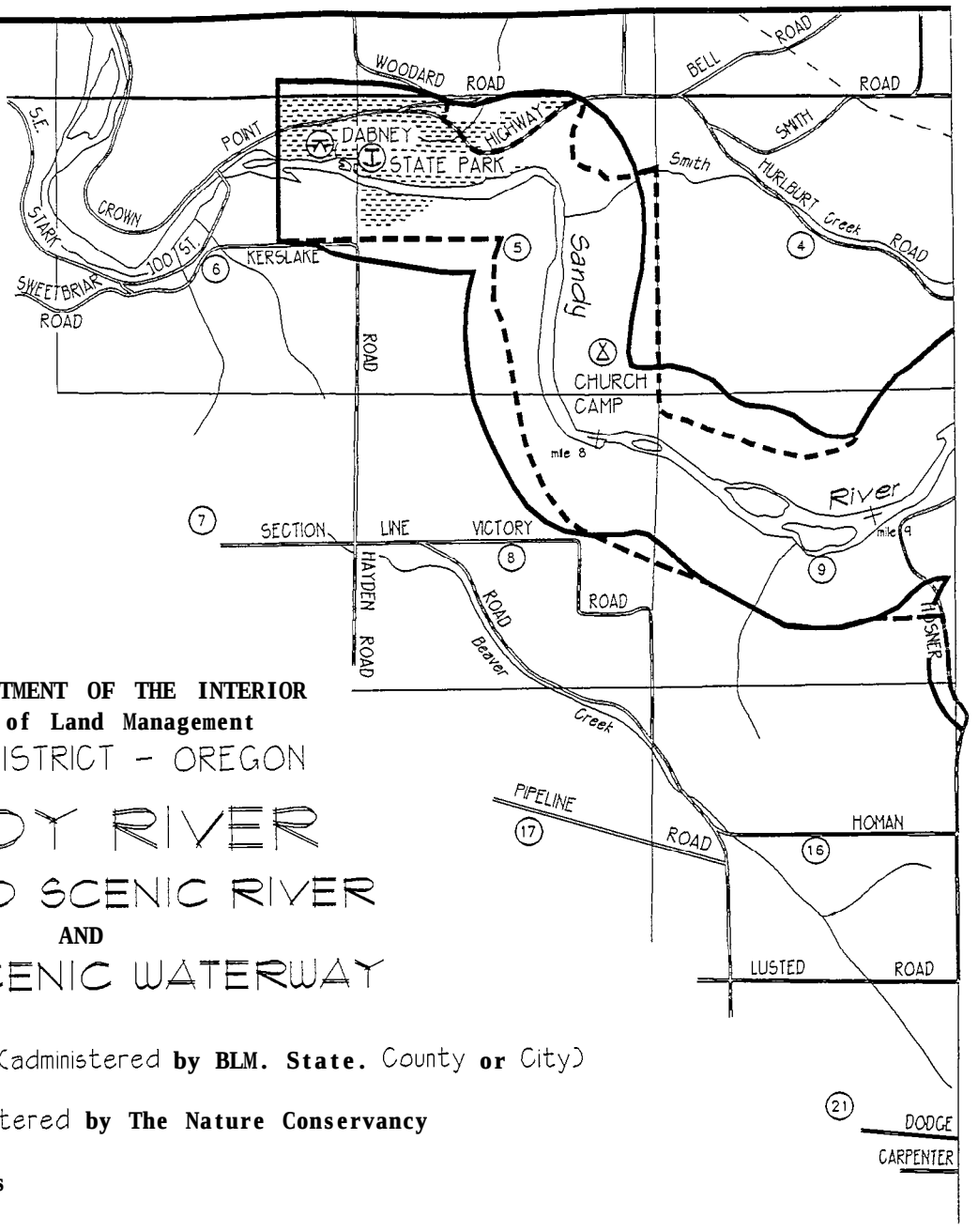
Forest Practices and Timber Harvest

Forest practices and timber harvest on private lands will continue to be regulated under conditions and regulations set forth in the Oregon Forest Practices Act. Forest management activities are allowed within the river corridor as long as those activities do not have long term, direct and adverse effects on important river values such as fisheries or water quality. ***The Federal government can not regulate timber harvest on non-federal lands except through acquisition (easement or fee title).*** Also, it is important to note that boundaries are not the same as vegetative buffers and should not be construed as such.

Coordination between the Oregon State Department of Forestry and the State Scenic Waterways Program is outlined in the appendix. When a timber operator or landowner gives a notice to the State Forester of intent to perform a commercial operation on forest land within the State Scenic Waterway boundary, the Department of Forestry will inform the operator that special constraints may apply and that a Notification of Intent for land use must be filed with the State Scenic Waterways Program. The State Forester then must contact the State Scenic Waterways Program when notice of an operation is received and determine coordinating steps such as field visits and harvest plan review.

Under the river management plan, the BLM will also develop similar agreements with Oregon Department of Forestry (ODF) that would provide the opportunity for the federal agencies to review harvest plans submitted to ODF and provide input about proposed harvest activities. This will also allow the BLM to be aware of proposed activities both inside and outside State Scenic Waterway boundaries so the agency can offer the landowner technical assistance or compensation options such as easement or exchange if the activity is determined to have long term, direct, and adverse effects on the river.

Timber harvest on county owned lands are also managed under guidelines of the Oregon Forest Practices Act. However, the policy of Clackamas County is to solicit public input in the management of these public lands. The Oregon Forest Practices Act is currently



U.5. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
SALEM DISTRICT - OREGON

SANDY RIVER
WILD AND SCENIC RIVER
AND
STATE SCENIC WATERWAY

Public **Lands** (administered **by BLM. State.** County **or** City)

Lands administered **by The Nature Conservancy**

Private Lands

State Scenic **Waterway Boundary**

Wild **and** Scenic River Administrative **Boundary**

Sandy River - designated **Recreational River segment**

Sandy River - designated **Scenic** River **segment**

Existing **boat ramp / launch area**

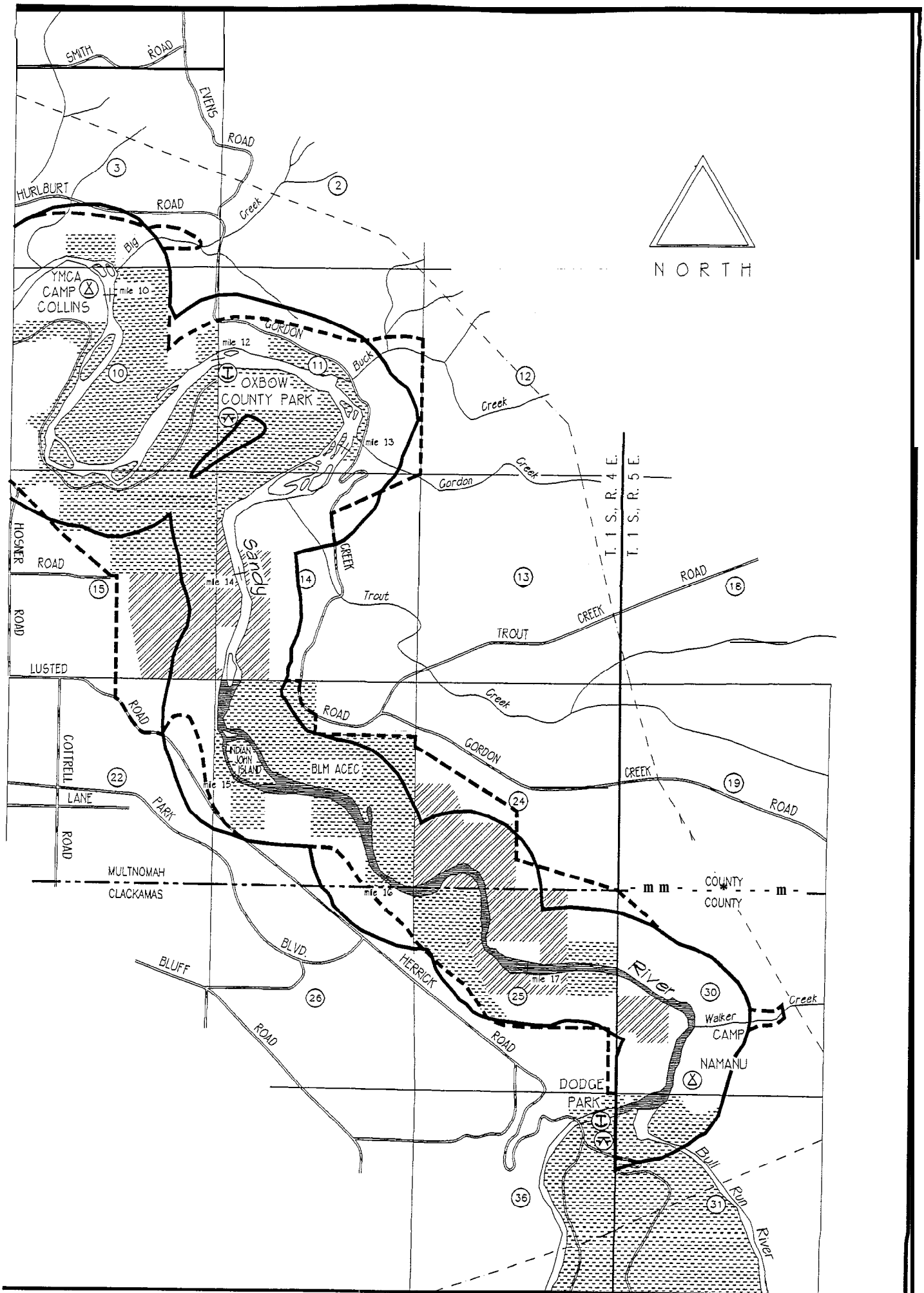
Existing **park or** picnic **area**

Existing **private summer camp**

- - - -Existing powerline

0 1 2

scale in **mile5**


SMITH ROAD
EVENS ROAD
HURLBURT ROAD
Big Creek
YMCA CAMP COLLINS
mile 10
GORDON
mile 12
OXBOW COUNTY PARK
Buck Creek
mile 13
Gordon Creek
Sandy
HOSNER ROAD
ROAD
mile 14
GREEK
Trout
T. 1 S., R. 4 E.
T. 1 S., R. 5 E.
TROUT CREEK ROAD
LUSTED ROAD
Creek
ROAD
COITRELL ROAD
INDIAN JOHN ISLAND
BLM ACEC
mile 15
GORDON CREEK
LANE
PARK
MULTNOMAH COUNTY
CLACKAMAS COUNTY
mile 16
BLVD
BLUFF ROAD
HERRICK ROAD
mile 17
River
Walker Creek
CAMP NAMANU
DODGE PARK
Bull Run River
NORTH

being updated for stream and riparian management guidelines. Therefore, guidelines may be modified and, in all likelihood, become more protective of river resources in the near future regarding vegetative buffers and stream shading requirements. In addition, the county, as a non-federal landowner, is eligible to receive the same technical assistance or acquisition options available to private landowners as Iisted previously.

Additional information concerning questions and answers about wild and scenic river and state scenic waterway designation is available from the agency offices listed in the beginning of this document.

Chapter II: MANAGEMENT GOALS, STANDARDS, AND GUIDELINES

Chapter II: Management Goals, Standards, and Guidelines

Chapter II identifies and discusses outstandingly remarkable values found within the Sandy River corridor, It provides an overview of general management direction and goals for the Sandy. This chapter also outlines the standards and guidelines the BLM will use to assess land or resource use activities and will apply when implementing various management practices. Resource specific management objectives and actions are discussed in Chapter III.

Area Overview

Regional Setting and Description

The Sandy River is located near Portland, Oregon on the west side of the Cascade Range, a region exhibiting significant faunal, floral, and topographic diversity. The river originates on the glacial and snow-covered flanks of Mount Hood, at 11,235 feet Oregon's highest mountain. From Mount Hood, the river flows 55 miles west and north to its confluence with the Columbia River near Troutdale, Oregon. In this relatively short distance, the river descends over 6,000 feet, flowing through alpine meadows, steep and densely forested canyons, and deep gorges before winding its way to the Columbia. The Sandy meets the Columbia at the west end of the Columbia River Gorge, an unusual and spectacular physiographic feature that has had a major effect on the biotic diversity of the area. Carving a near-sea level route through the Cascade Range, the Columbia is a primary factor in the area's rich natural and cultural history.

The wet coastal or maritime climate of western Oregon is characterized by mild temperatures, wet winters, a long frost-free period, and narrow daily fluctuations in temperature. Annual precipitation in the Sandy drainage ranges from 40 inches near the mouth to 110 inches near its source with the heaviest rainfall occurring in the late fall and early winter. The river area incorporates portions of two major physiographic zones, the Willamette Valley and Western Cascades regions. This unique physiographic setting supports many endemic and relict populations of plants as well as important habitat for numerous animal species.

The Sandy River and its tributaries drain an area of 508 square miles, constituting the smallest major river basin in the state. It is the only major river on the west side of the Cascades to be glacial in origin and character. Major tributaries include the Bull Run River on the north, and the Zigzag and Salmon Rivers on the south side of the main stem. The Bull Run River has its headwaters in the high mountain lakes northwest of Mount Hood and is Portland's major municipal water source. The Salmon River begins on the south side of Mount Hood near Timberline Lodge. The entire Salmon River is designated as a component of the National Wild and Scenic Rivers System.

The upper reaches of the Sandy River and its tributaries flow through rolling mountainous terrain falling 1,600 feet in the first 13 miles. The upper river is characterized by narrow chutes and boulder-choked channels. The middle portion of the river from the confluence of the Zigzag River (River Mile 42) to Marmot Dam (RM 30), flows through a wider river valley with a moderate gradient. Below Marmot Dam the river descends into narrow and incised bedrock gorges with a moderate to steep gradient of over 40 feet per mile to an elevation of 200 feet at the mouth of the Bull Run River near Dodge Park (RM 18.5).

The lower 12.5-mile designated segment lies 6 miles upstream from the river's mouth and includes the regionally known Sandy River Gorge. This 800-foot deep gorge is heavily forested and, although considerably shorter in length, exhibits characteristics similar to the much larger Columbia River Gorge. Within the gorge, the river flows past

low elevation old growth forests, riparian woodlands and fern and moss-laden cliffs. At the gorge's lower end, the Sandy meanders through two large "oxbows" and begins to widen, having large gravel bars, shallow riffles and fewer rapids. The river below Dabney Park has a low gradient and is surrounded by rolling hills and pastures. It is the accumulation of sand and sediment along this lower reach from which the river gets its name.

Outstandingly Remarkable Values

The intent of the Wild and Scenic Rivers Act is to maintain the free-flowing character of the lower Sandy River corridor and protect its important or unique values. These values were termed by Congress as "outstandingly remarkable values." Outstandingly remarkable values are values or opportunities in a river corridor which are important, rare or unique from a regional or national perspective. An objective analysis of the river's resource values, referred to as the resource assessment process, was conducted as the first step in the development of the river plan and environmental assessment. The values found to be outstandingly remarkable through the federal resource assessment process are also the same values found to be '*special attributes" through the OPRD resource analysis process. The final plan for the Sandy River provides for balanced protection and enhancement of all values found to be outstandingly remarkable: recreation, wildlife, vegetation, water quality, scenery, the anadromous sport fishery, and botany/ecology of the lower Sandy River corridor. The following summary describes the findings of the resource assessment and reviews characteristics of the resource that led to a finding of outstandingly remarkable value.

Scenic

Results of the resource assessment confirm the Congressional Record that the scenic quality within the Sandy River corridor is an outstandingly remarkable value. This distinctive canyon landscape is characterized by its near-pristine condition, steep topographic relief, and varied and diverse vegetation, The scenic quality is further enhanced by rushing rapids and still pools with occasional riverside cliffs and waterfalls. The proximity of the lower Sandy River to the Portland metropolitan area and to the Columbia River Gorge National Scenic Area adds significance to this scenic resource.

Fisheries

The fisheries value of the lower Sandy River is considered outstandingly remarkable based on the diversity of populations, quality of spawning and rearing habitat, and its regional importance and reputation as an excellent sport fishery. The Northwest Power Planning Act and subsequent Northwest Power Planning Council goals to increase the anadromous fishery in the Columbia River system represent recognition of the national importance of the Sandy River's fishery (Sandy River Sub-basin Plan 1990).
The Sandy River contains populations of at least eight runs of anadromous fish species (includes wild and hatchery stock), as well as up to ten resident species. The Sandy River system exhibits a relatively large number of anadromous species in comparison to other rivers in the region and other major tributaries of the Columbia River. Species diversity and relatively healthy populations are due, in part, to the river's location on the Columbia River, below the restrictions and impacts created by large dams and water projects. Habitat within the river segment is considered good to excellent, and provides nearly ideal conditions for anadromous fish species. Riparian vegetation in the sub-basin is afforded much more protection than that in other drainages in the state, contributing to generally good stream shading in the upper and middle portions of the drainage, which in turn keeps water temperatures relatively cool.

Recreation

In addition to the Sandy's outstandingly remarkable recreational sports fishery, the river offers exceptional recreational opportunities for nature study, land-based recreational day use, and non-motorized boating or floating.

State restrictions on motorized boating, easily accessible parks, and river-oriented facilities and the river's proximity to the northwest's second largest population center combined with its near-pristine condition, make it a unique recreational resource within the region. The area's popularity is evidenced by high visitor use (900,000 - 1,000,000 visitors per year). The recreational importance of this segment of the Sandy River is supported by numerous documents, studies, and guidebooks.

Geology

The geologic history of the Sandy River is complex and has given rise to a number of rare or unique features including incised oxbows from the Pliocene river channel (a phenomenon rare in the Northwest), volcanic deposits from the Old Maid Eruptive Period, and buried forests resulting from volcanic activity 200 years ago. These rare and unique features offer exceptional opportunities for scientific study and interpretation.

Wildlife

Wildlife values within the river corridor are outstandingly remarkable because of the regional significance of habitat diversity and number of species present. The Sandy River Gorge offers one of the greatest levels of diversity in both wildlife species and habitat of any river in the region. In addition, the educational and scientific values are correspondingly varied and significant. The river is used extensively for local wildlife and natural history educational and interpretive programs.

The Sandy River Gorge and vicinity provides a diversity of habitat for the full complement of wildlife species typical of a low elevation site in the north Cascade Range of Oregon as well as provides habitat for species typical of the Willamette Valley. The Gorge is especially valuable because the area is relatively isolated and undisturbed, yet is located within 30 minutes of the largest metropolitan area in the state. The habitats bordering the river and major tributaries provide critically important travel corridors for wildlife movement along the river and to and from the Larch Mountain area to the east, especially for important big game species such as Roosevelt elk.

Water Quality

Water quality is an outstandingly remarkable value based on its importance to the regionally and nationally significant fisheries of the Sandy River. The water quality of the Sandy River exceeds most state water quality standards set for the watershed. In addition, the river exhibits an unusual milky gray coloring in late summer due to glacial erosion. Termed glacial "milk" or "flour," the Sandy's gray waters are a rare phenomenon for Oregon rivers originating on the west slopes of the Cascade Range.

Botanical and Ecological

The botanical/ecological resources of the lower Sandy River are considered outstandingly remarkable because of the diversity of vegetation (plant species and communities), the presence of a unique low-elevation old-growth forest ecosystem, and its importance to scenic and wildlife values.

The heterogeneity of the vegetation found in the Sandy River Gorge is one of its most distinctive and important characteristics. These unique vegetation assemblages contribute significantly to the scenic, scientific and wildlife values of the river. In addition, the river corridor contains the last remaining stand of low-elevation old-growth forest representative of pre-European transitional vegetation in the Willamette Valley region. Few stands of this type of old-growth can be found in the Pacific Northwest today.

Cultural

Current information on prehistoric cultural resources within the Sandy River Gorge does not support a finding of outstandingly remarkable. Although prehistoric use of the area is indicated by historic reference, reports of artifact occurrence, inference from cultural site locations along other rivers in the western Cascades and by the high site density along the Columbia River, no specific prehistoric cultural sites have been documented in the Sandy River Gorge.

The identified existing historic sites and features within the Sandy River Gorge also do not support a finding of outstandingly remarkable. A variety of activities associated with the exploration, settlement, economic development and recreation history of northwestern Oregon took place in the Gorge and vicinity. However, the few evident sites and features representing these historical activities are common throughout the region and are not considered rare or unusual.

Management Issues and Public Involvement

Early in the planning process and throughout the development of the management plan, public meetings and workshops were held to identify issues and concerns people had regarding management of the river. The public involvement process is fully discussed in the environmental assessment (EA). The public's overwhelming response and emphasis concerning management of the Sandy River Gorge and vicinity was to keep the character of the river similar to the way it currently exists and protect its values. Conflicts centered mainly around private land use and development, timber harvest, fisheries management and recreation use. Key issues are summarized below and are broken down by resource. These key issues are the driving force behind the development of the plan and its proposed management actions.

Fisheries Management: What will or can be done to improve fish habitat and protect wild fish populations? Can sport fishing opportunities be enhanced as well?

Recreation: How can recreation be better managed to reduce impacts caused by visitors? How can access and facilities be improved without changing the character of the river or negatively affecting the quality of the recreation experience?

Water Quality and Quantity: What is being done to insure protection of the river's water quality and adequate flows?

Wildlife/Habitat Management: What will or can be done to protect wildlife habitat and populations?

Botanical/Ecological Resources: What will be done to protect the ecology of the area, including plants and riparian areas?

Cultural Resources: What can be done to enhance awareness of the area's cultural resources and how can we insure resources will be protected?

Timber Harvest: What level of timber harvest should or can be allowed in the river corridor?

Private Land Development: Will there be a loss of property rights through restrictive management practices? Will owners receive compensation if property rights are lost? What restrictions or opportunities will there be for landowners inside the boundaries as opposed to outside the boundaries? What can be done to ensure good conservation practices on private lands? What can be done to control trespassers and illegal dumping or littering?

Management Goals

The following river management goals were derived from the intent and direction contained in the Wild and Scenic Rivers Act, the Oregon Omnibus Act, federal agency guidelines for Wild and Scenic Rivers, and from input and comment received from the public and the interagency planning group.

The following management goals are intended to guide and help focus the management plan to ensure that any recommended actions or set of actions result in the intended outcome:

- Protect the rivers' free-flowing character and protect and enhance its outstandingly remarkable values and special attributes: scenery, recreation, geological, botany/ecology, hydrology, water quality, wildlife and fisheries.
- Provide opportunities for a wide range of non-motorized river-oriented recreational activities managed in a fashion to prevent degradation of the outstandingly remarkable values.
- Protect and enhance the quality and quantity of river water. Maintain acceptable levels of water temperature, suspended sediment, chemicals and bacteria.
- Protect and enhance habitat for fish and wildlife species. Protect and enhance stream channel conditions that provide high quality fish habitat.
- Maintain and/or enhance the integrated ecological functions of rivers, streams, floodplains, wetlands, lakes and associated riparian areas.
- Provide for plant and animal community diversity and maintain and/or enhance healthy functioning ecosystems to sustain long-term productivity.
- Help reduce conflicts between recreationists and private property owners and reduce trespass on private property.
- Strive for a balance of resource use: permit other activities to the extent that they protect and enhance the quality of the river's outstandingly remarkable values and special attributes.
- Develop a partnership among landowners, county and state governments, and federal agencies to determine the future of the Sandy River and share in management responsibilities for the river.
- Recognize and respond to the socioeconomic effects of management strategies. Recognize the variety of needs of citizens and involve them as partners and participants in managing the river corridor through awareness, interaction, and communication.

- Emphasize user education and information. Strive for all public use to be educated use. Establish as few regulations as possible and assure that any regulations established are enforceable and enforced.

- Encourage cooperative interpretation and environmental education efforts.

Develop a management plan that is reasonable, cost-effective, viable, and protects the rivers' outstandingly remarkable values.

Identify, provide, and protect instream flows which are necessary to maintain and/or enhance the outstandingly remarkable values of the Sandy River.

- Recognize that no action will prevent or limit the City of Portland of use of the water in the Bull Run and Little Sandy Rivers to the extent that such water is necessary for the purpose of municipal water supply.

Strive to develop effective, compatible, and consistent land use management through coordination with local land use planning authorities.

Agency Roles in River Management and Plan Implementation

The BLM has primary responsibility for managing the river corridor and implementing management actions outlined in this document. However, as directed by Congress, BLM shares this responsibility with State Parks and local counties. Oregon State Parks and Recreation Department through the State Scenic Waterways Program is still obligated to fulfill its mandate and manage the Sandy State Scenic Waterway as required by law. Multnomah and Clackamas Counties still maintain the authority to zone and control development on private lands according to their respective comprehensive plans. Conditions and jurisdictions within the corridor are inseparably tied to the management of neighboring lands. This, along with growing budget constraints among many federal, state, and local agencies, make coordination and cooperation between these and private entities a key component for successful plan implementation. As guided by this plan, it is the BLM's role to establish and promote cooperative relationships and partnerships in the management of areas both within and bordering the river corridor boundary.

Management Standards and Guidelines

The standards and guidelines listed below provide direction for and stipulate the constraints within which all land use activities or management practices must comply. Additional management objectives and actions specific to various Sandy River resources are contained in Chapter III. These standards and guidelines are applied in coordination with the Oregon State Scenic Waterways Act and the specific Administrative Rules (see appendix A) adopted for the Sandy River. For joint Federal and State management purposes, the more restrictive of the rules, classifications, standards or guidelines will apply.

The Wild and Scenic Rivers Act established a method for providing Federal protection for remaining free-flowing rivers, and preserves them and their immediate environments for the use and enjoyment of present and future generations. The Act provides for coordinated and protective management for rivers included in the national system. The Act sets forth a management policy that calls for the maintenance or enhancement of the resource values for which the river was designated.

This non-degradation and enhancement policy applies to all designated river areas regardless of classification. Section 10 (a) of the Act states:

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

Congressional guidance for resource management practices along Wild and Scenic Rivers states:

Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation or enhancement of the river area resources.

For the sake of clarity, management standards and guidelines are presented for separate river classifications (scenic and recreational river areas). The following requirements are found in BLM Manual section 8351.5 and supplement the September 7, 1982 (47 FR 39454), joint U.S Department of Interior and U.S. Department of Agriculture guidelines.

Scenic River Areas

Scenic river areas defined by the Wild and Scenic Rivers Act include:

> *Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.*

Management Objective for Scenic River Areas

Management of scenic river areas should maintain and provide outdoor recreation opportunities in a near-natural setting. The basic distinctions between a "wild" and a "scenic" river area are the degree of development, types of land use, and road accessibility. In general, a wide range of agricultural, water management, silvicultural, and other practices or structures could be compatible with scenic river values, providing such practices or structures are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment.

Management Standards for Scenic River Areas

Allowable management practices in *wild* river areas might include construction of minor structures for such purposes as: improvement of fish and game habitat; grazing; protection from fire, insects or disease; and rehabilitation or stabilization of damaged resources, provided the area will remain natural appearing and the practices or structures are compatible and in harmony with the environment. Developments such as trail bridges, occasional fencing, natural appearing water diversions, ditches flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the river area.

The same considerations set forth above for *wild* river areas should be considered for *scenic* river areas, except that motorized vehicle use may, in some cases, be appropriate and that development of larger scale public-use facilities within the river area, such as

moderate-sized campgrounds, interpretive centers, or administrative headquarters would be compatible if such facilities were screened from the river. The following program management standards apply:

Forest Practices: practices including timber harvesting could be allowed provided that such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment. The river area should be maintained in its near-natural condition. Timber outside the boundary (public lands) but within the visual seen area, should be managed and harvested in a manner which provides special emphasis on visual quality. Preferably, re-establishment of tree cover would be through natural revegetation. Cutting of dead and down materials for fuel/wood should be limited. Where necessary, restriction on use of wood for fuel may be prescribed.

Water Quality: Water quality shall be maintained or improved to meet Federal criteria or federally approved State standards. (River management plans shall prescribe a process for monitoring water quality on continuing basis, see water quality section.)

Hydroelectric Power and Water Resource Development: n t o f hydroelectric power facilities would be permitted. Flood control dams and levees would be prohibited. All water supply dams and major diversions are prohibited. Maintenance of existing facilities and construction of some new structures would be permitted provided that the area remain natural in appearance and the practices or structures harmonize with the surrounding environment.

Mining: ct to existing regulations (e.g., 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect the values of rivers included in the national System new mining claims, and mineral leases can be allowed. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation and pollution, and visual impairment. Reasonable mining claim and mineral lease access shall be permitted. Mining claims, subject to valid existing rights, within the scenic river area boundary can be patented only as to the mineral estate and not the surface estate. Proof of discovery must be shown prior to the effective date of Wild and Scenic River designation.

Road and Trail Construction: Roads or trails occasionally bridge the river area and short stretches of conspicuous or long stretches of inconspicuous and well-screened roads could be allowed. Maintenance of existing roads and trails, and any new roads or trails, shall be based on the type of use for which the roads/trails are constructed and the type of use that will occur in the river area.

Agricultural Practices and Livestock Grazing: In comparison to wild river areas, a wider range of agricultural and livestock grazing uses are permitted to the extent currently practiced. Row crops are not considered as an intrusion of the "largely primitive" nature of scenic corridors as long as there is not a substantial adverse effect on the natural-like appearance of the river area.

Recreation Facilities: Larger-scale public use facilities, such as moderate-sized campgrounds, interpretive centers, or facilities, such as moderate-sized campgrounds, interpretive centers, or administrative headquarters are allowed if such facilities are screened from the river.

Public Use and Access: Recreation use including, but not limited to; hiking, fishing, hunting, and boating is encouraged in scenic river areas to the extent

consistent with the protection of the river environment. Public use and access may be regulated and distributed, where necessary, to protect and enhance scenic river values.

Rights-of-Way: New transmission lines, natural gas lines, etc., are discouraged unless specifically authorized by other plans, orders, or laws. Where no reasonable alternate location exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques shall be selected to minimize adverse effects on scenic river area related values and fully evaluated during the site selection process.

Motorized Travel: Motorized travel on land or water may be permitted, prohibited, or restricted to protect river values. Prescriptions for management of motorized use may allow for search and rescue and other emergency situations.

Instream Flow Assessment: To the extent practical, consistent with resource management objectives, quantify instream flow and protection requirement related to outstandingly remarkable and other resource values identified through the Resource Management Plan process. Where possible, conduct a comprehensive, interdisciplinary, resource value-based assessment in order to delineate resource values, relate flows to resource conditions, and formulate flow protection strategies which incorporate legal, technical, and administrative aspects in order to secure instream flows which address values associated with the scenic river segment.

Recreational River Areas

Recreational river areas are defined by the Wild and Scenic Rivers Act (WSRA) to include:

> *Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.*

Management Objective for Recreational River Areas

Management of recreational river areas should give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a recreational setting. Recreational classification is a determination of the level of development and does not prescribe or assume recreation development or enhancement. Management of recreational river areas can and should maintain and provide outdoor recreation opportunities. The basic distinctions between a '*scenic" and a "recreational" river area are the degree of access, extent of shoreline development, historical impoundment or diversion, and types of land use. In general, a variety of agricultural, water management, silvicultural, recreational, and other practices or structures are compatible with recreational river values, providing such practices or structures are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment.

Management Standards for Recreational River Areas

Recreational facilities may be established in proximity to the river, although recreational river classification does not require extensive recreational development. Recreational facilities may still be kept to a minimum, with visitor services provided outside the river area. Future construction of impoundments, diversions, straightening, riprapping, and other modification of the waterway or adjacent lands would not be permitted except in

instances where such developments would not have a direct and adverse effect on the river and its immediate environment. The following program management standards apply:

Forestry Practices: Forestry practices including timber harvesting would be allowed under standard restrictions to avoid adverse effects on the river environment and its associated values.

Water Quality: Water quality shall be maintained or improved to meet Federal criteria or federally approved State standards (River management plans shall prescribe a process for monitoring water quality on a continuing basis.)

Hydroelectric Power and Water Resource Development: No development of hydroelectric power facilities would be permitted. Existing low dams, diversion works, rip rap, and other minor structures may be maintained provided the waterway remains generally natural in appearance. New structures may be allowed provided that the area remains generally natural in appearance and the structures harmonize with the surrounding environment.

Mining: Subject to existing regulations (e.g.. 43 CFR 3809) and any future regulations that the Secretary of the Interior may prescribe to protect values of rivers included in the National System, new mining claims are allowed and existing operations are allowed to continue. All mineral activity on federally administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation and pollution, and visual impairment. Reasonable mining claim and mineral lease access shall be permitted. Mining claims, subject to valid existing rights, within the recreational river area boundary can be patented only as to the mineral estate and not the surface estate. Proof of discovery must be shown prior to the effective date of Wild and Scenic River designation.

Road and Trail Construction: Existing parallel roads can be maintained on one or both river banks. There can be several bridge crossings and numerous river access points. Roads, trails, and visitor areas must conform to construction and maintenance standards and be free of recognized hazards.

Agricultural Practices and Livestock Grazing: In comparison to scenic river areas, lands may be managed for a full range of agriculture and livestock grazing uses, consistent with current practices.

Recreation Facilities: interpretive centers,administrative headquarters, campgrounds, and picnic areas may be established in proximity to the river. However, recreational classification does not require extensive recreation development.

Public Use and Access: Recreation use including, but not limited to hiking, fishing, hunting, and boating is encouraged in recreational river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed where necessary to protect and enhance recreational river values. Any new structures must meet established safety and health standards or in their absence be free of any recognized hazard.

Rights-of-Way: New transmission lines, natural gas lines, water lines, etc, are discouraged unless specifically authorized by other plans, orders, or laws. Where no reasonable alternate location exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques shall be selected to minimize adverse effects on recreational river area related values and fully evaluated during the site selection process.

Motorized Travel: Motorized travel on land shall generally be permitted on existing roads. Controls shall usually be similar to that of surrounding lands. Motorized travel on water shall be in accordance with existing regulations or restrictions.

Instream Flow Assessment: To the extent practical, consistent with resource management objectives, quantify instream flow and protection requirements related to outstandingly remarkable and other resource values identified through the RMP process. Where possible, conduct a comprehensive, interdisciplinary, resource value-based assessment in order to delineate resource values, relate flows to resource conditions, and formulate flow protection strategies which incorporate legal, technical, and administrative aspects in order to secure instream flows which address values associated with the recreational river segment.

Management

Wilderness and Wilderness Study Areas: Management of Wild and Scenic rivers which overlap designated wilderness areas or wilderness study areas will meet whichever standard is highest. If an area is released from wilderness study status and the associated Wilderness Interim Management Policy, the applicable Wild and Scenic river classification guidelines and standards would then apply.

Fire Protection and Suppression: Management and suppression of fires within a designated Wild and Scenic river area will be carried out in a manner compatible with contiguous Federal lands. Wildfire suppression methods will be used that minimize long-term impacts on the river and river area. Pre-suppression and prevention activities will be conducted in a manner which reflects management objectives for the specific river segment. Prescribed fire may be used to maintain or restore ecological condition or meet objectives of the river management plan,

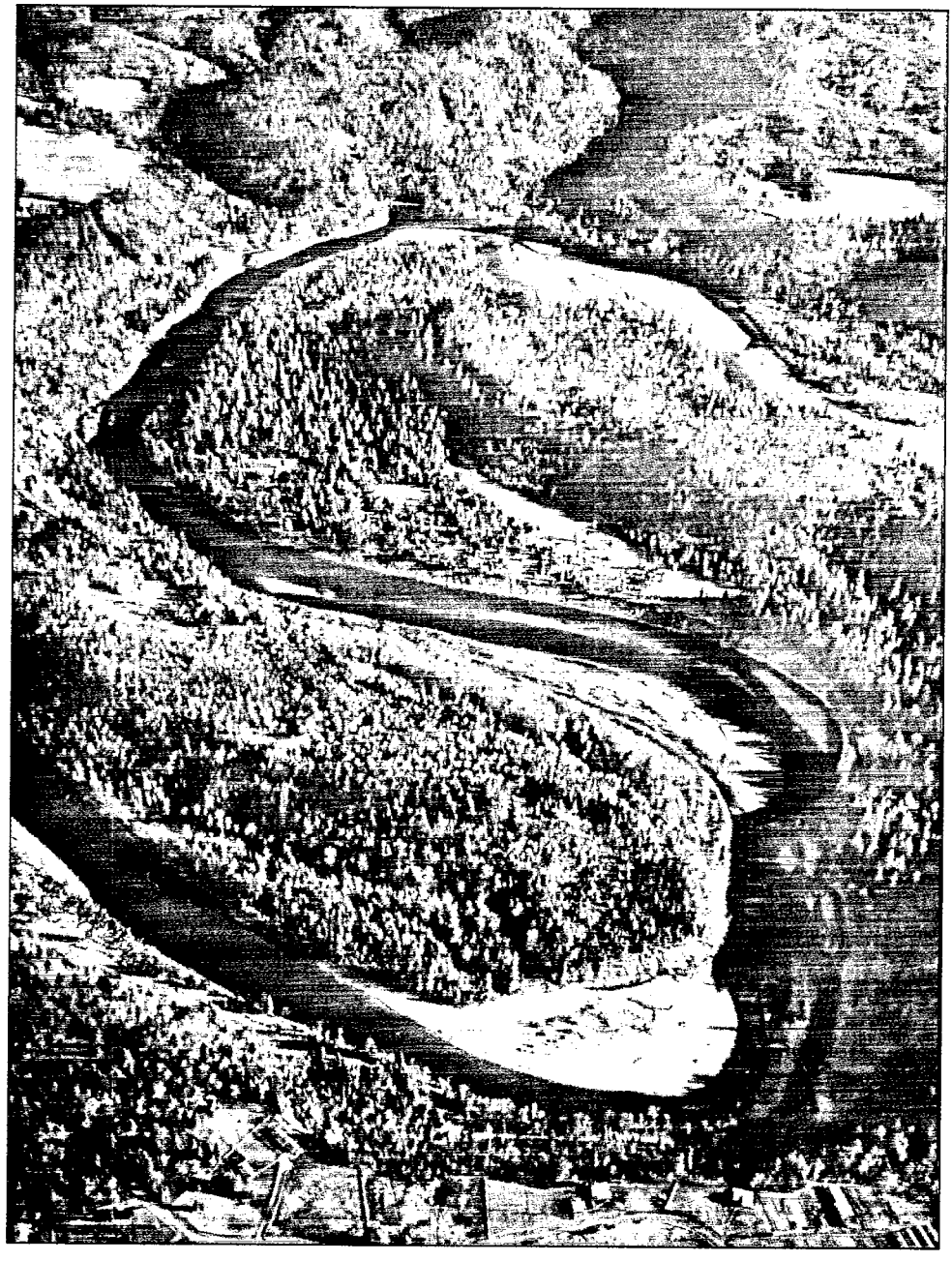
Insects, Diseases, and Noxious Weeds: The control of forest and rangeland pests, diseases, and noxious weed infestations shall be carried out in a manner compatible with the intent of the WSRA and management objectives of contiguous Federal lands.

Cultural Resources: Historic prehistoric resource sites shall be identified, evaluated, and protected in a manner compatible with the management objectives of the river and in accordance with applicable regulations and policies. Where appropriate, historic or prehistoric sites shall be stabilized, enhanced, and interpreted.

Fish and Wildlife Habitat Improvement: The construction and maintenance of minor structures of the protection, conservation, rehabilitation, or enhancement of fish and wildlife habitat are acceptable provided they do not affect the free-flowing characteristics of the Wild and Scenic river, are compatible with the river's classification, that the area remains natural in appearance, and the practices or structures harmonize with the surrounding environment.

Water Rights: In the process of evaluating river segments, authorizing officials are held to established principles of law with respect to water rights. Under provisions of Section 13 of the Wild and Scenic Rivers Act (WSRA) as well as other statutes, river studies shall not interfere (except for license under Section 7(b) of the WSRA pertaining to Section 5(a) Wild and Scenic river studies) with existing rights, including the right of access, with respect to the beds of navigable streams, tributaries, or river segments. In addition, under the Federal Land Policy and Management Act and the Federal Power Act, the BLM has conditioning authority to control any proposed projects which would be incompatible or potentially degrading to river and/or other identified resource values. (See appendix for additional discussion of water rights and water resource projects).

Chapter III: IMPLEMENTATION



Chapter III: Implementation

This chapter discusses the overall goal and intent of the management plan and summarizes the plan's direction for each resource. It outlines specific management objectives and actions for each resource by first providing management guidelines and the desired future condition of each resource, followed by specific management actions, a listing of the agency(s) responsible for completing the action or participating in its implementation, project time frames and estimated costs. In the case where certain management actions are ongoing and do not require a completion date, a starting date is listed. Associated costs identified are only those costs estimated to be incurred by the BLM, not necessarily the total cost of implementing or completing the management action.

Goal of the Plan

The plan will seek to provide for the balanced protection and enhancement of all outstandingly remarkable river values. Standards, guidelines and management actions contained in the plan are designed to maintain the natural character of the river, enhance fish habitat and other natural values, improve management of recreation facilities and activities, foster interagency cooperation, and improve management efficiency and effectiveness.

Discussion of Intent

The plan and its management standards, guidelines, objectives, and following actions are designed to primarily accomplish a single difficult and overriding task, that of keeping the river and its corridor similar in character and condition as it is today. The plan is intended to provide a framework to guide efforts in accomplishing this task. The terms *maintain* and *enhance* are used in the Wild and Scenic Rivers Act (WSRA). For implementation purposes, these terms will be interpreted to mean that the river will be managed in such a way that the "outstandingly remarkable" values for which the river was designated will not be degraded and, where possible, will be enhanced by being restored to healthy and naturally functioning systems. For recreation, enhancement will mean the provision of facilities or management of activities that will protect the condition of natural resources while insuring existing high quality recreation activities and opportunities.

Plan Administration and Amendment Process

The river will be administered jointly by the BLM and State Parks and Recreation Department. These agencies will develop a cooperative management agreement that outlines specific roles regarding the management of the Sandy River. These agencies will also develop and pursue separate Memorandums of Understanding (MOUs) or interagency agreements with various cooperating agencies and organizations involved in some aspect of the management of the river or its resources. An interagency management committee will be established and will meet at regular intervals to coordinate management of the river corridor and facilitate the implementation of the management plan. The committee's membership will include representatives from agencies, organizations, landowners and others with direct management authority or jurisdiction within the corridor. Cooperating agencies and organizations could include Portland Water Bureau, Multnomah County, Clackamas County, The Nature Conservancy, Division of State Lands, Oregon Department of Fish and Wildlife, Oregon Water Resources Department, and others.

The interagency management committee will help guide management decisions concerning the river and provide the coordination necessary for the implementation of the

plan. This group will be formed by separate letters of agreement or memorandums of understanding. The primary purpose of the group will be to facilitate interagency/ organization cooperation and communication. The group will act as a sounding board for management issues and their resolution.

Plan Implementation Summary

The plan seeks to maintain and enhance important river related values such as fisheries, wildlife, and water quality while improving management of current recreation sites and activities. Some existing recreation sites would be improved to a limited degree for the purpose of channelling existing recreation use to appropriate areas to reduce impacts and crowding. The plan provides a management strategy that would strive to conserve and enhance natural values while recognizing private property and land use rights and resource uses. It would also provide appropriate but limited recreation development, access and an increased management presence.

Boundaries: The final boundaries were established to best conserve and protect for wildlife, fish and vegetation habitat as well as provide for visual resource management needs. In general, the federal boundaries follow a logical, river related, rim-to-rim corridor. Boundaries vary from 1/8 to 1/2 mile from each side of the river and along major tributaries and viewshed in critical areas, averaging about 1/4 mile for most of the river corridor. The boundary reflects the realities of topographic features, easily identifiable roads and landmarks as well as considering contiguous land ownership as much as possible.

Recreation and public access: The plan calls for a limited improvements to recreational services and key existing facilities. New signing and visitor information will be provided to protect other resources and enhance the recreation experience. Cooperative interpretive efforts will be initiated. Expansion or improvement of existing facilities and trails or access areas will be pursued in some high use areas including Dodge and Dabney Parks. Additional restrictions, monitoring and management of recreation use or access could take place to protect private lands, reduce recreation conflicts and protect other river resources.

Fisheries: Some new fish population and habitat inventories and habitat restoration projects will be initiated particularly along the main stem and major tributaries. Any recommended changes to the current management of fish populations will be pursued or supported only to enhance recovery of wild fish populations.

Water Quality and Quantity: Monitoring of water flow and quality will continue at established stations (Stark Street Bridge and below Bull Run pipeline). If identified, acute chronic pollution sources would be located and appropriate agencies informed and actions taken. Instream flow studies will be pursued in cooperation with other agencies to determine flow needs for recreation and fish. Flow and water quality studies would be used to support or modify existing management practices.

Vegetation: Additional inventory and monitoring activities will occur. Programs for landowners regarding botanical/ecological information will be pursued with less emphasis on acquisitions. Emphasis will be on habitat restoration and protection in critical areas.

Wildlife: Several inventory and monitoring activities will occur for wildlife including: baseline inventories of populations and habitat; monitoring of impacts associated with land use, development and recreation: and identifying opportunities involving habitat restoration and protection in critical areas. The BLM will also initiate an elk manage-

ment agreement in cooperation with ODFW, Multnomah County, The Nature Conservancy (TNC) and private landowners. BLM will also provide technical assistance to private landowners for mitigation and habitat enhancement opportunities.

Visual resources and Land Use: Current state and county regulations would continue. However, current enforcement levels and development/permit review procedures will be reviewed and improved for consistency and effectiveness. Some scenic and conservation easements could be pursued within state scenic waterway boundaries and within federal boundaries. Efforts will be made to educate and inform landowners of incentives, regulations and conservation practices.

Land Acquisition, Exchange, or Easement Strategy: Land acquisition, exchange or easements will be pursued on a willing seller basis. Each proposal will be considered on a case-by-case basis, considering availability, funding, resources and values. Lands identified as having critically important river-related features or resources will have priority. When a property becomes available for sale, exchange or easement the BLM will consider the following priorities: important fish, wildlife or botanical habitat; riparian habitat or river frontage; significant cultural sites; scenic viewshed; and public access opportunities. Use of public domain lands for exchange will be emphasized wherever possible.

Resource Management Objectives and Actions

The following section is organized for easy reference to specific resources and their management.

Management Guidelines: Refers to guidelines developed specifically for the particular resource as it relates to the Sandy River. These guidelines establish the direction, constraints, or parameters to which all management actions or land use activities regarding the particular resource must adhere.

Desired Future Condition: This section describes the desired outcomes or condition of a specific resource at some time in the future, (usually 30 to 50 years). It is a description of the desired end product of management for the resource.

Management Actions: These are specific actions that will be taken to resolve current resource management issues, concerns, or problems.

Primary Responsibility: Identifies a specific agency or agencies responsible for initiating the particular action or participating in its implementation. It does not necessarily mean that the agency identified will carry out all aspects of the action, only that it will insure that necessary steps are taken to coordinate and facilitate the completion of the action.
Schedule: Identifies when the action will be implemented.
Estimated Costs: Estimates the costs to the BLM associated with implementing the specific action. Costs identified include BLM's contribution for staffing or personnel needed as well as material, contract or construction costs. Costs listed are one time costs unless identified as ongoing or annual management costs. Cost estimates identified are those that would be incurred by the BLM (unless otherwise specifically noted) and may not necessarily reflect the total cost needed to implement the particular action. All costs and actions are summarized in a table following this chapter.

Budget Note: Although the Plan establishes standards and guidelines, monitoring elements and potential projects, accomplishment and implementation will depend on budget allocations. If budget allocations are insufficient, activities proposed in the Plan may need to be rescheduled. Insufficient budgets over a period of several years could cause an inability to implement proposed activities, to apply standards and guidelines and to achieve some of the desired conditions.

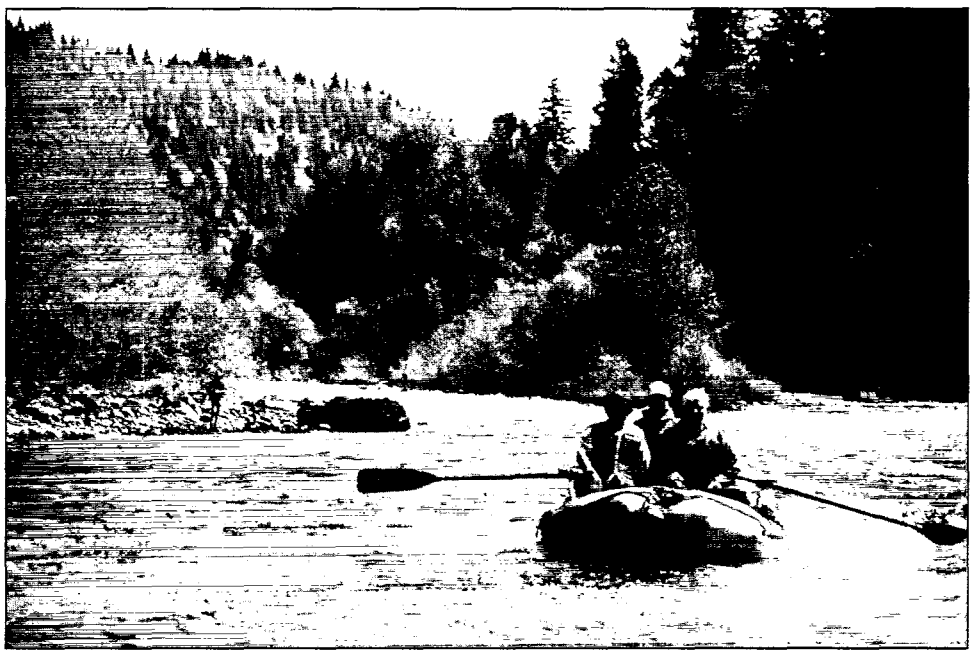
Strategy for expenditure of funds: Limited funding and staff will be available to the managing agencies to implement the decisions of this plan. Because the amounts and types of funds are not always predictable and because it will be necessary to await the event to determine which management actions are most urgently needed, it is not possible to have expenditures prioritized at the time of plan adoption. However, some general guidelines can be established to help guide managers' actions in allocating funding and staff time.

Generally, the highest priority will be given to those actions necessary to ensure that natural and cultural resources, especially outstandingly remarkable resources, within the planning area are maintained within management standards. Law enforcement, public information and education, and other measures necessary to protect public safety will also receive the highest priority.

High priority will also be given to developing baseline data that is necessary to effectively implement, monitor, and adjust the plan using the Limits of Acceptable Change process.

Facility development and capital improvements will be limited but will also be part of an overall resource strategy. Improvements will *be consistent with the need to protect the natural resources of the river and control or manage use consistent with the plan objectives. Developments or improvements* will *be based on resource needs, health and safety concerns and not change the physical character of the river or the desired recreational experience. Land acquisition ranges from high to low priority depending on willingness of sellers, resource values and available funding or exchange potential.*

Resource: Recreation, Interpretation, and Environmental Education



Recreation, Interpretation and Environmental Education

Management Guidelines

- Allow a wide range of non-motorized recreational activities that are managed in a fashion to prevent degradation of the outstandingly remarkable resources.
- Recreation opportunities within corridor would be enhanced through the expansion and improvement of existing facilities and access areas only. No development of new campgrounds and major new trails (such as the "Gorge Trail") along the river will be allowed.
- Recreation management efforts would emphasize information and education efforts as well as other indirect methods of visitor management. Agency presence and patrols can also be used to improve management of high use areas and along the river.
- Current and future emphasis should be placed on identifying opportunities for barrier free recreation facilities. All new recreation facilities must provide for barrier free access when feasible.
- Commercial guiding and outfitting activities on the river and any other commercial uses of federal lands shall be required to obtain a special recreation use permit.
- The Limits of Acceptable Change (LAC) planning process will be used to determine carrying capacities of the river (see monitoring section for LAC discussion). If and when use limits are reached or needed, management agencies shall consider implementing a "freedom of choice" use allocation system.
- Interpretive and environmental efforts will pursue coordination with existing programs and facilities to complement other efforts within the region. Environmental education and interpretive efforts should emphasize topics that will build awareness of the Sandy River's unique and important features and encourage responsible use ethics among visitors and area residents.
- Additional information, signing and services will be provided to visitors. Agreements will be developed between management agencies and organizations to coordinate recreation management within the corridor.
- All interpretive and information signs should be placed at existing recreation sites. Printed information should have limited distribution and not be designed to promote or advertise the area.
- Allow reconstruction and realignment of existing trails when necessary.
- Oxbow, Dodge and Dabney Park management, including hours of operation, would remain under discretion of Multnomah County Park, Portland Water Bureau and State Parks management respectively.

Desired Future Condition:

Expectations of high quality recreation experiences will continue to attract visitors to the Sandy River. While recreations use levels will rise significantly over 1992 levels, the

user will still be able to experience solitude and tranquility in many areas of the river corridor. Most of the increased use will occur in the existing developed recreation sites and parks. The recreation opportunity classification (roaded natural) will continue near Dodge, Oxbow and Dabney Parks with other areas remaining in a primitive to semi-primitive state. With the exception of allowing automobiles in the developed parks, the river corridor will be managed for non-motorized recreation activities. To accommodate increases in use levels, parks will be improved with clean, modern facilities which blend with the natural setting. Some high use areas will be upgraded and improved to limit or prohibit impacts to the environment and natural resources. Increased information and education efforts will reduce incidents of litter, dumping, trespass, and vandalism from 1992 levels. Coordinated management efforts will result in the development of a corridor interpretive plan that addresses signing, information, and the development of other materials which will enhance the recreation experience of the visitors. Increased agency presence and uniformed patrol will help control conflicts between visitors and reduce illegal activities such as poaching.

Management Actions:

1. Develop and provide adequate but limited recreation infrastructure including appropriate levels and types of public access, trails and facilities.

   - Develop a management strategy for Dodge Park and vicinity, in coordination with the Portland Water Bureau's long-term potential use for the site and recreation access/facility as well as other visitor management needs. The BLM would facilitate the development of a management strategy in coordination with the Portland Water Bureau, Campfire Inc., The Nature Conservancy, Oregon Parks and Recreation Department, Oregon Department of Fish and Wildlife, Clackamas County Sheriff's Department, Clackamas County Planning and Transportation Department, Multnomah County Parks Services Division and other interested parties.

     Primary Responsibility: BLM and PWB
     Schedule: Initiate management committee 1993
     Estimated Costs: Planning: $5,000; Construction: unknown

   - BLM will cooperate with Multnomah County Park Services Division and State Parks to improve existing parking/trailhead areas along Gordon Creek Road (near mouth of Gordon Creek), to accommodate existing use but not to promote additional use. This may include the provision of sanitation and signing as appropriate to address safety and environmental concerns.

     Primary Responsibility: BLM, State Parks and County Parks
     Schedule: Evaluate in 1994, construction if necessary 95-96
     Estimated Costs: Planning: $3,500; Construction $30,000+

   - Inventory, close and rehabilitate existing dispersed camping sites and user trails along river and in riparian areas where resource damage is present on Federal lands or other public lands in cooperation with the appropriate agencies.

   - Provide primitive sanitation facilities at key public use access areas if water quality testing or area monitoring reveals impacts.

     Primary Responsibility: BLM
     Schedule: 1995-97
     Estimated Costs: $20,000

- State Parks will work cooperatively with BLM, DSL, Multnomah County and local landowners in developing any management plan, facility or activity at Dabney Park.

  Primnrv Responsibility: State Parks
  Schedule: ongoing
  Estimated Costs: e

2. Develop and provide a comprehensive recreation management and monitoring program that will insure that existing types of high quality recreation opportunities are maintained or enhanced and that recreation caused impacts do not degrade other resources or available recreation experiences.

- The managing agencies would develop and implement a comprehensive recreation monitoring program and visitor use survey (year round study).

  Primary Responsibility: BLM and State Parks
  Schedule: 6 - 9 8
  Estimated Costs: t o 5 0 , 0 0 0

- Close federal lands to off-road vehicle (motorized) access and cooperate with state agencies to restrict motor vehicle access within the gorge. This would not effect motorized vehicle use on private lands.

  Primary Responsibility: BLM and State Agencies
  Schedule: Completed by 1994
  Estimated Costs: none

- State Parks and BLM would increase the level of agency/ranger patrols, visitor contact and enforcement during high use periods. Seasonal river ranger patrols would be coordinated with Multnomah County Sheriffs Department and Parks Services Division as well as Clackamas County Sheriff's Department and the State Highway Patrol.

  Primary Resnonsibilitv: BLM and State Parks
  Schedule: Coordinated by 1994, implemented by summer 1995
  Estimated Costs: $40,000 annually

- BLM, State Parks and Multnomah/Clackamas Counties would provide additional signing and information along roads and at key access points would be used initially to channel recreation use to appropriate locations, encourage resource protection practices and inform users of private lands and concerns.

  Primary Responsibility: BLM, State Parks and County Planning/Transportation
  Schedule: 1995
  Estimated Costs: $10,000

- Pursue the use of Oregon State Patrol Cadets to help enforce fishing and other regulations on river.

  Primary Resnonsibilitv: State Parks, Oregon State Police and BLM
  Schedule: 1994
  Estimated Costs: $35,000 annually

- Establish Limits of Acceptable Change (LAC) process for recreation use and impacts for determining use level capacities and needs for management action.

Primary Resnonsibilitv: BLM and State Parks
Schedule: 1996-98 (corresponds with visitor monitoring and survey)
Estimated Costs: $45,000+

- Conduct cooperatively sponsored annual river clean-up event and pursue river clean-up efforts in coordination with county, state, BLM and others.

  Primary Responsibilitv: BLM, State Parks, ODFW and Multnomah County Parks
  Schedule: 1994
  Estimated Costs: $3,500

- Recommend that Clackamas County adopt ordinances (similar to Multnomah County) to increase county penalty for illegal dumping and conduct regular dumping/litter patrols.

  Primary Resnonsibilitv: BLM
  Schedule: 1994
  Estimated Costs: none

  Continue to restrict motorized boating use in the designated segment,

  Primary Responsibility: BLM and Oregon State Marine Board
  Schedule: ongoing
  Estimated Costs: none

  Institute an outfitter and guide policy and permit outfitted use as required.

  Primary Responsibility: BLM
  Schedule: 1993
  Estimated Costs: none

3. Develop a comprehensive interpretive program including the development of an appropriate level of interpretive facilities and services, environmental education support efforts and public information. (Several additional and specific interpretive program recommendations and potential facilities are listed under other related resource topics in separate sections.)

   - Develop a comprehensive interagency interpretation/public information and education plan for the entire river corridor to coordinate efforts of key agencies and organizations (signing, interpretation, interpretive trails, brochures etc.) in cooperation with State Parks, ODFW, The Nature Conservancy, Portland Water Bureau and Multnomah Parks Services Division.

     Primary Responsibilitv: BLM, State Parks, ODFW, Multnomah County, PWB and The Nature Conservancy
     Schedule: 1994
     Estimated Costs: $15,000

   - Provide cooperative funding for interpretation and volunteer coordinator position with Multnomah County and work with Oxbow Park and State Parks to develop interpretive facilities. The position could direct the development of an interpretive plan for the river corridor.

     Primary Responsibility: BLM and Multnomah County Parks
     Schedule: 1994
     Estimated Costs: $15,000 annually

State Parks, ODFW and BLM would continue to pursue support (through co-sponsorship) for the Salmon Festival held each year at Oxbow County Park (good education opportunity for fisheries resources).

Primary Responsibility: and State Parks
Schedule: 1993
Estimated Costs: 0 0

Place signs containing river maps at all key access points (Dodge, Oxbow and Dabney). This would include the development of a kiosk addressing state and federal river designation and management as well as river safety at Dabney State Park, Dodge Park and Oxbow Park.

Primary Responsibility: State Parks
Schedule: 1995
Estimated Costs: $15,000

Develop and publish interpretive materials about the river including a river map/ brochure with all parks, access, use ethics information but restrict distribution so as not to attract more visitors.

Primary Responsibility: and State Parks
Schedule: 1995
Estimated Costs: $7,500

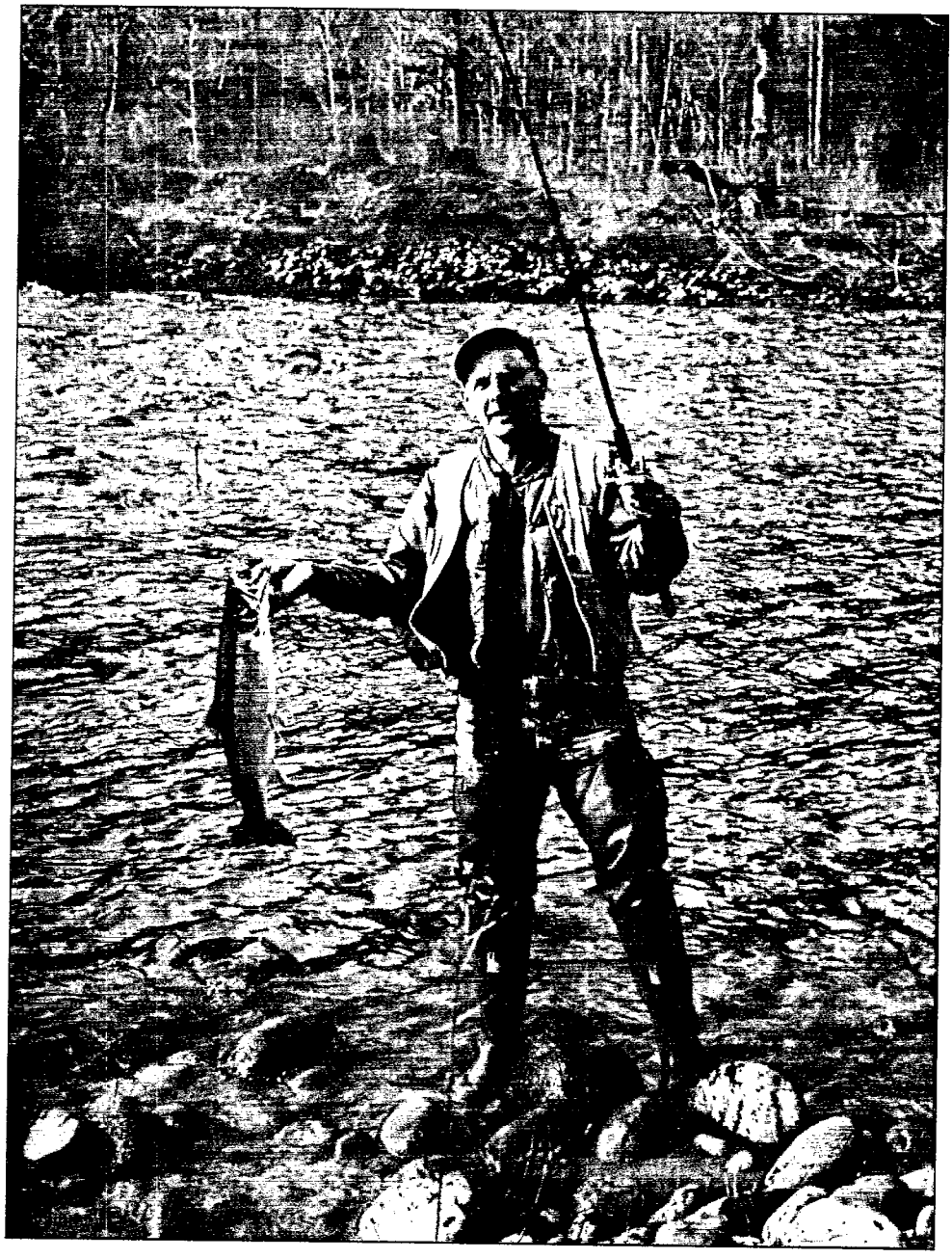
Work with local businesses to provide recreation and interpretive information and displays.

Primary Responsibility: tnomah County Parks
Schedule: 1996
Estimated Costs: $2,500

Provide and post informational signs marking public lands in high use areas and designate private lands near areas used by recreationists (if requested by land-owner and if trespass problems have been identified).

Primary Responsibility: BLM and State Parks
Schedule: 1996
Estimated Costs: $5,000

Resource: Fisheries



Fisheries

Management Guidelines

- All site specific project planning within the corridor and tributary watersheds (public lands) would identify the existing habitat conditions, determine habitat objectives, develop a range of alternatives, and discuss the potential consequences (including cumulative effects) of the alternatives to fisheries resources.

- The fish and critical wildlife habitat areas in the designated river corridor would continue to be protected. Any activity or project in the Wild and Scenic River Corridor or tributary watersheds that may cause direct and adverse consequences to fish or wildlife populations or habitat, and thus degrade these outstandingly remarkable values (ORVs), shall identify the existing habitat conditions, the risk and magnitude of the consequences and measures to be taken to eliminate or satisfactorily mitigate any impacts to fish and wildlife resources.

- Management authority for fish and wildlife populations rests with the State and is administered through Oregon Department of Fish and Wildlife. All fisheries and wildlife management activities will be coordinated with ODFW. Any stock or population management recommendations must be approved by the ODFW commission before implementation.

- All fisheries habitat improvement projects, inventories, and population management recommendations would be coordinated with the State's and Northwest Power Planning Council's respective sub-basin plans. The BLM will be an active participant in these planning efforts.

- Habitat enhancement and restoration efforts, including protection of water quality and quantity, would emphasize populations of wild fish stocks.

- Threatened and endangered species will be managed in accordance with the Endangered Species Act. BLM will cooperate with State and Federal fish and wildlife agencies in developing recovery plans or resolving conflicts for threatened and endangered species. Recovery plans take precedence over other management activities.

- Fish passage or habitat enhancement structures would be allowed only if they do not detract from the river values or affect free-flow characteristics of the river or its tributaries. Large woody debris may be removed or modified if it is a hazard to navigation or human safety.

Desired Future Condition

Existing fish resting, rearing and spawning habitat will not be further degraded as a result of human activities. Habitat quality will gradually improve in the Sandy River and its tributaries as previously disturbed riparian areas revegetate, and as new land management practices afford better protection for these areas in the future. Fish habitat restoration measures will speed this process. Sufficient habitat will be provided, both in terms of quality and quantity, to achieve the ODFW objectives as contained in the Sandy River Basin Fish Management Plan.

The future condition of the Sandy River and its tributaries will be one in which abundant high quality habitat will be capable of supporting healthy anadromous and resident fish populations.

Management Actions

1. Undertake improvement of auadromous fish habitat on federal public lauds, primarily secondary channel habitat along the mainstem.

- Habitat inventory of mainstem secondary channels will be done in late spring-early summer, when the river is high enough to raft, in order to gain access to the secondary channels. Determination of the number, types and locations of habitat improvement structures will be made after an analysis of the inventory. Habitat improvement work will be done in summer, after inventory and analysis are completed.

  Primary responsibility: BLM
  Schedule: Inventory 1993-94. Project planning 1995. Habitat improvement structure work 199.5-96.
  Estimated costs: $4,500 one-time cost (work months) for inventory. $80,000 for work months, equipment and materials for habitat improvement. $900 annual inventory costs to re-inventory restructured channels every 5 years. $5,000 for maintenance of structures annually.

2. Conduct habitat inventory of maiustem and tributaries, with increased species monitoring on tributaries.

- Habitat inventory for the designated segment of the mainstem is already complete. Habitat inventories will be conducted on Gordon, Buck, Trout, Walker and lower Big Creeks. Species monitoring/population estimates will be conducted on Gordon and Trout Creeks.

  Primary responsibility: BLM and ODFW
  Schedule: Gordon Creek habitat inventory completed by 1993. Trout and Buck Creek habitat inventory will be conducted 1994. Gordon and Trout Creek species monitoring will begin 1993.
  Estimated Costs: $3000 (work months) one-time costs to inventory tributaries. $6000 (work months) annually for species/population monitoring. $700 annual cost to re-inventory.

3. Work cooperatively with ODFW, Multuomah and Clackamas counties, private landowners and organizations to improve auadromous habitat on the mainstem, lower Trout, Buck and Gordon Creeks and possibly other tributaries. Actions will emphasize wild stock production and be consistent with ODFW's Wild Fish Policy.

- Increase habitat diversity with log and boulder placement to create pools and hiding cover in tributaries and mainstem secondary channels.
- Protect, enhance and restore secondary channel habitat.
- Work with landowners and DSL where opportunities exist to restore meanders, oxbows and flood channels.
- Create alcove and off-channel rearing areas.
- Restore impacted areas in riparian zones and promote retention of large conifers along the river.
- Alter culverts to improve anadromous fish passage (Buck Creek).

Primary Responsibility: BLM
Schedule: Coordination of groups will begin in 1994. Project work will begin 1995. Cooperative projects will be ongoing.
Estimated costs: $120,000 (work months + equipment + materials)

4. **Coordinate interagency planning and develop management strategy with an emphasis on wild stock production. The BLM, ODFW and others would enter into an agreement to coordinate dam collection and share inventory data.**

- Identify habitat improvement/restoration opportunities on mainstem. Work with ODFW and others to conduct improvements as funds become available.

- Conduct an Instream Flow Incremental Methodology (IFIM) study to determine fish flows (minimum/optimum) for summer and fall months.

- Investigate and evaluate, in coordination with ODFW, PWB and PGE, the potential for anadromous fish utilization and rehabilitation in the Bull Run River below the headworks dam through mutual agreement. (Note: *PWB and the City of Portland is already mitigating for the loss of anadronwus fish habitat on the Bull Run River through financial support of ODFW's Clackamas Hatchery.)*

Primary responsibility: BLM and ODFW
Schedule: Interagency coordination will begin 1994. Identification of habitat improvement opportunities 1995. IFIM study 1998. Investigation of potential for anadromous fish utilization of Bull Run River 1995.
Estimated costs: One-time cost of $1,500 (work months) for identification of habitat improvement opportunities on mainstem. One-time cost of $250,000+ for IFIM study.

5. **Recommend to ODFW a management emphasis that would encourage rehabilitation of and improved production of native/wild salmonids while providing close to existing levels of consumptive fishing. Recommendations are:**

Increase public education to encourage catch and release of native/wild stocks.

Mark hatchery released salmon/steelhead in the Sandy Basin.

Maintain existing closures to protect late-run coho and late-run fall chinook.

Maintain or enact catch and release regulation for other native species.

Continue to limit releases of anadromous hatchery fish above Marmot Dam to spring chinook and summer steelhead.

Encourage development of non-reproducing hatchery stocks.

Encourage increased ODFW enforcement patrols to discourage poaching.

Increase monitoring of fish populations to determine if management actions are effective at enhancing native/wild populations and minimizing competition between native and hatchery stocks.

Primary responsibility: BLM and ODFW
Schedule: Recommendations will be made by 1994.
Estimated costs: None.

Resource: Water Quality and Quantity

Water Quality and Quantity

Management Guidelines

- Water quality must meet the Clean Water Act and Oregon Water Quality Standards established for the Sandy. Existing water quality will be maintained or enhanced.

- Legal beneficial uses and existing legal water rights or permits will not be impaired or affected by designation. This includes the development of legal existing rights that have not yet been exercised as long as the free flowing condition of the river remains unimpaired and or the outstandingly remarkable values not directly or adversely affected (see water resource project analysis in appendix).

- Out-of-stream water rights and instream water rights are established, pursued and protected under the umbrella of state law. No additional out-of-stream water needs are anticipated for the implementation of this plan (in addition to existing recreation facility uses).

- New major water structures are prohibited. New minor structures, existing low dams, diversion works, erosion/flood control efforts and other structures may be allowed and maintained provided the waterway remains natural in appearance and its free-flowing condition unimpaired.

- Any proposed activity allowed under the Wild and Scenic Rivers Act within or along the floodplain, wetlands, the bed and banks of the river would still require a formal declaration and public notification on public lands (executive orders 11988 and 11990). The project initiator would be required (Section 404 of Clean Water Act) to obtain all necessary permits and approvals from the State Department of Environmental Quality, Division of State Lands and Army Corps of Engineers.

  No development of hydroelectric facilities will be permitted.

- Any proposed activity should maintain and/or enhance the integrated ecological functions of rivers, streams, floodplains, wetlands, and associated riparian areas.

- All management actions should seek to restore natural ecological and hydrological functioning along the river and protect and enhance water quality. Strive to maintain acceptable levels of water temperatures, suspended sediment, turbidities, chemicals, and bacteria.

- All water conservation promotional efforts within the basin shall be done in cooperation with water agencies and providers.

Desired Future Condition

Water quality and quantity are directly related to the health and condition of other outstandingly remarkable values such as fisheries and recreation. Water quality and quantity will be maintained or enhanced over 1988 conditions (year of designation). A monitoring program has been established to collect baseline data, develop limits of acceptable change, assess trends, and identify pollution sources and potential mitigating measures.

In addition to the Wild and Scenic Rivers Act direction for water quality, the BLM is obligated by a number of federal laws to concern itself with water quality. Chief among these laws are the National Environmental Policy Act of 1969, the Federal Land Policy

and Management Act of 1976, and the Clean Water Act of 1977, amended in 1987. The Clean Water Act lists the State of Oregon as ultimately responsible for the protection of the quality of all waters contained in the state. However, the Oregon Department of Environmental Quality (ODEQ) has identified BLM as a designated water management agency responsible for protecting water quality as part of its land management planning and implementation. Taken together, these laws require BLM to comply with all federal, state, and local water quality protection measures.

Guidelines for water quality have been prepared by ODEQ for the Sandy River Basin, These guidelines include maximum allowable levels and/or changes in the physical, chemical, and microbiological quality of the river. The 1988 ODEQ publication entitled "Oregon Statewide Assessment of Non-point Sources of Water Pollution" lists the Sandy River as severely impacted in terms of turbidity, nutrient composition, erosion, and stream structure. The document lists the river as moderately impacted in terms of low levels of dissolved oxygen, sediment, and low flows. The publication lists probable causes for the impacts as landslides, alteration of flows, reservoir storage and release, and dredging. However, classification of the Sandy was based on professional observation, not on actual data.

Once baseline data collection is completed and the natural variation in the river's water quality established, standards (acceptable thresholds and parameters) will be developed to characterize existing water quality. These standards will enable hydrologists to detect changes in water quality and potential sources of pollution. If negative impacts are identified, point or non-point sources will be isolated and appropriate state and federal authorities will be notified. All human activities that can affect water quality will be reviewed. Specific projects such as variance requests, development projects, water resources projects, and recreation trails and facilities will be reviewed.

Management Actions

Water Quality and Quantity

1. Develop a monitoring program for water quantity and quality.

- BLM will conduct monitoring and testing at 2 locations on the river: one site near the upper end of the designated segment, and one near the lower end.

- The locations will be tested for a range of chemical, biological, physical indicators, and stream discharge on a monthly basis (and during "storm events") for 5 years, and bi-monthly or quarterly thereafter.

  Primary Responsibility: BLM
  Schedule: Begin monitoring immediately
  Estimated Costs: $5,000 per year for staffing, equipment and water testing.

2. Develop water quality standards (parameters and thresholds) using the Limits of Acceptable Change planning process (see process description in monitoring table).

- After 3 years of baseline data have been collected, interim guidelines will be established using the LAC process.

  Interim guidelines will be tested for applicability and effectiveness for 2 years, then finalized after the initial 5 year data collection period.

  ODEQ will be notified of the parameters and thresholds.

Primary Resuonsibilitv: BLM
Schedule: Establish interim parameters (natural variation) by 1995 and final parameters by 1997.
Estimated Costs: $5,000 one-time cost for planning and staffing.

3. Establish an action plan outlining notification procedures and mitigation measures if pollution levels are exceeded.

BLM will develop notification procedures to follow if pollution is detected.

- BLM will develop recommended mitigation measures in cooperation with ODEQ and Clackamas County for specific human activities such as residential construction, water resource projects and recreational facility development.

Primary Responsibility: BLM
Schedule: 1994
Estimated Costs: $4,000 one-time cost for planning and staffing.

4. Develop a pesticide/herbicide and chemical application policy in coordination with ODEQ, DOE, and ODF and prohibit the use of pesticides in riparian zones on federal lands.

- Develop an interagency policy on the use of pesticides/ herbicides and chemicals within the riparian zone on all lands within the watershed.

Primary Responsibility: BLM, ODF
Schedule: 1996
Estimated Costs: $3,000 one-time cost for planning and staffing.

5. Pursue "Outstanding Water Body of the State" designation for the river (non-degradation policy).

- Develop rationale and provide baseline information to ODEQ and then petition for designation.

Primary Resnonsibilitv: BLM
Schedule: 1995
Estimated Costs: $2,000 one-time cost for planning and staffing.

6. Work with county and state on enforcement of existing water quality laws, zoning codes, and development regulations.

Notify the county or state of any observed violations on private or public land.

- Develop an agreement with the agencies which will allow BLM to review and advise on zoning and development proposals and variances, and submit recommendations and/or mitigation measures.

Primary Resnonsibilitv: BLM
Schedule: Completed by 1995
Estimated Costs: $1,000 annually for staffing

7. Encourage ODEQ to establish a water quality monitoring site near the mouth of the river.

- Develop rationale and submit recommendations to ODEQ for a water quality station at the mouth of the Sandy River.

Primary Responsibility: BLM
Schedule: Completed by 1995
Estimated Costs: $1,000 one-time cost for staffing

8. Review and evaluate potential impacts to water quality from stream bed and bank work to improve fisheries (with ODFW approval), and insure that the natural free-flowing condition of the river is maintained.

- Assess water quality considerations from fisheries enhancement activities to improve habitat for anadromous species if they insure the free-flowing condition and blend into the natural environment.

Primary Responsibility: BLM
Schedule: Ongoing
Estimated Costs: Vary (average $3,000 annually)

9. Actively pursue and conduct watershed enhancement opportunities through cooperative efforts by federal, state and county agencies and TNC to reduce non-point source pollution.

- Review grounds and surface water practices at major recreation sites and make recommendations.

- Rehabilitate trails, campgrounds, and roads to reduce runoff and sediment if necessary.

- Work with the Oregon Department of Transportation (ODOT) and county to install sediment traps to collect road/highway sediment, stabilize road fill and sand/gravel storage, and improve drainage under state and county highways and roads.

- Work cooperatively with organizations and agencies to identify and conduct educational and other watershed enhancement activities.

- Develop, publish and distribute a River Landowners Stewardship Handbook to help inform landowners.(see Visual Resources and Land Use Section)

Primary Responsibility: BLM
Schedule: Ongoing
Estimated Costs: Vary. $5,000 the first year for planning, staffing, and publishing, and $2000 a year thereafter.

10. BLM would work with state agencies to conduct a comprehensive instream flow study for fish and recreation values.

- Cooperate with ODFW, State Parks, and ODEQ in conducting an instream flow study to determine flows necessary to protect the outstanding river values.

- Work with OWRD, ODFW, OPRD, ODEQ, PWB, and counties, by supplying data and study results to assist in determining or reassessing instream flow needs for outstanding river values.

Primary Responsibility: BLM, ODFW, OPRD
Schedule: 1995-98
Estimated Costs: $50,000 for planning and staffing (costs in addition to those identified in the fisheries and recreation sections for the comprehensive instream flow study)

11. Encourage ODEQ, ODFW, and OPRD to apply for instream water rights to protect fish and recreation values. (Note: ODFW has completed applications for instream water rights on most streams in the Sandy basin).

- Cooperate with the agencies by assisting in an instream flow study and encouraging them to apply for water rights.
  Primary Responsibility: BLM
  Schedule: 1998
  Estimated Costs: $1,000 for staffing

12. Develop and or assist in interpretive programs to promote water conservation in a manner consistent with existing educational programs.

- Coordinate with existing water conservation programs and events whenever possible (those administered by Portland Water Bureau and other regional water purveyors), Events such as fairs, festivals, school, and community events would be targeted.
  Primary Responsibility: BLM, WRD, PWB and other local water providers
  Schedule: Ongoing
  Estimated Costs: $3,000 per year for staffing and printing.

13. BLM would monitor and participate in issues which have the potential to directly and adversely impact flows associated with the outstandingly remarkable values. If necessary, the BLM would actively seek opportunities to accept transfer, receive donations, or purchase existing water rights.

- BLM would request the state include the agency in the review process for new water rights applications and other issues which could potentially impact flows.

- Water right acquisition (through donation or purchase) would be pursued if necessary to protect outstanding river values.
  Primary Responsibility: BLM
  Schedule: ongoing
  Estimated Costs: $1,000 per year for staffing, unknown acquisition costs.

14. Develop a comprehensive wetlands, riparian and floodplain inventory, monitoring and restoration/enhancement program.

- BLM would develop a monitoring program in conjunction with the counties, ODFW and DSL to establish baseline inventory information (maps) of wetlands and riparian areas and review net change in acreage every five years.

- Work with Multnomah County and Clackamas County and state agencies on enforcement of existing regulations by alerting agencies of problems identified through monitoring or inventory.

- Seek stream enhancement opportunities and provide technical assistance and funding for projects and pursue cooperative and voluntary opportunities for rehabilitation projects (includes other sources such as GWEB, ODFW etc.).

- Develop and provide technical information to landowners/county about appropriate and environmentally sound shoreline engineering techniques in cooperation with other state, county and federal agencies. Work with landowners and county to restore natural hydrological functioning within the floodplain through the provision of technical information and assistance.

- Discourage development within the 100 year flood plain through existing county zoning and review.
  Primary Responsibility: BLM and State Parks
  Schedule: Completed by 1996
  Estimated Costs: $5,000 and $3,500 a year for staffing.

Resource: Geology

Geology

Management Guidelines

- Recognize and conserve known unique geological features in the Sandy River Gorge including buried forest locations.
- Unique geologic features should be interpreted at parks in the Gorge.
- No use, occupancy, surface mining or gravel operations or any other surface disturbing mineral or energy development activity shall be allowed within the river corridor. Placer or dredge mining within the river corridor is not allowed under the State Scenic Waterway Act.
- Encourage scientific research to identify and interpret geologic features.

Desired Future Condition

Geologic resources will be unchanged in the future with natural geologic processes allowed to continue. Increased study, research and interpretation will be encouraged with state colleges and universities. Additional scientific research will continue to identify and interpret unique geologic features in the Sandy River Gorge. The Sandy River Gorge will be placed on the list of the state's unique geologic features in recognition of it's important scientific and educational values.

Management Actions

1. Develop a geologic field trip guide and other interpretive material for the public.

- Provide funds for further scientific study to complete the field trip guide.

  Primary Responsibility: BLM, Multnomah County and TNC
  Schedule: 1996
  Estimated costs: $3,000 (publication and 3 work months), including slide show.

2. Develop slide show of the known unique geologic features to share with the public and provide interpretive information at parks in the Gorge.

  Primary Responsibility: BLM, Multnomah County and TNC
  Schedule: 1995
  Estimated Costs: $2,500

3. Do not allow digging or any other kind of activity that effects the buried forests.

- Buried forest areas shall be inventoried and monitored.

  Primary Resnonsibility: BLM, TNC, DSL and local geologists
  Schedule: 1996
  Estimated Costs: $1,500

4. Request that the State place the Sandy River Gorge on the list of unique geologic features.

- Develop rationale and provide baseline information to Oregon State Land Board and then petition the OSLB for status.

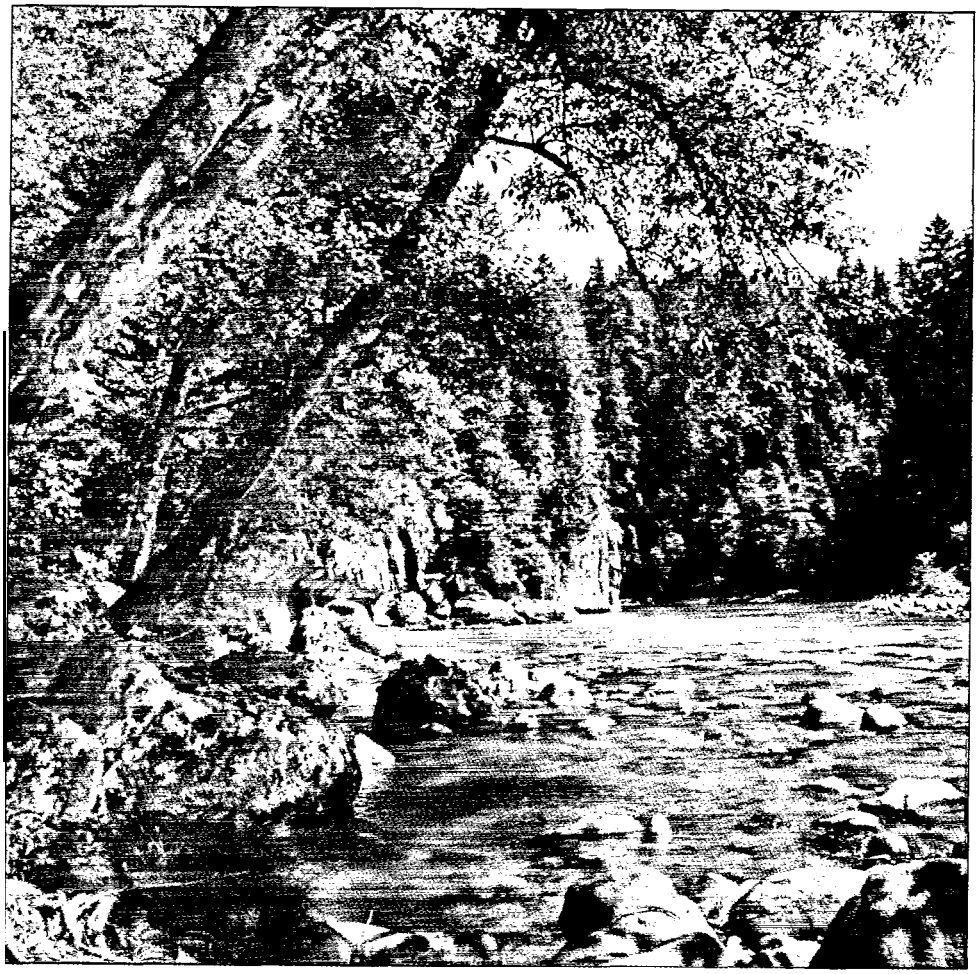
  Primary Responsibility: BLM, The Nature Conservancy and State Parks.
  Schedule: Request submitted by 1994.
  Estimated Cost: $700.

5. Pursue mineral withdrawal for federal lands along the Sandy River.

- BLM will initiate procedures to withdraw federal lands along the Sandy Wild and Scenic River from all types of mineral entry.

  Primary Responsibility: BLM
  Schedule: 1995
  Estimated Costs: 0 0

Resource: Vegetation and Botanical/Ecological



Vegetation and Botanical/Ecological

Management Guidelines

- All Federal or State listed species found in the river corridor are protected as specified under applicable laws.
- Maintain or enhance the integrated ecological functions of rivers, streams, floodplains, wetlands, lakes, and associated riparian areas through a combination of vegetation management tools. Chemical management would be allowed in upland areas only when no other vegetation management tools are appropriate.
- Provide for plant and animal community diversity and maintain or enhance healthy functioning ecosystems, as the foundation to sustain long-term productivity. Introduction of non-native species of plants can occur if determined by BLM and State Parks botanists that there would be no adverse affect to any river values.
- All vegetative management actions shall emphasize cooperative interpretation and environmental education efforts.
- Do not allow grazing on public lands within the corridor. Grazing will be allowed to continue on private lands.
- Fire management responsibility rests with the state and will continue a policy of aggressive suppression of wildfire while minimizing suppression practices that could cause long-term impacts on the river or river-related resource values. BLM will work with state agencies to mitigate any impacts caused by fire suppression activities on lands within the corridor.
- Prescribed fire may be used to reduce threat of wildfire or restore/enhance the ecological condition of the river corridor.

Desired Future Condition

The desired future condition for the botanical/ecological resource is to perpetuate and conserve naturally functioning ecosystems within the river corridor. Some aspects of ecosystem conservation will include: nutrient cycles, plant and animal habitat, number of species (species richness), abundance and density of species, age/size class distribution, spatial arrangement and geological and successional processes. Conservation practices will serve to maintain native plant communities and their habitats and protect rare, sensitive, threatened, or endangered species administered by federal and state agencies and the Oregon Natural Heritage Program. Conservation practices will strive to eliminate any noxious weed species and replace exotic species with native taxa. Management will monitor and evaluate the amount of soil, vegetation, and water quality affected by human activities within the river corridor. Facility or commodity development would consider and mitigate the impacts to any natural resource within the river corridor. Revegetation, where necessary, will be done with native species from onsite sources.

Management Actions

1. Develop a monitoring and inventory program:

- Agencies involved with the river plan will organize a meeting to discuss methods and opportunities to develop a systematic botanical survey of the entire river

corridor involving: (A) cooperative opportunities *to do the work with university* or college students or other organizations; (B) identification of priority habitats on the river for specified seasonal inventory and monitoring; (C) determination of priority access restriction areas on the river (where presently or potentially necessary); and (D) assess personnel needs and agency commitment opportunities to do inventory and monitoring.

- Develop Memorandum of Understanding (MOU) between organizations responsible for managing the Sandy which outlines monitoring roles, responsibilities, cost sharing, and prioritizing rare species and habitats.

- Agencies involved with the river plan will develop a lo-year schedule for the annual inventory and monitoring priorities.

Primary Responsibility: BLM
Schedule: Organizational Meeting - 1994. Establish Agency involvement and long-term schedule - 1994. Develop MOU - 1995. Begin Monitoring/Inventory -1995-97.
Estimated Costs: are $12,000 for staffing and for minimum monitoring equipment.

2. Provide educational material and technical assistance to landowners concerning the identification and conservation of listed species, wetland and riparian species and their habitats:

- Coordinate with county and state agencies to develop and implement a procedure to allow review of proposed projects within the river corridor.

- Develop, publish, and distribute a "River Landowners Stewardship Handbook" to help inform landowners about conservation practices and opportunities.

- Provide educational "conservation" meetings or workshops at nearby public centers for landowners on the river.

- Hire an Student Conservation Association volunteer to visit and provide suitable ecological and botanical information to landowners on the river.

Primary Responsibility: BLM and The Nature Conservancy
Schedule: Organizational meeting for BLM & TNC - 1994. Planning Discussions - 1994. Implement Plan - 1994. Hire SCA student for Summer, 1994, and next two summers. Handbook $5,000 (botany section)
Estimated Cost: Annual costs are $2,500 for workshops/staffing and $2,500 per year for SCA student. One time cost of $5,000 for handbook.

3. Establish agreements with willing landowners:

- BLM and TNC jointly develop notification procedures (action plan steps) to follow if impacts to listed species/communities on private lands becomes apparent.

- BLM and TNC seek willing landowners who will allow inventory and monitoring of plants and habitats on private lands.

- Work with The Nature Conservancy's Stewardship Coordinator to establish landowner conservation agreements, willing seller easements, or purchase of private lands on the river, especially where important species or habitats need to be protected.

- Pursue federal assistance programs and funding for acquiring important river land parcels.

  Primary Responsibility: BLM and TNC
  Schedule: BLM & TNC "Notifications Procedures" meeting - 1994. Actions on other management proposals - 1994 and ongoing.
  Estimated Costs: $5,000 annually for monitoring and inventory. Purchase of private lands would vary and would be substantial. There may also be some cost sharing opportunities with TNC.

4. Develop or revise the fire management plan for the river corridor in conjunction with Counties and State Department of Forestry:

- The Sandy inter-agency management group will organize a meeting with the State Department of Forestry to discuss and plan an efficient fire management plan for the Wild & Scenic Sandy River. More than one meeting may be required.

- The BLM's Fire Management plan for the Sandy River Outstanding Natural Area will be reviewed and updated, and tied in to a full corridor plan.

- Develop an MOU between the state, county, and federal agencies involved with fire management in the Sandy River Gorge which outlines fire related roles, responsibilities, and cost sharing.

- Invest in a Fire Prevention "Educational" campaign for local display centers.

  Primary Resuonsibility: BLM and Inter-Agency Group.
  Schedule: Organizational meeting with ODF - 1994. Fire Management Plan and MOU done by 1995.
  Estimated Cost: Fire Prevention Educational Campaign, MOU development and staffing - $5,000. (Variable fire fighting costs, or prescribed burning costs are shared on statewide basis.)

5. Establish interpretive displays and information about Sandy River Gorge botany/ecology at Oxbow and Dabney Parks:

- Work cooperatively with Multnomah County Parks Services, The Nature Conservancy and Reed College Biology Department to coordinate work student opportunities for summer educational tours of Natural History interpretation in these parks.

- Work cooperatively with the naturalist at Oxbow Park to assist in conducting educational tours or developing outdoor interpretive activities or searching out monetary opportunities for enhancement of such programs.

- Enlist the help of BLM interpretive specialists for designing interpretive displays.

- Coordinate with local schools and community colleges for educational use of Oxbow and Dabney Parks, and help in developing suggested material on natural history.
  Primary Responsibility: State Parks, Multnomah County Parks, BLM, The Nature Conservancy.
  Schedule: Coordinate with TNC, Reed College, local schools - 1994. Complete Planning & Design of Displays - 1995. Installment - 1995.
  Estimated Cost: $10,000 for display materials, construction, and placement. Annual maintenance costs thereafter - $1,000, $3,000 for staffing.

6. Coordinate with the State Department of Agriculture and counties for noxious weed and exotic species control and develop policy for manual versus herbicide control of exotic species:

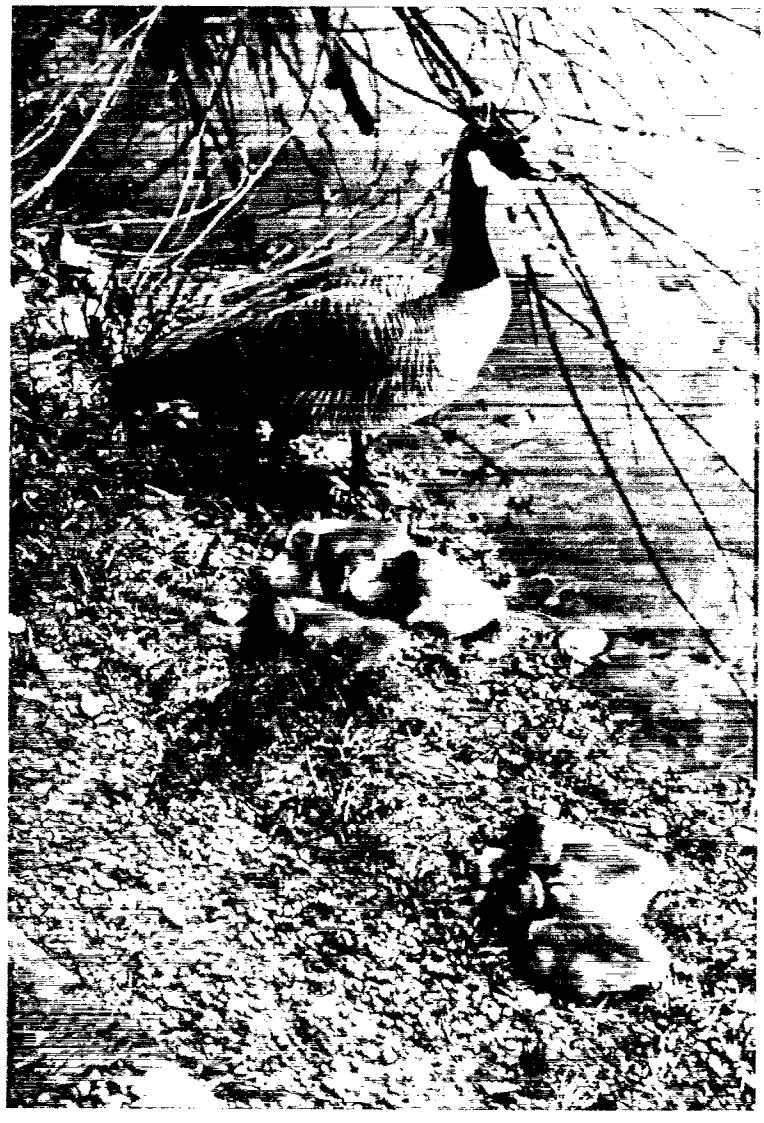
- The Inter-Agency Advisory Team will organize a meeting with the State Department of Agriculture to discuss and plan an efficient noxious weed and exotic species control program in the Sandy River Gorge. More than one meeting may be required.

- Enlist experts at the Oregon State Department of Agriculture to advise on manual versus herbicide control of exotic species at specified infestation sites on the Sandy River.

- Develop an MOU between state, county, and federal agencies involved with exotic species control in the Sandy River Gorge which outlines action roles, responsibilities, and cost sharing.

  Primary Resuonsibilitv: BLM and inter-agency management group
  Schedule: Organizational meeting with ODA - 1994. Noxious Weed Plan and MOU completed by 1995.
  Estimated Cost: unknown

Resource: Wildlife/Habitat Management



Wildlife/Habitat Management

Management Guidelines

All management activities shall consider inventory data and strive to protect critical habitat areas, migratory routes, wetlands, riparian areas, and old-growth habitats.

All site specific project planning within the corridor (public lands) will identify the existing habitat conditions, determine habitat objectives, develop a range of alternatives, and discuss the potential consequences (including cumulative effects) of the alternatives to wildlife resources.

- Management authority for fish and wildlife populations rests with the State and is administered through Oregon Department of Fish and Wildlife. All wildlife management activities will be coordinated with ODFW. Any population management recommendations (hunting etc.) must be approved by the ODFW commission before implementation.

- All wildlife habitat projects, inventories, and population management recommendations will be coordinated with the ODFW's respective plans for the area. The BLM will be an active participant in any planning efforts.

- Habitat enhancement and restoration efforts, including protection of water quality and quantity, will emphasize populations of native wildlife.

- Threatened and endangered species will be managed in accordance with the Endangered Species Act. Cooperate with State and Federal fish and wildlife agencies in developing recovery plans or resolving conflicts for threatened and endangered species. Recovery plans take precedence over other management activities.

- Wildlife habitat enhancement or restoration projects would be allowed only if they do not detract from the river values or affect the natural characteristics of the river corridor.

  All elk management and conflicts with nurseries and other landowners should be resolved in cooperation with ODFW, TNC and BLM.

Desired Future Condition

Portions of the Sandy River Gorge will continue to represent some of the last remaining generally undisturbed valley bottom coniferous forest in the northern Willamette valley, and offer unique opportunities for long term monitoring of wildlife species, as well as education and interpretation. Protection of critical wetlands, riparian areas, and old growth/mature coniferous forest will be stressed, with impacts from human activities mitigated to allow natural processes to continue.

Habitat restoration and enhancement will continue on public lands, and assistance will be offered to private landowners in order for them to restore areas previously or currently adversely impacted due to human activity. Resolution of conflicts between landowners and the native elk population should be aggressively pursued to reduce or eliminate property damage with cooperation from the BLM, ODFW and The Nature Conservancy.

Inventory and monitoring of wildlife species within the Gorge will continue in order to establish baseline population and distribution data, with special emphasis placed on those species identified by the U.S. Fish and Wildlife Service and Oregon Department of Fish and Wildlife as endangered, threatened, or of special concern. Monitoring of movement and numbers of elk and nesting osprey (one of the greatest concentrations in the northern Willamette Valley) will continue.

Educational and interpretative opportunities will be pursued and coordinated with state, county and regional organizations and agencies in order to develop public awareness of key wildlife issues, especially within the Portland metro area.

All population and habitat inventories, restoration projects and other management decisions and actions are coordinated through a core group of representatives from BLM, ODFW, Division of State Lands, TNC, Multnomah County Parks Services, Portland Water Bureau, and other concerned agencies. Most non-game wildlife surveys and monitoring would be coordinated by BLM. Elk, deer and other large game species are handled by ODFW.

Management Actions

1. Form an interagency planning group to facilitate wildlife and other management decisions and actions.

Primary responsibility: O D F W
Schedule: 1994-1995.
Estimated costs: $5,000 for BLM staffing.

2. Conduct general wildlife surveys and monitor osprey nesting activity.

- This ongoing survey (up to 2 visits per month) on public lands (and other lands with landowner permission) within the Gorge will continue in order to establish baseline data for future monitoring purposes.

- A breeding bird survey will be conducted each year during the month of June along a 25-mile auto route (tentatively established and surveyed in 1992) encompassing the Gorge. This survey will follow USFWS protocol, and the results will be forwarded to USFWS for listing in the national database.

Primary responsibility: BLM
Schedule: o i n g
Estimated Cost: $10,000 annually for survey and monitoring (except elk monitoring)

3. Create a Sandy River Gorge site-specific wildlife observation file compiled from agency, organization, and landowner information.

- The existing wildlife observation file compiled by BLM will be expanded. Contacts with Oxbow Park staff and TNC staff will be strengthened to expedite the flow of information between agencies and organizations.

- The observation file will be made available to all interested public and private organizations for research and educational uses. In addition, Oxbow Park staff may use the data to develop a Sandy River Gorge wildlife checklist to be made available at the Park.

- Inventory and monitoring of species of special concern by BLM and cooperating agencies will continue.

- Continued emphasis will be placed on determining occurrence and population estimates of species listed as endangered, threatened, or of other special status by USFWS or ODFW. These species include the federally protected peregrine falcon (Endangered), and bald eagle, (Threatened). Candidate species for federal protection (FC2) include harlequin duck and red legged frog. Potential habitat for the northern spotted owl (Threatened) exists in old growth areas within the Gorge, and although no owls have been found, yearly surveys in suitable habitat will continue.

- In cooperation with ODFW, evaluate the suitability of habitat within the Sandy River corridor for the possibility of release of captive bred peregrine falcons.

  Primary resuonsibilitv: ODFW, USFWS, BLM
  Schedule: Establish observation file (ongoing) 1993. Initiate evaluation of potential sites 1994-95.
  Estimated costs: Costs to create a site specific wildlife observation file included with wildlife surveys group.

4. Dispersed campsites in and adjacent to riparian areas would be evaluated for adverse impacts to wildlife. Close and rehabilitate areas found to have unacceptable impacts.

- Dispersed sites will be inventoried and evaluated for adverse impacts.

- Closed sites will be restored using native vegetation and posted. Informational signs may be used to educate and inform the public.

- Sites will be monitored yearly in the course of wildlife surveys to evaluate needs for additional management actions.

  Primary responsibility: BLM, Multnomah County Parks, ODFW, TNC and others.
  Schedule: Begin site inventory in conjunction with wildlife monitoring and surveys 1994-95. Determine final site evaluation 1996-97
  Estimated Costs: Cost of inventory and monitoring of sites included in wildlife survey.

5. Evaluate need to restrict recreational use in the riparian area to maintain travel corridors and reduce disturbance for wildlife during critical seasons.

- Use survey data to identify species subject to disturbance and establish critical season.

- Identify bald eagle winter roost sites and elk travel corridors and evaluate adverse impacts due to human presence.

  Primary responsibility: BLM, ODFW, TNC
  Schedule: Bald eagle survey ongoing, additional visits will be required between October and March.
  Estimated cost: Combined with general wildlife surveys.

6. Provide technical assistance and information to private landowners for mitigation and enhancement opportunities in sensitive habitat areas.

- Seek willing landowners who will allow inventory of sensitive habitat areas on their lands.

- Landowners will be informed of sensitive habitat areas on or adjacent to affected properties and offered technical assistance in preserving or maintaining them.

Primary responsibility: BLM, ODFW
Schedule: Begin contacting landowners 1994-95 to determine interest. Initiate site surveys and evaluation in 1993.
Estimated cost: $1,000 annually for staffing and materials.

7. Pursue willing seller easements, cooperative agreements or purchase of important sensitive habitats on private lands.

- Sensitive habitat areas which could be on private lands will be identified in the course of ongoing wildlife surveys.

- Potential easement acquisition opportunities will be identified and parcels will be prioritized.

- Landowners will be contacted to determine interest and willingness for participation

Primary resuonsibility: BLM (ODFW may be able to assist)
Schedule: Ongoing, surveys for potential easement opportunities will begin 1994.
Estimated costs: included with general wildlife surveys.

8. Maintain healthy populations of beaver to enhance wetland habitat and diversity.

- Restore habitat for beavers in corridor and along tributaries. Work with ODFW to restrict beaver trapping.

- Existing beaver dam sites and activity areas on public lands will be inventoried and monitored yearly. Seek willing landowners interested in allowing inventory of such habitat on their lands.

- Private landowners will be offered technical assistance when mitigating property damage due to beaver activity.

- Restrictions on beaver trapping on public lands will be pursued.

Primary responsibility: BLM, ODFW and others
Schedule: Begin organizing data immediately. BLM wildlife surveys will include beaver activity inventory, 1995.
Estimated Cost: $3,500

9. Elk populations would be monitored by ODFW, and an elk management agreement would be developed in coordination with ODFW, BLM, Multnomah County Parks, TNC and other interested landowners.

- Provide technical assistance to landowners and nursery owners to mitigate damage by elk to private property and nursery stock.

Landowners will be surveyed for information about past and current damage, and estimated costs incurred.

- ODFW and BLM will assist in developing alternatives for mitigating elk damage, and offer information and assistance as requested on a case-by-case basis.

- Emphasize protection of winter deer and elk range along river on public lands and work with willing landowners to improve habitat/range on private lands.

- Winter range will be identified and inventoried within the corridor. Data will be coordinated by ODFW and BLM.

- Private landowners will be approached with technical assistance when improving identified range areas.

Primary responsibility: ODFW and BLM
Schedule: 1994-95
Estimated costs: $6,500

10. Work with willing landowners to limit motor vehicle access to certain areas on private lands to protect winter range and decrease disturbance.

- Determine interest of private landowners to allow surveys of winter Bald Eagle roost sites and elk corridors, as above.

- Approach and inform private landowners when winter range and disturbance is identified. Offer technical assistance for mitigation.

Primary responsibility: ODFW, BLM
Schedule: ongoing
Estimated costs: Included with general wildlife surveys and technical assistance.

11. Management presence and ranger patrol will be increased to reduce poaching.

- Options will be explored by cooperating public agencies to determine specific enforcement needs.

- An MOU will be pursued with ODFW, Oregon State Police and State Parks to use state police cadets to enforce hunting and fishing regulations and discourage poaching (recreation section).

Primary responsibility: BLM, ODFW, State Parks and State Police
Schedule: Ongoing, 1994-95
Estimated costs: $1,500 BLM wildlife staffing specialist

Resource: Cultural

Cultural

Management Guidelines

- Protect cultural resource sites within the river corridor to the extent required by law, regulation and policy. This may require or involve the implementation of evaluation and mitigation procedures to minimize impacts resulting from transportation, recreation or residential developments.
- All proposed development or enhancement activities on public lands will require cultural inventory, site assessment or project clearance.
- Significant sites will be stabilized if threatened by natural or human-caused disturbance.
- Cultural resource management efforts shall emphasize interpretation and education.
- Management and protection of cultural sites shall be coordinated with tribal governments and federal, state and local authorities as appropriate.
- Protect and preserve Native American access to and use of traditional sites, to worship through ceremonies and traditional rites within the river corridor.

Desired Future Condition

Public lands will be inventoried to determine the presence of specific prehistoric and historic sites. Some historic activities and sites have been previously identified. The National Historic Preservation Act and other laws mandate certain requirements for identification, evaluation and protection of cultural resource values. The goal of cultural resource management along the river will be to identify and protect significant cultural resources and to enhance recreational experiences of visitors by interpreting the local history and prehistory of the Sandy River. This will be done by conducting inventories of lands and recorded sources, as possible, and compiling oral historical information. Evaluations of identified sites will occur in accordance with federal law and Bureau policy. Interpretive materials may take a variety of forms and would be made available typically at existing facilities or at facilities developed for purposes other than specifically cultural resource uses.

Management Actions

1. Conduct a cultural inventory in the river corridor on public lands and in cooperation with the State Historic Preservation Office and counties through Goal 5 process.

Primary responsibility: BLM
Schedule: 1996-97
Estimated Costs: $35,000+ one-time cost

2. Collect specific oral histories for Sandy River areas.

Primary responsibility: BLM
Schedule: Ongoing
Estimated Costs: $1,500 initially, $1,500 annually

3. Evaluate and determine National Register of Historic Places (NRHP) eligibility of all sites.

Primary responsibility: BLM in cooperation with the specific land managing agency or landowner
Schedule: Following inventory, or as needed
Estimated costs: $5000 to $20,000 per site

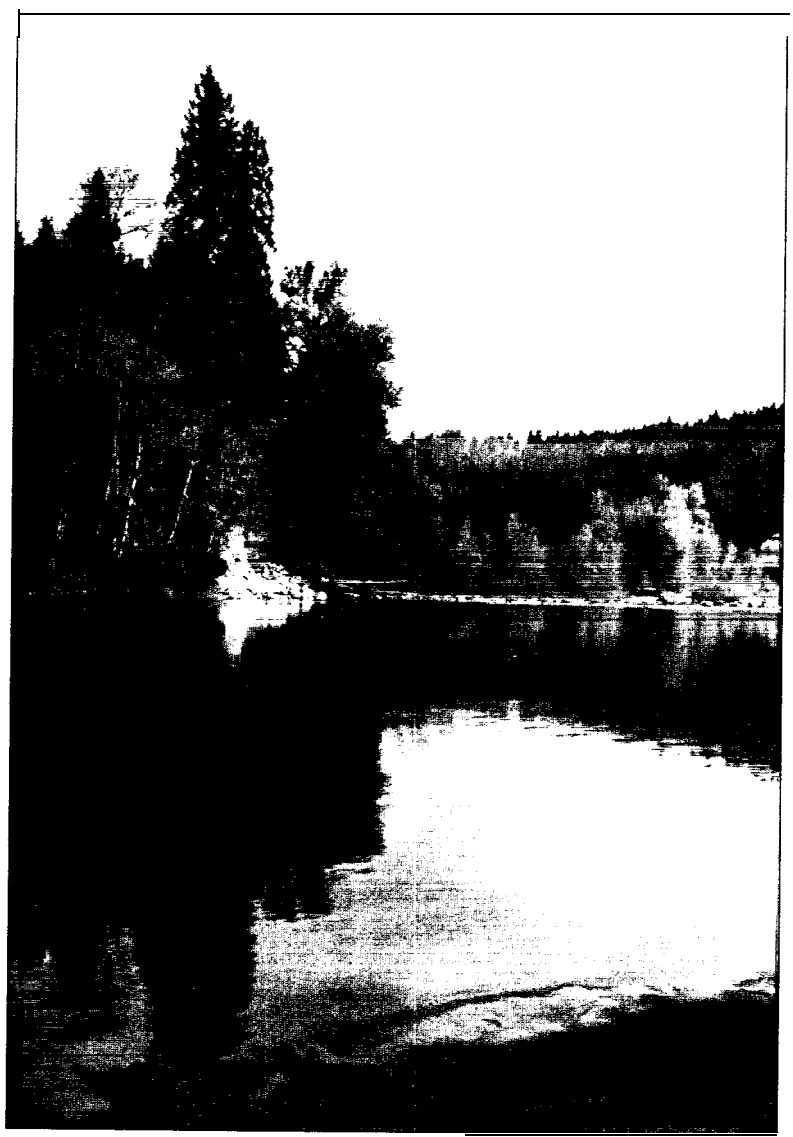
4. Manage identified NRHP sites for scientific, conservation and interpretive purposes as appropriate.

Primary responsibility: Land managing agency or landowner
Schedule: Ongoing
Estimated costs: $1000 annually for monitoring if sites identified

5. Interpret cultural resources to emphasize cultural history as well as resource protection.

Primary responsibility: Oregon State Parks
Schedule: Following inventory, with majority of work in the two years immediately thereafter. Ongoing and updating interpretation would occur continually after the initial work.
Estimated costs: $6,000 annually for the first two years after initiation of interpretation effort: $1,500 annually in succeeding years.

Resource: Visual Resources and Land Use



Visual Resources and Land Use

Management Guidelines

- State Scenic Waterways Program will continue to monitor and enforce administrative rules for the Sandy River. State Scenic Waterways and county zoning regulations will continue subject to compliance with federal designation as stipulated under Goal 5 of state land use law.

- Acquire easements or lands for protection of scenic resources from willing sellers through exchange or fee title where possible both within and adjacent to the corridor boundaries.

- Views from the river will determine the critical viewshed, area of high visual sensitivity or seen area.

  Visual Resource Management Class I will apply to all BLM lands within the corridor (retention).

  Visual enhancement and rehabilitation will be completed within parameters of soil and water standards and guidelines (see Agriculture Handbook 462) and will only use native vegetation or seed mixes.

  Human-made shoreline improvements including erosion control structures or efforts, recreation facilities, road construction and so forth shall use natural appearing materials and colors (muted earth tones), native vegetation and emphasize techniques (bioengineering) that minimize or screen visual impacts.

- Emphasize landowner and developer education efforts to inform landowners and developers of incentives, existing regulations and conservation/screening practices.

- Formalized and increased coordination between county, state and federal agencies will focus on improving the effectiveness and enforcement of existing county and state regulations concerning private property development.

- Fire suppression should seek to minimize physical disturbance by confining, containing or controlling fires utilizing conditional use fire suppression and/or confinement or containment strategies whenever possible. Fire management responsibility rests with the state and will continue a policy of aggressive suppression of wildfire while minimizing suppression practices that could cause long-term impacts on the river or river related resource values.

- Replacement of existing facilities would be allowed at the current level of development within existing utility or pipeline corridors as long as scenic or other outstandingly remarkable values are not adversely impacted. Upgrading of existing facilities or corridors could only be done after the necessary environmental analysis demonstrated that no adverse impacts to these resources would occur. No additional river crossing sites will be allowed other than existing locations.

- All Federal lands within the corridor will have no scheduled timber harvest. Forestry practices on private lands and other public lands will be governed by the Oregon State Forest Practices Act and the State Scenic Waterway Program administered by State Department of Forestry and State Parks under all appropriate administrative rules, agreements and state land use and development laws.

- **All** county and state transportation projects including realignment, stabilization, erosion control, vegetative management etc... shall coordinate with the BLM and State Parks for design review, construction/mitigation techniques and river value considerations.

Desired Future Condition

The Sandy River will continue to exhibit a variety of scenic qualities which prompted its designation as a State Scenic Waterway and its subsequent designation as a Federal Wild and Scenic River. The river segment will retain an undeveloped character although it is relatively close to the growing Portland metropolitan area. The overall existing character and appearance of this corridor will remain basically unchanged from its present condition. Management goals and objectives strive for a balance of resource use and other activities to the extent that they protect and enhance the quality of the river's scenic values. Visitors to and residents of the river corridor will be able to continue to observe the river and gorge framed by mostly undisturbed mature stands of mixed conifer and hardwood forests.

Scenic resources continue to be primarily influenced by the effectiveness of monitoring and enforcement of the State Scenic Waterway administrative rules and through direct coordination with Clackamas and Multnomah County planning departments. Zoning regulations continue to dictate the extent and type of development or resource use that can occur on a given parcel of private land with direct review by the BLM for compliance with the WSRA. Oregon State Parks cooperates with the Oregon Department of Forestry in the reviews and monitoring of timber harvest proposals (for lands zoned for forest management) to ensure compliance with the Oregon Forest Practices Act and Scenic Waterway rules.

The BLM, State Parks and counties work together to prepare materials and inform landowners along the river of applicable requirements and work with them to design activities which are compatible with scenic quality of the viewshed. The river's viewshed quality will be monitored regularly through a program developed and implemented by the BLM.

Management Actions

Visual Resources

1. Establish an inventory and monitoring program for scenic values in the river viewshed, map viewshed using GIS and compile periodic (5-year) reports summarizing monitoring results.

Primary Responsibility: BLM
Schedule: 1994, ongoing
Estimated Costs: annually

Residential, Community and Recreational Development Land Use Zoning and Development Review

2. Improve coordination, effectiveness and efficiency of existing land use, scenic waterway and zoning regulations between Federal, State and County agencies.

- Develop MOU between county, state and BLM to coordinate review procedures concerning any proposed development and zoning changes or requests for variance or conditional use permits.

- Review county zoning ordinances for consistency with Wild and Scenic River plan and effectiveness in implementation. Make any recommended changes to the area of Significant Environmental Concern (SEC-Multnomah Co.)or Principle River Conservation Area (PRCA-Clackamas) zoning ordinances or zoning regulation enforcement.

- Work with ODOT, county, PGE, BPA, and PWB to improve appearance of signs, roads, road cuts/fill and right-of-ways as viewed from river through screening, design considerations and recommendations on maintenance activities.

- Work with county to adopt ordinance to require sellers (and realtors) to notify potential buyers of private property within the corridor of federal/state or special county river zoning designations, or scenic regulations and restrictions.

  Primary Responsibility: BLM, Multnomah and Clackamas Counties, Oregon Department of Forestry, Oregon State Parks
  Schedule: 1993-94
  Estimated Costs: One time cost = $17,000, $3,500 annually

3. Establish a river liaison position within county planning departments to review development activity, and provide technical assistance and information (costs shared equally between BLM, State, and Counties).

- Pursue interagency agreement if matching cooperative funding for position becomes available and establish sunset provision (i.e. 3 years).

  Primary Responsibility: BLM, Clackamas County, Multnomah County, State of Oregon
  Schedule: 1995-97
  Estimated Costs: $15,000 BLM matching cost share (State Parks, Clackamas County and Multnomah County potential partners)

Private Lands, Landowner Stewardship and Information, Land Adjustments, Easements and Acquisition:

4. Acquire land or scenic easements from willing sellers (fee title, exchange or easement) in the scenic corridor to ensure future maintenance of scenic quality (approximately 300 acres).

- Pursue Land and Water Conservation Funds and other sources for acquisition funding.

- Pursue only limited public access, scenic and conservation easement acquisition from willing sellers of a few high priority locations for fish, wildlife and scenic values.

  Primary Resuonsibility: BLM, Clackamas County, Multnomah County, State of Oregon
  Schedule: 1995-99
  Estimated Costs: BLM - One time costs, approximately $750,000+.00

5. Develop landowner incentive, education and stewardship program in an effort to foster cooperation and partnerships in the management of the river as well as improving the condition of the river.

- Develop, publish and distribute a river landowner's stewardship handbook outlining conservation and enhancement techniques and guidelines, Wild and

Scenic river information, local/county/state ordinances and regulations, and sources for information and technical assistance.

- Work with landowners to enhance natural appearance and create screening of buildings, satellite dishes and other structures.

- Work with landowners to resolve trespass problems and to sign and identify private lands where chronic trespass problems occur.

- Initiate a landowner and interest group committee to act in an advisory capacity to assist in river management decisions, problem identification and day-to-day river stewardship monitoring.

- Conduct landowner survey to determine resource needs, management problems and issues, and potential conservation partnerships; meet with landowners.

- Provide landowners with additional wetland, riparian, shoreline information and any pertinent and appropriate wildlife, cultural and botanical information.

Primary Responsibility: BLM and State Parks
Schedule: 1995-96
Estimated Costs: $25,000 for development, publication and distribution

Forest Management and Timber Practices

6. Coordinate forest management practices within and adjacent to the river corridor.

- State Parks reviews and monitors timber harvest proposals on private lands in cooperation with ODF to ensure compliance with Forest Practices Act and Scenic Waterway rules.

- BLM lands in corridor would remain administratively withdrawn from timber harvest activities.

- Provide technical assistance to private landowners within and bordering the river corridor to minimize or reduce visual impacts of proposed timber harvests.

- Pursue development of MOU with regional Oregon Department of Forestry (ODF) office to establish a federal/state notification and review procedure for proposed harvests on private land within boundaries. BLM could provide assistance to landowners including conservation easements from willing sellers and assistance in harvest layout and design and other conservation measures.

- Fire suppression coordination policy in the river corridor will consist of a policy of aggressive suppression of wildfire while minimizing or mitigating activities that would cause long-term negative impacts on the river and its adjacent lands (see vegetative management section).

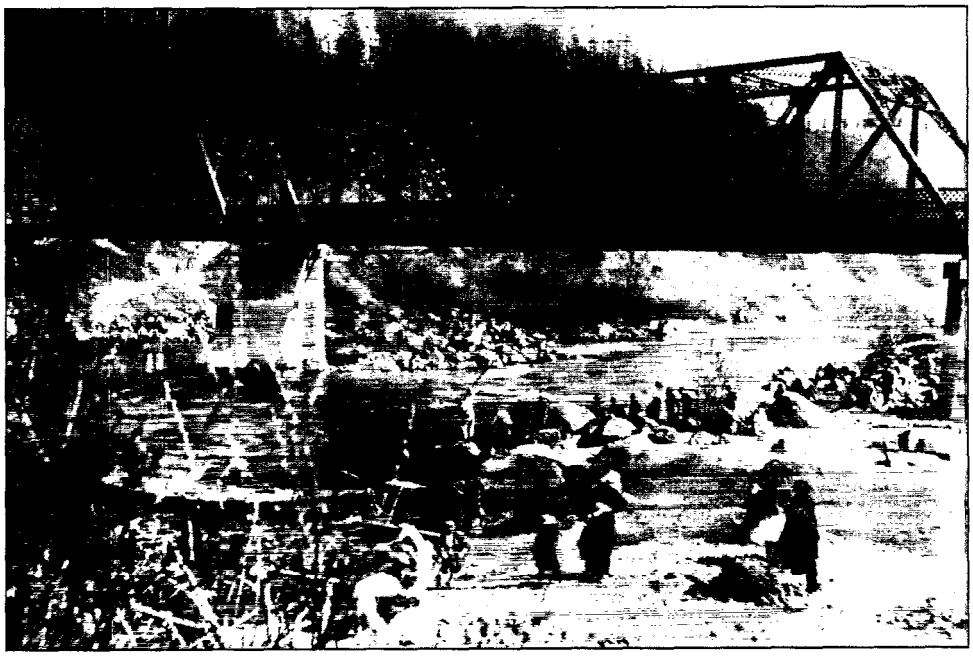
- Implement a proactive fire prevention public education campaign which targets the recreation users of the corridor.

Primary Responsibility: BLM, State Parks and Department of Forestry
Schedule: 1994-96
Estimated Costs: Within each year, $3,500

Implementation Summary Table

SANDY RIVER IMPLEMENTATION PLAN
SUMMARYTABLE

SCHEDULEOFPLANNEDACTIVITIESAND COSTESTIMATES



SANDY RIVER IMPLEMENTATION PLAN SUMMARY TABLE

SCHEDULE OF PLANNED ACTIVITIES AND COST ESTIMATES

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
RECREATION Facilities	* Develop a management plan for Dodge Park and vicinity, in coordination with PWB's long-term potential use for the site.	BLM/PWB/Others	93-94	5,000
	* Provide primitive sanitation facilities at key public use access areas if water quality testing or area monitoring documents impacts.	BLM	Ongoing	Unknown
	* Work cooperatively with BLM, DSL, Multnomah County and local landowners in developing any management plan, facility or activity at Dabney Park.	State Parks	Ongoing	None
RECREATION Trails and Public Access	* Work with Multnomah County and State Parks to improve existing parking/trailhead areas along Gordon Creek Rd.	BLM/State Parks/Mult.	94-96	30,000+
	* Inventory, close and rehabilitate, if necessary, dispersed camping sites and user trails along the river and in riparfan areas where resource damage is present on Federal or other public lands.	BLM and State Agencies	95-97	20,000
	* Close federal lands to OHV (motorized) accessand cooperate with stateagencies to restrict motor vehicle access on public lands in the gorge.	BLM/State Agencies	94	None

RESOURCE	DESCRIPTION OF ACTIONSAND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
RECREATION Interpretation, Information and Environmental Education	* Develop a comprehensive interagency interpretation/public information and education plan for the entire river corridor.	BLM/State Parks/Others	94	15,000
	* Provide cooperative funding for interpretation and a volunteer coordinator position with Multnomah Countyand work with Oxbow Park and State Parks to develop interpretive facilities.	BLM/Multnomah Co.	94	15,000/yr
	• Continue to pursue support for the annual Salmon festival at Oxbow Park.	BLM/ODFW/State Parks	93	4,000/yr
	* Place signs/kiosksdisplaying river maps and other information at all key access points.	BLM and State Parks	95	15,000
	* Develop and publish interpretive materials concerning the river, including a river map/brochure.	BLM/ODFW/State Parks	95	7,500
	• Work with local businessesto provide recreation and interpretive information and displays.	BLM/Multnomah Co.	96	2,500
	* Provide and post informational signs marking public and designated private lands in or near high use areas if trespass problems have been identified.	BLM and State Parks	96	5,000

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
RECREATION Management and Monitoring	* Develop and implement a comprehensive recreation monitoring program and visitor use survey (year round study).	BLM and State Parks	96	40,000+
	* Increase the level of agency/ranger patrols, visitor contact and law enforcement during high use periods. Coordinatewith other managing agencies to provide seasonal ranger patrols.	BLM and State Parks	94-95	40,000/yr
	* Provide additional signing and information along roads and at key access points to channel recreation use to appropriate locations, encourage resource protection practices and inform users of private lands and landowner concerns.	BLM/State Parks/Counties	95	10,000
	* Pursue the use of Oregon State Patrol Cadets to help enforce fishing and other regulations on the river.	State Parks/OSP/BLM	94	35,000/yr
	* Conduct cooperatively sponsored annual river clean-up events and other river clean-up efforts.	BLM/State Parks/ ODFW/Multnomah Co.	94	3,500/yr
	* Continue to restrict motorized boating use in the designated segment.	BLM and OSMB	Ongoing	None
	* Establish Limits of Acceptable Change (LAC) process for recreation use and impacts to determine use level capacities and needs for management action.	BLM and State Parks	96-96	45,000
	* Recommend that Clackamas County adopt ordinances to increase county penalty for illegal dumping and conduct regular dumping/litter patrols.	BLM	94	None
	* Institutean outfitter and guide policy and permit outfitted use as required.	BLM	93	None

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
WATER QUALITY AND QUANTITY	* Develop a monitoring program for water quality and quantity, including chemical, biological, physical property indicators and stream discharge.	BLM	93	5,000/yr
	* Develop water quality standards using the LAG planning processand notify ODEQ of parameters and thresholds.	BLM	95-97	5,000
	* Establish an action plan outlining notification procedures and mitigation measures if pollution levels are exceeded.	BLM	94	4,000
	* Develop an interagency policy on the use of pesticides/herbicidesand chemicals within the riparian zones on all lands in the watershed and prohibit the use of pesticidesin riparian zones on federal lands.	BLM and ODF	96	3,000
	* Pursue "OutstandingWaterbody of the State" designation for the river.	BLM	95	2,000
	* Work with county and the state on enforcement of existing water quality laws, zoning codes and development regulations.	BLM	95	1,000/yr
	* Encourage ODEQ to establish a water quality monitoring site near the mouth of the river.	BLM	95	1,000
	* Allow stream bed and bank work to improve fisheries habitat.	BLM	Ongoing	3,000/yr
	* Pursue and conduct watershed enhancement opportunities through cooperative efforts with other agencies and organizations to reduce non-point source pollution.	BLM	Ongoing	5,000+
	* Work with state agencies to conduct a comprehensive instream flow study for fish and recreation values.	BLM/ODFW/OPRD	95-98	50,000+
	* Encourage ODEQ, ODFW and OPRD to apply for instream water rights to protect fish and recreation values.	BLM	98	1,000
	* Develop and/or assistin interpretive programs to promote water conservation in a manner consistentwith existing educational programs.	BLM/WRD/PWB	Ongoing	2,000/yr
	* Monitor and participate in the resolution of issues which have the capacity to impact instream flows to the point that outstandingly remarkable values are adversely affected.	BLM	Ongoing	5,000+

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
FISH Habitat Management and Monitoring	* Conduct a habitat inventory of mainstem secondary channels to determine the number, types and locations of habitat improvement needed. Initiate habitat improvement projects as determined necessary.	BLM	93-96	84,000+
	* Conduct habitat inventory on Gordon, Buck, Trout, Walker and lower Big Creeks. Conduct species monitoring/population estimates on Gordon and Trout Creeks.	BLM and USFS	93-94	10,000+
	* Work cooperatively with ODFW, Multnomah and Clackamas counties, private landowners and organizations to improve anadromous fish habitat on the mainstem and several major tributaries.	BLM	94-95	120,880
FISH Stock Management	* Coordinate interagency planning and develop a management strategywith emphasis on wild stockproduction.	BLM and ODFW	94-98	250,000+
	* Recommend to ODFW a management emphasis that would encourage rehabilitation of and improved production of native/wild salmonids while providing close to existing levels of consumptive fishing.	BLM and ODFW	94	None
BOTANICALAND ECOLOGICAL	* Develop a botanical inventory and monitoring program for the river corridor.	BLM	94-96	12,000+
	* Provide educational material and technical assistanceto landowners concerning the identification and conservation of wildlife found in the corridor, including hiring and SCA student to assist landowners.	BLM and Others	94-99	5,000+/yr
	* Establish agreements with willing landowners to facilitate inventory and monitoring projects on private lands and mitigate potential impacts to plants or plant habitat on private lands.	BLM and Others	94-95	5,000+
	* Revise the fire management plan for the river corridor in conjunction with counties and ODF.	Inter-Agency	94-95	5,000+
	* Establish interpretive displays and programs about Sandy River Gorge botany/ecology at Oxbow and Dabney parks.	State Parks/Mult. Co. BLM/TNC	94-95	14,000+
	* Coordinate with State Department of Agriculture and counties to develop a noxious weed and exotic species control policy.	Inter-Agency	9495	Variable

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
WILDLIFE	* Form an interagency management group to facilitate wildlife and other management decisions and actions.	BLM and ODFW	94-95	5,000
	* Conduct general wildlife surveys and habitat inventories and monitor osprey nesting activity.	BLM	Ongoing	10,000/yr
	* Create a Sandy River Gorge site-specific wildlife observation file compiled from agency, organization and landowner information.	Mult. Co./BLM/ODFW	95	3,500
	* Evaluate wildlife impacts related to dispersed campsites in and adjacent to riparian areas. Close and rehabilitate areas found to have unacceptable impacts.	BLM/Mult. Co./DSL	94-97	
	* Evaluate need to restrict recreational use in the riparian area to maintain travel corridors for wildlife and reduce disturbance for wildlife during critical seasons.	BLM and ODFW	94-95	6,500
	* Provide technical assistance and information to private landowners for mitigation and enhancement opportunities in sensitive habitat areas.	BLM and ODFW	94-ongoing	3,000+
	* Pursue willing seller easements, cooperative agreements or purchases of critically important habitat on private lands.	BLM/ODFW/TNC	Ongoing	
	* Maintain healthy populations of beaver through habitat restoration, trapping restrictions, and development of an inventory and monitoring program.	BLM and ODFW	Ongoing	
	* Develop an elk management agreement in coordination with other agencies and interested landowners. ODFW would monitor elk populations within the corridor.	BLM	Ongoing	
	* Work with private landowners to limit motor vehicle access to certain area on private lands to protect winter range and decrease disturbance.	BLM/ODFW/USFWS	93-95	
	* Increase law enforcement management presence and ranger patrol to reduce poaching.	BLM/ODFW/State Parks /State Police	Ongoing	1,500

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
CULTURAL RESOURCES	* Conduct a cultural inventory in the river corridor on public lands and in cooperation with the State Historic Preservation Office and counties through the Goal 5 process.	BLM	96-97	35,000
	* Collect specific oral histories for the Sandy River Area.	BLM	Ongoing	10,000+
	* Evaluate and determine NRHP eligibility of all sites.	BLM	As needed	5,000+/site
	* Manage identified NRHP sites for scientific, conservation and interpretive purposes, as appropriate.	Land managing agency or landowner	Ongoing	2,000/yr
	* Interpret cultural resourcesto emphasize cultural historyas well as resource protection.	BLM and State Parks	Ongoing	1,500+/yr
VISUAL RESOURCES and LAND USE	* Establish an inventory and monitoring program for scenicvalues in the river viewshed, map viewshed using GIS and compile periodic (5-year) reports summarizing monitoring results.	BLM	94-95	3,500/yr
	* Improve coordination, effectiveness and efficiency of existing land use, Scenic Waterway and zoning regulations between federal, state and county agencies.	BLM/Counties/ODF /State Parks	Ongoing	17,000+
	* Establish a river liaison position within county planning departments to review development activity and provide technical assistanceand information.	BLM/counties/state	94-96	
	* Acquire land or scenic easements form willing sellers in the scenic corridor.	BLM/counties/state	94-96	750,000
	* Develop landowner incentive, education and stewardship programs to foster cooperation and partnerships in the management of the river.	BLM and State Parks	95-96	25,000
	* Coordinate forest management practices within and adjacent to the river corridor.	BLM/State Parks/ODF	94-96	3,501)

RESOURCE	DESCRIPTION OF ACTIONS AND ACTIVITIES	RESPONSIBLE AGENCY	FISCAL YEAR	ESTIMATED COSTS
GEOLOGY	* Develop a geologic field trip guide and other interpretive material for the public.	BLM/Mult. Co./TNC	96	3,000
	* Develop a slide show of known unique geologic features to share with the public and provide interpretive information at parks in the corridor.	BLM/Mult. Co./TNC	95	2,500
	* Inventory and monitor the buried forests.	BLM/TNC/DSL	95,Ongoing	1,500
	* Request that the state place the Sandy River Gorge on the List of Unique Geologic Features.	BLM/TNC/State Parks	94	700
	* Withdraw all federal lands along the Sandy River from mineral entry.	BLM	95	3,500

CHAPTER IV: MONITORING PROGRAM

Chapter IV: Monitoring Program

Data Collection, Monitoring, and Evaluation Strategy

This chapter discusses and reviews actions to take in monitoring and evaluating river resources; especially the outstandingly remarkable resources. A table reviews and summarizes resource monitoring actions, data collection, inventories and surveys. The chapter also provides a discussion of the Limits of Acceptable Change management process and monitoring strategy.

Priority funding will be allocated to collect the baseline data needed to implement, monitor, and adjust the Sandy River Plan. The Limits of Acceptable Change (LAC) process is the underpinning of the entire plan. Without adequate baseline data it becomes virtually impossible to monitor the changes necessary to determine whether or not the acceptable changes are exceeded. Objective baseline data is necessary to determine whether or not the implementation of plan actions is having the desired effect.

Baseline data will be gathered by the managing agencies as quickly as possible beginning in 1993 (some work in water quality, wildlife, fisheries, visual and botanical resources has already been completed). Data gathered will include, but not necessarily be limited to the following key studies:

- Habitat maps will be developed to inventory biological resources and the terrain in which they exist. Flora and fauna present and their densities will be plotted on topographic maps and entered into computer data file and geographic information systems (GIS). Wildlife and fish habitat inventories will be conducted and maps prepared for both land and instream habitat. Inventories will be repeated periodically (every 5 to 10 years) to document change in condition and identify trends.

- Water quality and quantity will be monitored on a regular basis for at least six years to determine baseline conditions. Acceptable parameters will be established from the baseline data and periodic monitoring will continue to ensure conditions remain acceptable.

- Viewshed baseline analysis will be conducted to establish existing scenic conditions. View analyses will be repeated periodically to document incremental change from human caused developments or actions, if any, in the views from the corridor.

- A comprehensive user survey will be developed and implemented to determine levels of recreation use, the characteristics of the users, their opinions about the Sandy River, their activities, and recreation management needs.

- A survey of landowners will be conducted to determine landowner concerns, needs and awareness of river related conservation opportunities, incentives and river programs.

- A comprehensive cultural resource inventory will be completed to determine sites and conditions of archaeological and historical resources.

Limits of Acceptable Change Planning and Monitoring Process

The monitoring and evaluation of this plan will be based, whenever possible, upon the Limits of Acceptable Change (LAC) concept. 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 within levels consistent with plan objectives and protection of the river's outstandingly remarkable values. Separate LAC monitoring will be conducted for recreation, water quality, vegetation, wildlife, fisheries, and other critical 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 along the river, but rather one of deciding what human-induced 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 have been met or are being met.

Once in place, the mechanics of the LAC system can alert the managing agencies to an unacceptable change in the river corridor before it is too late to react. For each river value monitored, one or more key indicators are selected which allow managers to stay attuned to changes in the ecosystem or social setting. For each key indicator, a standard is set and 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 recreation opportunities they are managing for are actually being provided. The standards serve as "triggers" which cause predetermined management actions to begin when the limit is approached.

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

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

Monitoring Program Table

MONITORINGPROGRAMSANDYWILD ANDSCENICRIVER

MONITORING PROGRAM SANDY WILD AND SCENIC RIVER

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARD TO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
WATER QUALITY	Fecal coliform, enterococci bacteria	A log mean of 200 fecal coliform per 100 milliliters based on a minimum of one sample per month with no more than 10 percent of the samples per annum exceeding 400 per 100 ml.	Identify possible sources of effluent. Increase and intensify sampling. Work with counties and DEQ to prepare corrective actions or plans. Correct management practices or land use activities which contribute to temperature rise, turbidity, pH, reduced oxygen levels, change in gas saturation, or indications of gas, oil, or chemicals. Provide toilets at key public use areas if water quality tests show negative impacts.	Establish a baseline by taking samples from at least two locations on a monthly basis for six years (92-96), then on a quarterly (seasonal) basis thereafter. Monitorand test at two locationson the river. (One site near the upper end of the designated segment and one near the lower end of the designated segment). Regularly monitor the temperature and USGS flow recordings. Yearly monitoring of turbidity with a datalogger during the heavy flows of fall, winter, spring, summer (June, July, August). Monitor dissolved oxygen with a datalogger during June, July, and August. Take samples during significant "events" when possible. Monitorand participate in issueswhich have the capacity to impact optimum flows associatedwith the outstandingly remarkable values and if necessary, search for opportunities to accept transfer, receive donations, or purchase existing water rights. Monitor (every five years) to establish baseline inventory information (e,g. maps) of wetlands and riparian areas and review net changes in acreage. Responsibility: BLM Resource area hydrologist. Cost: $12,600 annually
	Temperature	Temperature equal to, or cooler than, the baseline establishedduring 1992-1996.		
	Turbidity	Turbidity levels equal to or clearer than the baseline established during 1992-l 996.		
	Ph	Maintain pH between 6.5 and 6.5		
	Dissolved oxygen	Maintain dissolved oxygen equal to or greater than 90% saturation at low flow, 95% during spawning, hatching and fry stages of anadromous fish.		
	Gas and oil	No detectable oil and gas.		
	Chemistry	No non-permitted increase in measured metals or chemicals above 1992-1996 baseline.		
	Aquatic life	No negative change in macroinvertebrate indices of species and community composition establishedin the 199396 baseline.		

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARD TO USE	MANAGEMENT ACTIONS TRIGGERED IF ASTANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE. AND FREQUENCY
WATER QUANTITY	Instream Flows Peak flows	As determined by comprehensive instream flow study. Diack flows will be used as interim guidelines.	If not natural drought conditions, identify cause and rectify in coordination with state WRD and others.	Periodic (monthly) sampling and gauge readings. See Water Quality.
FISH HABITAT	Quality and quantity of spawning gavels	Locate spawning areas. Map and measure total area, substrateembededness, and particle size distribution. Maintain or increase quality and quantity of spawning gravel establishedin baseline inventory.	Identify cause of degradation to quality and quantity of habitat and mitigate or eliminate impact.	Conduct habitat inventories every five years, including spawning gravels. Do a stratified random sample for substrateanalysis, annually for 3 years, then at 2 year intervals thereafter. Perform annual substrateanalysis at selected key sites for the first three years and then every other year thereafter.
	Rearing habitat and Pool quality	Maintain habitat quality and quantity at baseline levels except where pool or side channel, or both, may increase.	Create additional habitat, when possible, through habitat improvement opportunities.	
	Large Woody Material	No decrease in the amount of large woody debris meeting minimum standard.		Inventory the habitats of mainstem secondary channels in late spring-earfy summer, when the river and channels are high enough to raft. The number, types, and locations of habitat improvement structureswill be determined after an analysis of the inventory.
	Effectiveness of Habitat work	Continue towards desired condition for mix of habitats and cover.	Additional habitat work or change in method.	Re-inventory restructured channels every 5 years. Responsibility: BLM fish biologists. Cost: $6,000 annually; $27,000 every 5 years for fish habitat inventory.

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
FISH POPULATIONS	Fish species composition Smolt production Creel census as indication of quality of sport fishing	Maintain fish population composition using inventory data and ODFW baseline data. Wild fish populations should be maintained or increased. A decrease in excess of a 10% basin-wide average for each year in wild smolt numbers compared to stream-specific baseline information. No decrease in five year average sample of selected species.	Coordinate with ODFW and identify actions that may lower wild fish populations and assistin implementing mitigation measures. Since natural variability in smolt production is high, discusswith ODFW to determine if variability is due to non-habitat factors (poor escapement, drought, or others.)	Annual creel census, Marmot Dam Counts, spawning and redd counts on selected reaches, random shocking, snorkel counts, and inventory, report analysis of data every five years. Before and after project habitat surveys and determine, by snorkel, the population of juvenile fish. Increase monitoring of fish populations to determine if management actions are effective at enhancing native populations and minimizing competition between native and hatchery stocks. Responsibility: BLM fisheries biologistsin coordination with ODFW regional biologists. Cost: $6,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
WILDLIFE and WILDLIFE HABITAT	Populations of major species Amount and combination of habitat type	Negative change in river corridor use by selected species (i.e. neotropical birds, waterfowl, beaver, herptofauna, big game, and listed species). No net loss of acreage or significant human-caused change (5%) in the mixture of habitat types in the corridor.	Identify cause of change, if human-caused correct practices or activities.	Conduct wildlife surveys every five years to correspond with habitat surveys. Count and record all nests, raptors, and waterfowl sightings during regularly scheduled surveys. Establish baseline data for future monitoring purposes with ongoing surveys (up to two visits per month). Do the same on private lands if landowner gives permission. Conduct an annual (June) breeding bird survey along the 25-mile auto route (tentatively surveyed and establishedin 1992) encompassing the Gorge. This survey will follow USFWS protocol, and the results will be given to the USFWS for the national database. GIS mapping of habitat type and extent (in acres) using aerial photography interpretation. Establish a baseline year (1993) and repeat the survey every five years. Monitor elk populations (by ODFW) and develop an elk management agreement among ODFW, BLM, Multnomah County Parks, TNC, and other interested landowners. Survey landowners for information about past and current damage due to elk and their estimated costs. Inventory and evaluate dispersed camp sites and recreation use for adverse impacts to wildlife habitat. Monitor dispersed camp sites yearly in the course of wildlife surveys to evaluate needs for additional management actions. Responsibility: BLM natural resource specialist and wildlife biologists.

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARD TO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
RIPARIAN VEGETATION and WETLANDS	Amount of riparian habitat and wetlands Proper functioning ecological condition as indicated by vegetative cover, stream bank condition, and stream shading and structure (LWD).	Riparian vegetation would be managed to maintain or enhance vegetation diversity, biomass, and percent of cover at the desired level which was determined during baseline monitoring. Obtain 95 percent shade potential and maintain cutbanks, wetlands, and side streams at natural levels (no net loss as measured by length, area/acres, square meters etc.) as established during baseline monitoring.	Remove or eliminate source of impact (i.e. close campsites, roads, trails, etc.) if inventory considersthe extent of the impact unacceptable. Plant native riparian vegetation. Use bio-engineerfng techniques to reduce erosion or riparian loss.	Conduct baseline riparlan and wetland resource inventory and photo inventory. Continue to reassessat five year intervals. Incorporate stream shading and LWD amounts from fish habitat inventories. Establish study plots, stratified by the amount of recreation use, grazing, development, etc. Transect will identify plant species and percent ground cover. Each plot should have two controls, with species composition and the geomorphic surfaces matching the monitoring plot. Monitorthe transect annually. Document channel stability rating using a Pfanchuck stability form at monitoring sites establishedfor vegetation plots (above). Conduct a stability rating every five years along with vegetation monitoring. Conduct color infra-red aerial reconnaissanceevery four years for the first twelve years and then every ten years thereafter. Reinventory ecological site condition as changes in status warrant. Responsibility: BLM botanistsand hydrologists Cost: $5,000 each monitoring effort

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
BOTANICAL DIVERSITY	Ecological condition and trend as indicated by the amount and composition of species in the area. Population and extent of listed species.	Vegetation in the river corridor would be managed to maintain existing ecological conditionsas determined by baseline inventories and monitoring plots. No reduction or loss of listed species populations or habitat.	Control, restrict, or mitigate human caused activities as needed. Implement short-term prescriptive activities to restore natural condition or biodiversity.	Develop monitoring plans/plots for: - listed plants - old growth stands - cliff habitats - meadow complexes Conduct baseline vegetation habitat resource inventory and photo inventory. Develop GIS database. Continue to reassessat 5 year intervals. Inventory and monitor plants and habitats on private lands where permitted by landowners. Monitor specific populations eligible for Federal listing as endangered or threatened every year for three years. Determine plant vigor, size, flower, and fruit production using basic plant sampling techniques. Determine seed production, seedling establishment, plant mortality, and other factors in smaller subsets. After three years, revisit the sample plots every three to five years. Responsibility: BLM botanists Cost: $15,000 to $20,000 initial inventory and data base; $5,000 to $8,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARD TO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE. AND FREQUENCY
CULTURAL RESOURCES	Cultural site integrity	No loss or damage to significant cultural sites including NRHP registered sites.	Proposed ground disturbing activities will not be approved. Cultural resources not evaluated will be managed as if they were listed on the NRHP. If adequate protection of cultural resources is not available, a management plan will be prepared to establish mitigation measures protecting the values of the site or identifying appropriate actions to avoid further adverse effects. Cultural resourcesin the river corridor that are listed on the NRHP, or not yet evaluated, will be protected by avoiding adverse impacts to the site or by conserving their values. Cultural resources need protection from human vandalism and natural destruction. Cultural resources in the river corridor should be developed and interpreted for educational and recreational purposes when adequate provisions are available to protect them.	Review (annually) all undertakings that have occurred inside the river corridor to see if adequate cultural resource inventories or assessments, or both, have been completed. Cost: $250.00 annually A cultural resource inventory or assessment, or both, will be completed for each proposed project in the river corridor. Cultural resources possiblyaffected by projects in the river corridor will be evaluated to determine their significance and eligibility for the National Register of Historic Places (NRHP). Visit (annually) all listed, eligible, and cultural resources not evaluated within the river corridor to verify and record condition. Collect specific oral historfesfor Sandy River areas. Cost: $2,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE. AND FREQUENCY
VISUAL RESOURCES	Projects, activities, or modifications which alter landform, vegetation, water, color, or character of the protection as seen from the river and high use areas Extent and amount of developments as indicated by buildings and other structures	Numbers of housesviewed from the river (within area of greatest visual effect) during summer Number and extent of visual contrastsand intrusions seen from public use areas such as Wildwood and Dodge, Dabney, and Oxbow parks would not attract the attention of casual observers inside the characteristiclandscape. The number of housesand structureswill not exceed the number of lots that currently qualify for development.	Management actions or developments (or proposed developments) not consistentwith Wild and Scenic River classifications,visual resource management objectives (including ROS standards), or county PRCA/SEC zoning requirements will be modified (i.e. screened) or rejected. State Parks Scenic Waterway program enforcement staff notified; corrective actions taken, vegetative screening or relocation.	Conduct a VRM inventory and study every five years to ensure that projects are consistentwith management standards. Include aerial photographyinterpretation, key site inventory (photo points), and field (river view) assessments. Analyze projects on a case-by-case basis to ensure protection of the protection and compliance to standards that include county zoning and development reviews for private land development; NEPA analysis of federal projects to insure compliance with VQO standards, and state scenic waterways administrative rules. Responsibility: BLM river planner, county planning/ river management liaison, state parks staff. Cost: $2,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONSTRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
RECREATION	Key indicators and standards to establish with implementation of Limits of Acceptable Change (LAC) inventory, survey, and analysis. (The following represents items most likely included). Quality of Experience as indicated by conditions of congestion, use levels, safety, reported incidents of conflict (such as site competition), vandalism and trespass. Any non-motorized recreation opportunities lost or are curtailed	Established by visitor expectation survey and landowner survey to determine acceptable levels of use. (Physical site condition and environmental impacts and monitoring contained in recreation site day use, camping site, road and trail section&as well as under botany, ecology, and wildlife sections). Number of encounters with other recreation individuals or groups per day. Number of reported conflicts, trespassreports, vandalism reports, or safety incidents recorded annually. Recreation visitor counts, trail user counts, vehicle counts (parked and road). Number of days campground and parking lot capacity(s) exceeded. Number and type of non-motorized recreation opportunitiesand activities.	A combination of direct (enforcement patrols, site closures, seasonal restrictions, permits, etc.) and indirect (information, education, signing, site design, etc.) management actions and controls that would emphasize indirect methods first. Prohibit motorized off-road vehicles and cooperate with state agencies to restrict access to the gorge by motorized vehicles. Increase river and park enforcement patrols and visitor contact during high use periods and use Oregon State Patrol Cadets to help enforce regulations on the river. Add more signing to guide visitors to certain locationsand provide information regarding protection practices of the area and the concerns of private landowners.	Conduct LAC survey and monitoring program, every ten years. **Include:** Year round monitoring of visitor use levels, conflicts, needs, and programs. Random site use surveys, trail registration numbers, vehicle parking, and vehicle road use counts. A landowner and recreation user survey regarding recreation use conflicts and expectations. Conduct angler preference and statistical creel survey to study fishing regulations. Responsibility: BLM Cost: $2,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARD10 USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE. AND FREQUENCY
ROADS AND TRAILS	Road erosion and damage related to roadside vegetation and facilities Trail erosion and damage related to trail-side vegetation and bare ground	Confine motorized use to designated roads. Maintain roads to federal or state standards. Maintain trails to federal standards. Prevent multiple trail or trail networking by indirect methods. Trail use and design will be consistent with Recreation Opportunity Spectrum (ROS) experience level and visual management standards.	Increase road maintenance frequency. Reconstruct or relocate roads, parking lots, trails, and related facilities (i.e. signs, vehicle barriers, etc.) to resolve unlawful access, resource damage, and road safety problems. Develop, maintain, and replace signing as needed. Increase trail maintenance frequency. Reconstruct or relocate trails to reduce trail networking and encourage appropriate use. Keep trail maps and information up-to-date.	Monitor routine road maintenance needs annually. Apply feedback from visitor contact. Monitor routine trail maintenance needs annually. Establish monitoring points along high use trails to measure trail depth, width, and drainage. Remeasure points and map and inventory trails every five years. Responsibility: BLM River Planner or outdoor recreation planner, park managers. Cost: $1 ,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
DISPERSED CAMP AND DAY USE SITES	Soil stability Vegetative loss Tree Damage Fire rings Human Waste Litter Accumulation Facility Damage	Impacts to dispersed use areas will range between light and extreme, based on subjective judgement and objective measurement, regarding erosion, vegetation changes, facility damage, and accumulation of litter as follows: **Light:** Previous ground vegetation intact and does not allow abnormal erosion to occur. Facility damage and litter is not evident. The site has experienced minimal physical changes. Moderate: Vegetative growth is slightly impaired which allows minor abnormal erosion. Traces of litter can be found inside and bordering the site. Minor vandalism, repairable by maintenance, occurs on tables, signs etc. Physical changes to the site may include: small tree-limb cutting or damage, movement of rocks or semi-stationary objects, establishment of fire rings, etc. (Continued on next page)	Use basic site protection measures. Harden sites to maintain important sites, if necessary, between moderate and heavy standards. Campsites or day use areas which have received extreme impacts will be rehabilitated and closed until levels of impacts have been mitigated to at least moderate levels. Other actions could include: increased user education efforts, seasonal closures, site or access restrictions, etc. Management actions and controls would be utilized that emphasize indirect methods first. For example: 1. Increased user education efforts in "'minimum impact" camping techniques (e.g. signs, brochures, increased management patrol presence etc.). 2. Establishing camping setback from roads, river, trails, and other water sources. 3. Campsite rehabilitation. 4. Campfire ban. 5. Designated campsites and registration. 6. Close areas to overnight camping.	Conduct an inventory and assessmentof all existing and proposed sites within the river corridor upon approval of the plan. Remeasure and assessall sites once every three years, or when condiiionsindicate need. Select key or indicator sites to monitor on annual basis. Feedback from routine patrols, biological and wildlife monitoring programs, and maintenance demand. Inventory, close and rehabilitate existing camp sites and user trails along river and in riparian areas where resource damage is present on Federal lands or other public lands in cooperation with the appropriate agencies. Responsibility: BLM River Planner or outdoor recreation planner Cost: $3,000 annually

RESOURCE VALUE TO MAINTAIN/ ENHANCE	KEY INDICATOR	MANAGEMENT STANDARDTO USE	MANAGEMENT ACTIONS TRIGGERED IF A STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE, AND FREQUENCY
CAMP AND DAY USE SITES **(continued)**		**Heavy:** Vegetation is gone from the site but neighboring vegetation still intact. Abnormal erosion in the site is correctable through maintenance. Excessive littering is evident inside and nearby the site and can be corrected through maintenance. Major vandalism, though repairable, occurs on facilities and physical features such as tables, rocks, trees, etc. Physical changes to the site may include: moderate tree-limb cutting or damage, beginning tree root exposure, trails radiating from the site, human caused changes to the layout of the use area (e.g. trenching, movement of soil or facilities, evidence of human waste, etc). All impacts could be resolved through routine maintenance. Extreme: Use area vegetation is gone and adjacent vegetative growth is impaired which allows abnormal erosion to occur in and next to the site. Maintenance can no longer correct the adverse impacts to soil and vegetation without temporarily closing the site. Littering and dumping of garbage is a continuous problem. Major vandalism can be corrected through maintenance of facilities but not for vandalism to physical features such as rocks, trees, etc. Physical changes to the site may include: dead trees, cut trees, extensive tree root exposure, heavy erosion, compacted soil, changes in species composition, and major trails and satellitepareas that radiate from site. Maintenance can not sustain long term use without a temporary closure to allow natural rehabilitation to occur.		
GEOLOGY	Condition of buried forest geological sites.	Significant loss or destruction of site.	Protective actions if possible.	Inventory and monitor buried forestsat five year intervals.

GLOSSARY

GLOSSARY

Access easement - A legal right to cross the property of a landowner.

Administrative rules - Regulations established by a government agency under the authority of legislative actions.

Allocation - The assignment of recreational use or access to users through management methods after it is determined that demand for the resource exceeds acceptable limits or established standards.

Adverse effect - A reasonable likelihood of more than moderate adverse effects on the scenic, cultural, recreational, or natural resources of a scenic area. The adverse effects are determined by (1) the circumstances of a proposed action, (2) the intensity of the proposed action, including the magnitude and duration of an impact and the likelihood of it occurring; (3) the relationship between a proposed action and another similar action, which together are insignificant, but when considered cumulatively are significant impacts; and (4) proven mitigation measures which the supporter of an action will implement as part of the proposal to reduce significant effects to an insignificant level.

Adjudication - To hear and settle a case by judicial procedure.

Anadromous Fish - Fish that migrate as adults from the ocean into fresh water streams to reproduce young fish which, in turn, migrate to the ocean to maturity. (Example: Salmon)

Anaerobic - A condition in which oxygen is absent from the environment.

Best management practices - Conservation techniques that (1) reduce soil loss and degradation of water quality caused by animal waste, toxins, and sediment; (2) minimize adverse affects to surface water, ground water, and circulation patterns; (3) maintain chemical, biological, and physical characteristics of wetlands, ponds, streams, and riparian areas.

Bio-diversity - A diverse community of biological organisms at the genetic, species, ecosystems, and landscape levels.

Biological evaluation - A specific process required as part of an environmental assessment that evaluates the potential effects of a proposed project on proposed, endangered, threatened, and sensitive species and their habitats: done for both animals and plants.

Buffer zone - An area next to a sensitive body of water established and managed to protect the system from human disturbance. The zone may include all or a portion of the riparian area.

Bureau of Land Management - The organizational unit of the United States Department of the Interior that administers the Nation's public lands, about 272 million acres or one-eighth of the Nation. The BLM also has the responsibility for management of mineral estate underlying 572 acres, 300 million acres of which are administered or owned by other agencies or private interests.

Bureau of Land Management (BLM) lands - Any land and interest in land managed by the United States Government, administered by the Department of the Interior through the Bureau of Land Management.

Campsite hardening - Measures, such as paving a footpath, to reduce adverse impacts from camping.

Catch-and-Release - A popular trend promoted by management agencies, constituency organizations and sportsmen clubs which encourages anglers to return caught fish to the water rather than keeping them. This helps to maintain fisheries.

Clearcut - An opening created by the clearing vegetation of an area one acre or more in size.

Commercial forest products - Products such as timber for lumber, pulp, and firewood for commercial purposes.

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

Cryptogam survey - An inventory of mosses, lichens, and liverworts.

Cultural resource - A term generally meaning any cultural property and any traditional way-of-life value that includes historical, archeological and architectural sites, structures, places, objects, and works of art. They may consist of (1) physical remains: (2) definable areas of occurrence of significant human events where no remains exist; (3) the environment immediately surrounding the property area; or (4) abstract, non-material values important to the maintenance of a specified social and cultural traditional system of belief, practice, or interaction not closely identified with an established location.

Cumulative effects - The combined effects of two or more management activities. The effects may be related to the number of individual activities, or to the number of repeated activities on the same piece of ground. The effects can result from individually minor but collectively significant action taking place over a period of time.

Dedicated site - An area dedicated to the current use and specified on the site plan map.

Degraded site - Any area in which the environment is in an early seral status or is in a declining ecological condition.

Development - Any land division, structure, including but not limited to, new construction of buildings and structures, mining, dredging, filling, grading, paving, and excavating.

Diversity - A measure of the variety of species and habitats in an area that takes into account the relative abundance of each species or habitat.

Early seral - The ecological status that corresponds to 0 to 25 percent of the plant composition found in the potential natural community. Same as poor range conditions.

Easement - A right held by a person or entity to make use of the land of another for a limited purpose.

Ecosystem - An interacting system of organisms considered together with their environment. (Example: a marsh)

Eco-niche - The particular habitat that is needed by a certain plant or animal.

Ecotone - A transition area of vegetation between two communities that possesses characteristics of both types of neighboring vegetation as well as characteristics of its own.

Endangered species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Endemic - plants or animals found only in a particular area.

Enhancement - In relation to natural resources, the term means efforts would be undertaken to restore habitat to pre-impact conditions where possible and feasible. In relation to recreation, the term means that the site or facility would be improved or upgraded or expanded to improve quality of the recreational experience.

Environmental assessment - A concise public document which provides sufficient evidence and analysis for determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact

Environmental Impact Statement - A document prepared by a federal agency which evaluates significant environmental impacts anticipated from implementation of federal actions. An Environmental Impact Statement is filed with the Environmental Protection Agency.

Erosion - Separation and movement of soil and rock by water, wind, ice, and gravity.

Existing use **-** A legally-established use which existed before the effective date of the Act, the management plan, or a land use ordinance established under the act.

Fire suppression areas - An area identified in need of fire suppression requirements to prevent loss of life, property, and resources.

Ground cover - Vegetation that keeps the soil from eroding away.

Habitat - The type of environment in which certain plant and animals live.

Herbs - Non-woody (herbaceous) plants, including grasses and grasslike plants, forbs, ferns, fern allies, and non-woody vines.

Historic site - Any cultural property dating to the historic period of a particular region. The historic period is the period of time in any region for which historic records exists. In western Oregon, the historic period generally begins in the late 18th century and continues through the early 19th century.

Impact - A change in the environment which is caused by humans.

Indigenous - Naturally born, produced, or grown in an area; native.

Instream flow -Water that remain in stream beds and is not extracted for uses outside of the bed. Minimum in-stream flows can be mandated to provide consistent fishery habitats.

Instream water right - A right to the use of water which remains in the stream, such as fish, recreation, or pollution abatement.

Interpretation - Education and information programs through which public use specialists explain natural resource issues and concepts to the general public.

Late seral - The status of the ecology that corresponds to 51 to 75% of the of the plant composition found in the potential natural community. Synonymous with good range condition.

Limits of acceptable change (LAC) process - A river management planning process that requires managers to define desired river conditions and to undertake actions to maintain or achieve these conditions.

Management objectives - Parameters or goals used as standards to measure the success of the management plan.

Management indicator species - A species identified in a planning process that is used to monitor the effects of planned management activities on habitat of wildlife and fish, including those that are socially or economically important.

Memorandum of Understanding (MOU) - An agreement between two or more parties.

Mesic - Having a moderate rainfall.

Mid-seral - The status of the ecology that corresponds to 26 to 50% of the of the plant composition found in the potential natural community. Synonymous with fair range condition.

Mitigating measures - Modification of actions which (1) avoid impacts by not taking a certain action or parts of an action; (2) minimize impacts by limiting the degree or magnitude of the action and its implementation; (3) rectify impacts by repairing, rehabilitating, or restoring the affected environment; (4) reduce or eliminate impacts over time by preservation and maintenance operations during the life of the action: (5) compensate for impacts by replacing or providing substitute resources or environments.

Monitoring - The orderly collection of data evaluating the effects of both management actions and the existing natural conditions.

Motorized equipment - Any machine activated by a nonliving power source except small battery-powered, hand-caked devices such as flashlights, shavers, Geiger counters and cameras.

Motor vehicle - Any vehicle which is self-propelled or any vehicle which is propelled by electric power obtained from batteries.

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

National Environmental Policy Act -An Act passed in 1969 (has since been amended) to establish a national policy for the environment, the Council on Environmental Quality, and other purposes.

National Register of Historic Places (NRHP) - A listing, established by the Historic Preservation Act of 1966, of the nation's significant cultural resources.

National Wild and Scenic Rivers System - A system of Congressionally designated rivers and their immediate environments that have outstanding scenic, recreational, geological, fish and wildlife, historical, cultural, and other values and are preserved in a free-flowing condition. The system consists of three types:

- 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.

. Scenic

Rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped but accessible in places by roads.

· Wild

Rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with essentially primitive watersheds or shorelines, and unpolluted waters.

Native species - Plants or animals indigenous to an area.

Non-point source pollution - Pollution caused by the introduction of scattered sources (e.g. sediment and nutriments) or from a natural or human alteration in the stream system.

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

Off-highway vehicle (OHV) - A motorized vehicle capable of travel over natural terrain, including water. Non-amphibious registered motorboats, emergency vehicles, and other official vehicles are not included.

Old growth - Any stand of trees ten acres or greater generally containing the following characteristics: (1) trees in the overstory well into the mature growth state, (2) a multi-layered canopy with trees of several age classes, (3) the presence of standing dead trees and down material, (4) the presence of human activity which may be considered insignificant in relation to the other characteristics.

Oregon Natural Heritage Plan - A system based on a cooperative effort between The Nature Conservancy and the Oregon Division of State Lands and other public agencies which maintains a comprehensive manual and computerized data base on Oregon's rare, threatened and endangered plant, animals and ecosystems.

Outstandingly remarkable values - Values among those listed in Section l(b) of the Wild and Scenic Rivers Act: "scenic, recreational, geological, fiih and wildlife, historical, cultural, or other similar values." Other similar values may include ecological, biological, botanical, paleontological, hydrological, scientific, or research.

Oxbow - A bend in a river that resembles the U-shaped frame forming a collar about an ox's neck and supporting the yoke.

Paleontological resource - Remnants of life from past geological ages as seen in plant and animal fossils.

Point source pollution - A stationary pollution source, such as a smoke stack or discharge pipe.

Population or stock - A subunit of a larger group. For example, while the stock of Chinook salmon in the Sandy River may be healthy, a subgroup or population within that stock might be in trouble because it lives in a place that has added risks.

Primitive and Unconfined Recreation - Non-motorized and undeveloped types of outdoor recreational activities.

Public Utilities Commission - The state agency that regulates investor-owned electric and natural gas utilities, water companies, telephone companies, and transportation industries.

Resource Assessment - A comparative analysis of resource values used to determine the relative importance of those values. For the lower Sandy River, the resource assessment was used to evaluate the river's values in order to determine which values are considered outstandingly remarkable values.

Return flows **-** Excess irrigation water that returns to the stream.

Right-of-way - A permit or easement that authorizes a specific function of a specific area of land.

Riparian - An area of land directly influenced by the water of a stream, river, pond, lake or wetland in which water, soil, and vegetation interact to form a unique microclimate.

Riparian buffer - An area of land along the perimeter of the riparian area used to prevent unwanted development or other intrusion into areas beyond the buffer.

Riparian management area - An area designated in a plan to protect the riparian or stream-side zone or both.

Roaded natural - An area with a predominate natural- appearing environment with moderate evidences of the sights and sounds of humans which usually harmonize with the natural environment.

Scoping - The process of identifying significant issues of a proposal through public comment. The process develops issues, and alternatives for consideration.

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

Self-sustaining fish populations -Fish populations that have sufficient capabilities to maintain the population through natural reproduction.

Sensitive species - Any species within the jurisdiction of, and regulated by, the policies of the Bureau of Land Management.

Seral - Pertaining to a succession of plant communities in a given habitat leading to a particular climax association: a stage in a community succession.

Species of special concern - Plant species considered rare in Oregon but may be common in other states or justification for inclusion the Sensitive Plant Species list is insufficient, or both.

State Scenic Waterway - A river, or river segment, that has been designated by the Oregon Legislature, by Governor's Declaration, or by voter referendum as a Scenic Waterway under the provisions of the Oregon Scenic Waterways Act of 1969.

Stock - See Population or stock.

Succession - The process of a vegetative community towards climax or potential natural community.

Sustained yield - The annual production of timber on a consistent basis at a level of production to meet the needs of humans and the environment.

Threatened species - Any species defined through the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range and published in the Federal Register.

Turbidity - A measure of the clarity of water.

Visitor Use - Visitor use of the wilderness resource for inspiration, stimulation, solitude, relaxation, education, pleasure or satisfaction.

Watch-listed - Species the Salem District BLM has identified for further research in order to determine whether or not a plant is rare.

Water quality - The chemical, physical, and biological characteristics of water with respect to suitability for a particular purpose.

Wetlands - Commonly soft, wet tracts of land covered at times by water.

Wild and Scenic River - A river or section of a river designated by Congress under the Wild and Scenic Rivers Act of 1968, as amended.

APPENDIX A: STATE SCENIC WATERWAY ADMINISTRATIVE RULES AND OREGON DEPARTMENT OF FORESTRY AGREEMENT

OREGON ADMINISTRATIVE RULES

CHAPTER 736. DIVISION 40 — STATE PARKS AND RECREATION DIVISION

Classification of Scenic Waterways and Segments Thereof

736-40-040 (1) OAR 736-40-040 through 736-40-075 supplement, but in no way alter, other provisions of these rules and regulations. Notification procedures set forth in OAR 736-40-030, 736-40-035 and 736-40-080, relating to Land Management, are applicable to these rules. In order to establish varying intensities or protectionor development based on special attributes of each area within the scenic waterways, the following classifications are established:

(1)
(a) Natural River Areas:

(A) Those designated scenic waterways or segments thereof that are generally inaccessible except by trail or the river, with related adjacent lands and shorelines essentially primitive. These represent vestiges of primitive America;

(B) Natural River Areas may include an occasional lightly traveled road, airstrip, habitation or other kind of lightly traveled road, airstrip, habitation or other kind of improvement already established, provided the effects are limited to the immediate vicinity;

(C) Natural River Areas will be administered to preserve their natural, wild and primitive condition, essentially unaltered by the effects of man, while allowing compatible recreational uses, other compatible existing uses and protection of fish and wildlife habitat.

(b) Scenic River Areas:

(A) Those designated scenic waterways or segments thereof with related adjacent lands and shorelines still largely primitive and largely undeveloped, except for agriculture and grazing, but accessible in places by roads. Scenic River Areas may not include long stretches of conspicuous or well-traveled road paralleling the river in close proximity, but may include extensive areas in agricultural use;

(B) Scenic Areas will be administered to maintain or enhance their high scenic quality, recreational value, fishery and wildlife habitat, while preserving their largely undeveloped character and allowing continuing agricultural uses.

(c) Recreational River Areas:

(A) Those designated scenic waterways or segments thereof that are readily accessible by road or railroad, that may have some development along their shorelines and related adjacent lands, and that may have undergone some impoundment or diversion in the past;

(B) Recreational River Areas will be administered to allow continuance of compatible existing uses, while allowing a wide range of compatible river-oriented public outdoor recreation opportunities, to the extent that these do not impair substantially the natural beauty of the scenic waterway or diminish its aesthetic, fish and wildlife, scientific and recreational values.

(d) Natural Scenic View Areas:

(A) Those designated shorelines and related adjacent lands, lying along only on bank of a river within a scenic waterway, which possess the qualities of a Natural or Scenic River Area except that the opposite shoreline and related adjacent land, by reason of accessibility, or development, qualifies only for a less restrictive classification;

(B) Natural Scenic View Areas will be administered to preserve or enhance their essentially primitive scenic character, while allowing compatible public outdoor recreational use.

(e) Accessible Natural River Areas:

(A) Those designated scenic waterways or segments thereof that are readily accessible by road or railroad but otherwise possess the qualities of a Natural or Scenic River Area;

(B) Accessible Natural River Areas will be administered to protect or enhance their essentially primitive scenic character, while allowing compatible public outdoor recreation use.

(f) River Community Areas -Those designated areas of a scenic waterway, perhaps on only one bank of the river, where density of structures or other developments, already existing or provided for precludes application of a more restrictive classification.

(2)

(a) Within the general framework of these classifications, the Commission will further consider the nature and extent of existing land uses and developments, the scenic qualities and the aesthetic, fish and wildlife, scientific and recreational values of each classified area within the scenic waterways in determining whether, in its judgement, proposals for changes of land use or improvements are compatible with the Act;

(b) Because of the individual character of each scenic waterway, administrative criteria within each of the six classifications may vary from one scenic waterway to another.

Sandy River Scenic Waterway 736-40-075

(1) Natural River Area: The segment of the scenic waterway extending from the east boundary line of Section 25 and Section 36, Township 1 South, Range 4 East, or Willamette Meridian, in Clackamas County at Dodge Park, downstream approximately 3.8 miles to the South line of the North Half of the Northeast Quarter of Section 23, Township 1 South, Range 4 East, of Willamette Meridian, in Multnomah County near Indian John Island, is classified as a Natural River Area.

(2) Scenic River Area: The segment of the scenic waterway extending from the South line of the Township 1 South, Range 4 East, of the Willamette Meridian, in Multnomah County near Indian john Island, downstream approximately 8.7 miles to the West line of the East Half of the Northeast Quarter of Section 6, Township 1 South, Range 4, East, of the Willamette Meridian, in Multnomah County at Dabney State Park, is classified as a Scenic River Area.

(3) In both the Natural River Area and the Scenic River Area of the Sandy River Scenic Waterway:

(a)

(A) Within the area of greatest visual effect on the natural river scene, as indicated on the map of the Sandy River Scenic Waterway prepared by the State Parks and Recreation Division and dated 13 September 1972, new structures or other improvements which are visible from the river (see OAR 736-40-015(10), Definition of Terms), other than those erected or made in connection with compatible existing uses, or those needed for public outdoor recreation or resource protection will not be permitted unless they are so located that their visual effect is primarily on the upland scene (above the rims of the canyon, or "bluff line," usually readily discernible) rather than on the scene as viewed from the river:

(B) Outside that area of greatest visual effect on the natural river scene, uses which are consistent with applicable county zoning ordinances and OAR 736-40-030 and 736-40-035 may be permitted. Within the Natural River Area, such permitted uses shall be largely concealed from view from the river by topography or established evergreen vegetation which shall be maintained; within the Scenic River Area such permitted uses may be visible from the river, provided they are consistent with applicable county zoning regulations and OAR 736-40-030 and 736-40-035.

(b) Outside the area of greatest visual effect on the natural river scene, as indicated on the map of the Sandy River Scenic Waterway prepared by the State Parks and Recreation Division and dated 13 September 1972, notification is not required for changes of land use, construction of buildings or other improvements or other alterations or activities which:

(A) Are less than 21 feet in height above natural grade on a side facing the river: and
(B) Are entirely concealed from view from the river by topography or established evergreen vegetation which shall be maintained; and
(C) Do not involve reduction of existing vegetation which is visible from the river: and
(D) Are finished in muted tones without large reflective surfaces; and
(E) Meet applicable requirements of other governmental agencies, including county zoning regulations.

FOREST PRACTICES COORDINATION WITH THE WILLAMETTE GREENWAY AND OREGON SCENIC WATERWAYS PROGRAMS

AUTHORITY.

A. Forest Practices Act.

ORS 527.630 declares it to be in the public interest to vest authority in the Board to develop and enforce regional rules, for two purposes:

1. To assure the continuous growing and harvesting of forest tree species and to protect the soil, air and water resources including but not limited to streams, lakes and estuaries; and

2. To achieve coordination among state agencies which are concerned with the forest environment.

B. Scenic Waterways Program.

ORS 390.805 to 390.925 establishes a Scenic Waterways Program. The statutes declare that the highest and best use of these scenic waterways are recreational, fish and wildlife uses. The free-flowing characters of these waters shall be maintained in quantities necessary for recreation, fish and wildlife uses. Forest crops shall be harvested in such a manner as to maintain as nearly as reasonably is practicable the natural beauty of the scenic waterway. No person may put related adjacent lands to uses that violate the Scenic Waterways Program unless the owner of the land has given to the Department of Transportation written notice of proposed uses at least one year prior thereto. The program is administered by the Oregon Department of Transportation through its State Parks and Recreation Division, Rivers Program Section.

C. Willamette River Greenway.

Statewide planning Goal 15 (Willamette River Greenway) is to protect, conserve, enhance and maintain the natural scenic historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway. Partial harvest of timber shall be permitted beyond the vegetative fringes in areas not covered by a scenic easement when the harvest is consistent with an approved plan under the Forest Practices Act, or, if not covered by the Forest Practices Act, then with an approved plan under the Greenway Compatibility Review provisions. Such plan shall ensure that the natural scenic qualities of the Greenway will be maintained to the greatest extent practicable or restored within a brief period of time.

The Willamette River Greenway Program was established by the legislature in 1967 and later revised in 1973 under ORS 390.310 - 390.368. The Oregon Department of Transportation through its State Parks and Recreation Division, Rivers Program Section administers the program. It is a joint effort program carried out with the assistance of units of local government and the Department of Land Conservation' and Development. State Parks serves as the lead coordinating agency.

OBJECTIVE.

The purpose of this directive is to outline Department responsibilities and procedures for coordinating the Forest Practices Program administration with the Willamette River Greenway and the Oregon Scenic Waterways programs.

STANDARDS.

A. Knowledge of Willamette River Greenway and Oregon Scenic Waterways Programs.

Forest Practices Program personnel shall be knowledgeable about the Willamette River Greenway and Oregon Scenic Waterways programs as they relate to Forest Practices.

B. Willamette River Greenway and Oregon Scenic Waterways Programs Boundaries.

Districts shall maintain maps showing the current Willamette River Greenway and Oregon Scenic Waterways boundaries that lie within their respective District boundaries.

C. Coordination.

Appropriate counties and the Department of Transportation will be informed of notifications received for operations within the boundaries of the Willamette River Greenway and the Oregon Scenic Waterways, respectively.

D. Landowners.

Landowners giving notification under the Forest Practices Act will be given basic information about the Oregon Scenic Waterways and Willamette River Greenway programs, when appropriate.

PROCEDURES.

A. Districts will maintain a current map showing the boundaries of the Willamette River Greenway and Oregon Scenic Waterways and affected lands.

B. When an operator, timber owner, or landowner gives a notice to the State Forester of intent to perform a commercial operation on forest land within the Willamette River Greenway or Oregon Scenic Waterways boundary, the Department will inform the operator, the landowner or the timber owner that special constraints may apply. The Department of Transportation has a handout that can be given to the operator, timber owner, or landowner affected outlining his responsibilities under the Oregon Scenic Waterways Program.

C. Telephone the manager of the River Programs, Department of Transportation, Parks and Recreation Division, Salem (378-6500) when notice of an operation within a Scenic River Program area ia received. Telephone the respective county planning director when the notice of an operation within the Willamette River Greenway is received.

D. Telephone the manager of the River Programs, Department of Transportation, Parks and Recreation Division (378-6500) when known Scenic Waterways Program violations occur. Telephone the respective county planning director of known Willamette River Greenway violations.

E. Treat operations within the Willamette River Greenway and Oregon Scenic Waterways as high priority operations.

RESPONSIBILITY.

A. Area Directors, District Foresters.

Responsible for effective administration of Department responsibilities relative to the Willamette River Greenway and Oregon Scenic Waterways programs within their respective Area/District(s).

B. Forest Practices Foresters.

Responsible for:

1. Maintaining a map showing the current boundaries of the Willamette River Greenway and scenic waterways covered by "Goal 15" and the Oregon Scenic Waterways Program, respectively.

2. Providing the landowner, timber owner or operator with basic information about the Willamette River Greenway and Oregon Scenic Waterways programs at the time the landowner/operator/timber owner gives Forest Practices notification to the State Forester.

3. Telephoning the Manager of the Rivers Program, Department of Transportation, Parks and Recreation Division when the Department received notification of intent to operate in areas covered by the Scenic Waterways Program. Telephoning the respective county planning director when the Department receives notification of an operation within the Willamette River Greenway.

4. Reporting known Scenic Waterways Program violations to the Manager of the Rivers Program, Department of Transportation, Parks and Recreation Division, Reporting known violations of the Willamette River Greenway program to the respective county planning director.

5. Being aware of county requirements peculiar to the Willamette River Greenway Program.

C. Forest Practices Section

Responsible for providing current information to the field regarding the Willamette River Greenway and Scenic Waterways Program.

D. Manager. Rivers Program. DOT

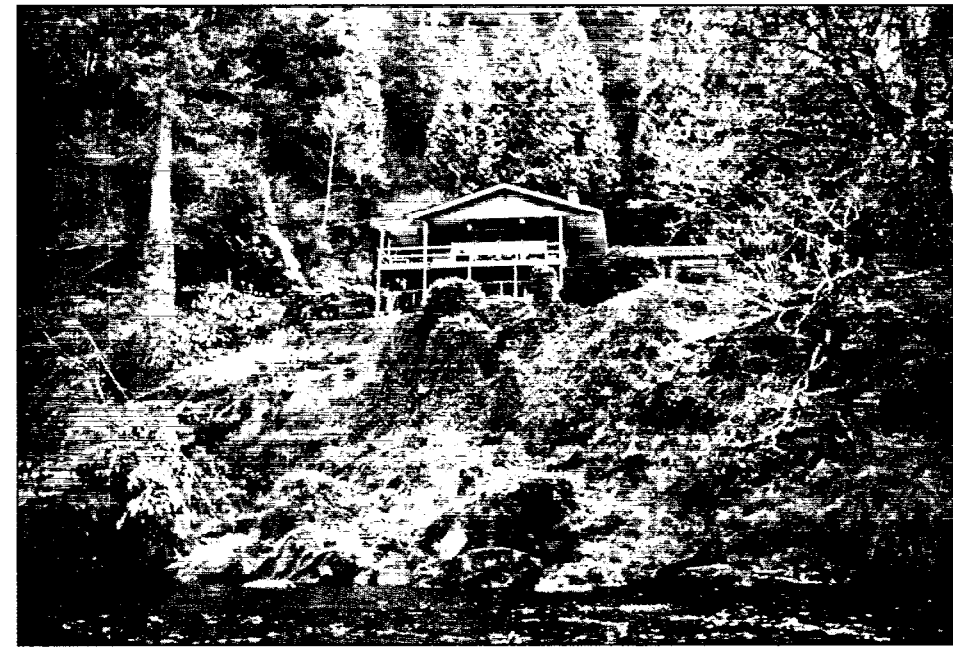
Responsible for:

1. Providing "handouts" to the Forestry Department regarding the Willamette River Greenway and Oregon Scenic Waterways programs.

2. Providing current information to the Forestry Department on the status of the Willamette River Greenway and Oregon Scenic Waterways programs, including boundaries, landowner requirements, etc.

3. Providing training to Forestry Department personnel on the Willamette River Greenway and Oregon Scenic Waterways programs.

APPENDIX B: COUNTY PLANNING AND ZONING REGULATIONS AND STATE LANDUSELAWS(GOAL5)



COUNTY PLANNING AND ZONING REGULATIONS

Clackamas and Multnomah County Comprehensive Planning and Zone Ordinances

Clackamas and Multnomah Counties have approved comprehensive plans in place. These plans address Federal Wild and Scenic Rivers and State Scenic Waterways protection in a number of ways. First, all development must meet the general standards for the unincorporated areas of the counties described in the General Provisions of the plans. The General Provisions set forth restrictions and considerations for natural hazards, slopes, stream corridors, wildlife and fish habitat, cultural and historic resources and natural drainage channels. Second, development and land uses are regulated through specific zoning classifications. Specific restrictions and regulations apply for each zone classification. There are two kinds of zones in effect for the land along the river and within the Sandy Wild and Scenic River boundaries:

1) Recreational or rural residential: The purpose of this classification and its application is to maintain and enhance the natural environmental and living qualities of those areas which are recreational or rural residential in character through resource conservation and carefully controlled development. These areas are usually divided into parcels of five acres or less, although some are up to 20 acres in size.

2) General or multiple use forestry or agriculture: The purpose of this classification is to designate, conserve and protect areas for the continued use of lands for timber or agriculture production. This classification is also intended to conserve and protect watersheds, wildlife habitats, recreational and other values associated with forests and farmlands. These areas are usually divided into parcels of 20 acres or greater in size. Oregon state forest practices law supersedes county zoning regarding timer harvest on these lands.

By February 1993, both Clackamas County and Multnomah County expect to have amended their zoning regulations on forest lands to require an eighty-acre minimum parcel size and enact a drastic reduction in permitted non-forest-related land uses. These changes will comply with the revised Oregon Administrative Rule (OAR 660, Division 6) for Statewide Planning Goal 4, Forest Lands. In addition, any development within 1/4 mile of the Sandy River within Clackamas County must also meet Principle River Conservation Area (PRCA-Clackamas County) requirements. This overlay zoning places restrictions (in addition to State Scenic Waterway rules) on the type of development that can occur near the river and provides specific guidelines to minimize or eliminate impacts to the river's natural and aesthetic resources. The purpose of the PRCA zoning is to maintain the integrity of the rivers by minimizing erosion, promoting bank stability, maintaining and enhancing water quality and fish and wildlife habitats, and preserving scenic quality and recreation potentials. These zones set standards for development set-backs, size and color of structures, and for soil, slope and vegetation. Development proposals on lands within these zones are forwarded to the State Scenic Waterways enforcement division for its review and approval.

Similarly, Multnomah County has a Significant Environmental Concern (SEC) Comprehensive Plan and zoning overlay designation on the lands within 1/4 mile of the Sandy River to match the state designated boundary. However, current land use activities regulated under the Oregon Scenic Waterways System are exempted from the requirement to obtain an SEC permit. Review of such activities is made by the State Scenic Waterways enforcement staff (State Parks and Recreation). The SEC plan policies, nevertheless, are important factors in the County's review of all conditional or community service land use proposals.

704 PRINCIPAL RIVER CONSERVATION AREA (PRCA)

704.01 PURPOSE

A. To maintain the integrity of the rivers in Clackamas County by minimizing erosion, promoting bank stability, maintaining and enhancing water quality and fish and wildlife habitats, and preserving scenic quality and recreational potentials:

B. To maintain rivers in their natural state to the maximum extent practicable, thereby recognizing their natural, scenic, historic, economic, cultural and recreational qualities; and

C. To implement the Rivers Area Design Plan stated in the Comprehensive Plan.

704.02 AREA OF APPLICATION

A. The standards of Section 704 apply to land within a quarter mile of the mean low water line of the Clackamas, Sandy/Salmon, Molalla/Pudding, and Tualatin River corridors as identified in Chapter 3 of the Clackamas County Comprehensive Plan.

B. The provisions of Section 704 are in addition to those requirements of the State Scenic Waterways Act, Omnibus Oregon Wild and Scenic Rivers Act of 1988, and the Federal Wild and Scenic Rivers Act of 1968. In those areas so designated, the requirements of the County shall be administered subject to the application requirements of 704.06 and prevail when they are more restrictive than State and Federal standards. (12-13-89)

704.03 STANDARDS FOR DEVELOPMENT

A. All primary structures shall be located at least 100 feet from the mean low water line of the river. This minimum setback may be increased up to 150 feet from the mean low water line, to lessen the impact of development. In determining the minimum setback, the following shall be considered:

1. The size and design of any proposed structures:

2. The width of the river:

3. The topography of the land between the site and the river;

4. The type and stability of the soils;

5. The type and density of existing vegetation between the site and the river;

6. Established recreation areas or areas of public access; and

7. Visual impact of any structures.

B. Residential structures and structures accessory to residential structures which can be seen from the river shall be thirty-five (35) feet or less in height, and shall be muted earth tones.

C. Subsurface sewage disposal drainage fields are prohibited within 100 feet of the mean low water line.

D. Commercial or industrial structures, parking and storage areas and signs shall be screened from view of the river by an appropriate vegetation buffer and shall meet the siting requirements of subsection 704.03A.

E. Residential minor land partitions shall be designed, where possible, to allow compliance with the provisions of Section 704.

704.04 EXCEPTIONS TO THE STANDARDS OF SUBSECTION 704.03

A. Residential lots of record where lot depth precludes compliance with the setback standards of subsection 704.03A, shall be exempt from these standards. Structures shall be sited the maximum practicable distance from the mean low water line. All other provisions of Section 704 shall apply.

B. Water dependent uses, such as private boat docks, marinas, or boat ramps, shall be exempt from the provisions of subsection 704.03, except that structures shall be muted earth tones. All other provisions of Section 704 shall apply to water-dependent uses, and any structure shall be the minimum size necessary to.accommodate the use.

C. Additions to existing structures which are located closer than the setback requirements of subsection 704.03A are permitted, provided that the addition complies with the other provisions of Section 704.

D. Public uses, such as bridges for public roads, shall be allowed within the setbacks stated in subsection 704.03A, provided that adverse impacts are mitigated.

E. Water impoundments, diversions, detention and retention facilities and hydroelectric facilities shall be exempt from the setback provisions under subsection 704.03A. All such facilities shall comply with all other applicable provisions of the Section and Ordinance, and are subject to review and approval pursuant to applicable State and Federal statutes and administrative rules.

704.04 VEGETATION PRESERVATION REQUIREMENTS

A. A buffer or filter strip of existing vegetation shall be preserved along all river banks. The depth of this buffer strip need not exceed 150 feet, and shall be determined by evaluation of the following:

1. The character and size of the proposed development and its potential for adverse impact on the river;

2. The width of the river:

3. The topography of the area:

4. The type and stability of the soils; and

5. The type and density of the existing vegetation.

B. Tree cutting and grading shall be prohibited within the buffer or filter strip, with the following exceptions:

1. Diseased trees or trees in danger of falling may be removed; and

2. Tree cutting or grading may be permitted in conjunction with those uses listed in subsection 704.04, to the extent necessary to accommodate those uses.

C. Commercial forest activities and harvesting practices outside of the urban growth boundary shall be subject to the Oregon Forest Practices Act. Commercial forest harvesting activities inside the urban growth boundary shall be reviewed pursuant to Forest Policies of the Comprehensive Plan, (12-13-89)

704.06 APPLICATION REQUIREMENTS

A. All development and tree-cutting activities controlled by the provisions of Section 704 within a principal river conservation area shall be reviewed by the Planning Division staff to insure consistency with Section 704. For the purpose of this section, development shall include buildings or other structures, mining, dredging, filling, grading, paving, excavation or any other activity which results in the removal of substantial amounts of vegetation or in the alteration of natural site characteristics.

B. Development or tree-cutting activity shall be reviewed pursuant to a building or grading permit submitted to the Planning Division. The permit application shall be accompanied by such materials as are reasonably necessary for adequate review. Examples of such materials include: (7-l-83)

1. A site plan showing existing vegetation and development, and locations of proposed development or tree-cutting activity:

2. Elevations of any proposed structures;

3. Exterior materials list for any proposed structures, including type and colors of siding and roofing;

4. Cross-section of any area within the vegetative fringe where grading, filling or excavating will occur.

C. The applicant may appeal to the Hearings Officer a decision of the Planning Division staff as provided under subsection 1305.01K. (7-l-83)

11 **.15.6400** Purposes

The purposes of the Significant Environmental Concern subdistrict are to protect, conserve, enhance, restore, and maintain significant natural and man-made features which are of public value, including among other things, river corridors, streams, lakes and islands, domestic water supply watersheds, flood water storage areas, natural shorelines and unique vegetation, wetlands, wildlife and fish habitats, significant geological features, tourist attractions, archaeological features and sites, and scenic views and vistas, and to establish criteria, standards, and procedures for the development, change of use, or alteration of such features or of the lands adjacent thereto.

[Amended 1990, Ord. 643 § 2]

11.156402 Area Affected

Except as otherwise provided in MCC .6404 or MCC .6406, this subsection shall apply to those lands designated SEC on the Mulmomah County Zoning Map.

11.15.6404 Uses – SEC Permit Required

(A) All uses permitted under the provisions of the underlying district are permitted on lands designated SEC; provided, however, that the location and design of any use, or change or alteration of a use, except as provided in MCC .6406, shall be subject to an SEC permit. The excavation of any archaeological site shall require an SEC pen-nit, under MCC .6412, regardless of the zoning designation of the site.

(B) Any excavation or any removal of materials of archaeological, historical, prehistorical or anthropological nature shall be conducted under the conditions of an SEC permit.

(C) Any building, structure, or physical improvement within 100 feet of the normal high water level of a Class I stream, as defined by the State of Oregon Forest Practice Rules, shall require an SEC permit under MCC .6412, regardless of the zoning designation of the site. *[Added 1990, Ord. 643 f 2]*

11.15.6406 Exceptions

An SEC permit shall not be required for the following:

(A) Fan-n use, as defined in ORS 215203(2)(a), including buildings and structures accessory thereto on "converted wetlands'* as defined by ORS 541.695(9) or on upland areas;

[Amended 1990, Ord. 643 f 2]

(B) Except as provided in MCC .6420(C), the propagation of timber or the cutting of timber for public safety or personal use or the cutting of timber in accordance with the State Forest Practices Act;

[Amended 1990, Ord. 643 § 2]

(C) Customary dredging and channel maintenance and the removal or filling, or both, for the maintenance or reconstruction of structures such as dikes, levees, groins, riprap, drainage ditch, irrigation ditches and tile drain systems as allowed by ORS 196.905(6); *[Amended 1990, Ord. 643* f 21

(D) The placing, by a public agency, of signs, markers, aids, etc., to serve the public;

(E) Activities to protect, conserve, enhance, and maintain public recreational, scenic, historical, and natural uses on public lands;

(F) Activities regulated pursuant to the provisions of ORS 390.805 to 390.925 on lands designated as scenic waterways under the Oregon Scenic Waterways System;

(G) The expansion of capacity, or the replacement, of existing communication or energy distribution and transmission systems, except substations;

(H) The maintenance and repair of existing flood control facilities;

(I) Uses legally existing on the effective date of this Chapter; provided, however, that any change or alteration of such use shall require an SEC permit as provided herein; and

(J) Those Class 1 streams located:

(1) Within mineral and aggregate resource areas designated "2A", "3A" or "3C" by a Statewide Planning Goal 5 Economic, Social, Environmental and Energy analysis, or

(2) Within the Willamette River Greenway.

[Added 1990, Ord. 643 § 2]

11.156408 Application for SEC Permit

An application for an SEC permit for a use or for the change or alteration of an existing use on land designated SEC, shall address the applicable criteria for approval, under MCC 6420 and shall be filed as follows:

(A) For a Permitted Use or a Use Under Prescribed Conditions, in the manner provided in MCC .8210(B); and

(B) For a Conditional Use as specified either in the underlying district or in MCC .7105 through .7640, or for a Community Service Use as specified in MCC .7005 through .7030, or for a change of zone classification or for any other action as specified in MCC .8205, the SEC permit application shall be combined with the required application for the proposed action and filed in the manner provided in MCC .8210 and .8215.

11.15.6410 SEC Permit – Required Findings

A decision on an application for an SEC permit shall be based upon findings of consistency with the purposes of the SEC district and with the criteria for approval specified in MCC 6420.

11.156412 Decision by Planning Director

(A) A decision on an SEC permit application for a Permitted Use or a Use Under Prescribed Conditions shall be made by the Planning Director.

(B) The Director may approve the proposal or approve it with such modifications and conditions as may be consistent with the Comprehensive Plan and necessary to assure compatibility with MCC 6420.

(C) Within ten business days following receipt of a completed application for an SEC permit, the Planning Director shall file the decision with the Director of Environmental Services and shall mail a copy of the decision to the applicant and to other persons who request the same.

(D) A decision by the Planning Director on an SEC permit application shall include written conditions, if any, and findings and conclusions. The conditions, findings, and conclusions shall specifically address the relationships between the proposal and the criteria in MCC .6420.

11.15.6414 Decision by a Hearings Officer

(A) A decision on an SEC permit application for a Conditional Use as specified either in the underlying district or in MCC .7105 through .7640, or for a Community Service use as specified in MCC .7005 through .7030, shall be made by the Hearings Officer in conjunction with the decision on the use proposal associated therewith.

(B) Action by the Hearings Officer on an SEC permit application shah be taken pursuant to MCC .8205 through .8250.

(C) The findings and conclusions made by the Hearings Officer and the conditions or modifications of approval, if any, shall specifically address the relationships between the proposal and the criteria in MCC 6420.

11.15.6416 Appeals

(A) A decision by the Planning Director on an application for an SEC permit may be appealed to the Hearings Officer in the manner provided in MCC .8290 and .8295.

(B) A decision by the Hearings Officer on an application for an SEC permit may be appealed to the Board of County Commissioners in the manner provided in MCC .8255.

11.156418 Scope of Conditions

(A) Conditions of approval of an SEC permit, if any, shall be designed to bring the application into conformance with the applicable policies of the Comprehensive Plan. Said conditions may relate to the locations, design, and maintenance of existing and proposed improvements, including but not limit-

ed to buildings, structures and use areas, parking, pedestrian and vehicular circulation and access, natural vegetation and landscaped areas, fencing, screening and buffering, excavations, cuts and fills, signs, graphics, and lighting.

(B) Approval of an SEC permit shall be deemed to authorize associated public utilities, including energy and communication facilities.

11.15.6420 Criteria for Approval of SEC Permit

(A) The maximum possible landscaped area, scenic and aesthetic enhancement, open space or vegetation shall be provided between any use and a river, stream, lake, or floodwater storage area.

(B) Agricultural land and forest land shall be preserved and maintained for farm and forest use.

(C) The harvesting of timber on lands designated SEC shall be conducted in a manner which will insure that natural, scenic, and watershed qualities will be maintained to the greatest extent practicable or will be restored within a brief period of time.

(D) A building, structure, or use shall be located on a lot in a manner which will balance functional considerations and costs with the need to preserve and protect areas of environmental significance.

(E) Recreational needs shall be satisfied by public and private means in a manner consistent with the carrying capacity of the land and with minimum conflict with areas of environmental significance.

(F) The protection of the public safety and of public and private property, especially from vandalism and trespass, shall be provided to the maximum extent practicable.

(G) Significant fish and wildlife habitats shall be protected.

(H) The natural vegetation along rivers, lakes, wetlands and streams shall be protected and enhanced to the maximum extent practicable to assure scenic quality and protection from erosion, and continuous riparian corridors.

[Amended 1990, Ord. 643 § 21

(I) Archaeological areas shall be preserved for their historic, scientific, and cultural value and protected from vandalism or unauthorized entry. *[Renumbered 1990, Ord. 643 § 2]*

(J) Extraction of aggregates and minerals, the depositing of dredge spoils, and similar activities permitted pursuant to the provisions of MCC .7105 through .7640, shall be conducted in a manner designed to minimize adverse effects on water quality, fish and wildlife, historical or archaeological features, vegetation, erosion, stream flow, visual quality, noise, and safety, and to guarantee necessary reclamation. *[Renumbered 1990, Ord. 643 f 2]*

(K) Areas of annual flooding, floodplains, water areas, and wetlands shall be retained in their natural state to the maximum possible extent to preserve water quality and protect water retention, overflow, and natural functions.

[Renumbered 1990, Ord. 643 f 2]

(L) Significant wetland areas shall be protected as provided in MCC .6422.

[Added 1990, Ord. 643 f 2]

(M) Areas of erosion or potential erosion shall be protected from loss by appropriate means which are compatible with the environmental character.

(N) The quality of the air, water, and land resources and ambient noise levels in areas classified SEC shall be preserved in the development and use of such areas.

(O) The design, bulk, construction materials, color and lighting of buildings, structures and signs shall be compatible with the character and visual quality of areas of significant environmental concern.

(P) An area generally recognized as fragile or endangered plant habitat or which is valued for specific vegetative features, or which has an indentified need for protection of the natural vegetation, shall be retained in a natural state to the maximum extent possible.

(Q) The applicable policies of the Comprehensive Plan shall be satisfied.

11.15.6422 *Significant* Wetlands

***Significant** wetlands* consist of those areas desig-

nated as *Significant* on aerial photographs of a scale of 1"=200' made a part of the supporting documentation of the Comprehensive Framework Plan. Any proposed activity or use requiring an SEC permit which would impact those wetlands shall be subject to the following:

(A) In addition to other SEC Permit submittal requirements, the application shall also include:

(1) A site plan drawn to scale showing the wetland boundary as determined by a documented field survey, the location of all existing and proposed structures, roads, watercourses, drainageways, stormwater facilities, utility installations, and topography of the site at a contour interval of no greater than five feet;

(2) A description and map of the wetland area that will be affected by the proposed activity. This documentation must also include a map of the entire wetland, an assessment of the wetland's functional characteristics and water sources, and a description of the vegetation types and fish and wildlife habitat;

(3) A description and map of soil types in the proposed development area and the locations and specifications for all proposed draining, filling, grading, dredging, and vegetation removal, including the amounts and methods;

(4) A study of any flood hazard, erosion hazard, or other natural hazards in the proposed development area and any proposed protective measures to reduce such hazards;

(5) Detailed Mitigation Plans as described in subsection (D), if required;

(6) Description of how the proposal meets the approval criteria listed in subsection (B) below.

(B) In addition to the criteria listed in MCC .6372, the applicant shall demonstrate that the proposal:

(1) Is water-dependent or requires access to the wetland as a central element of its basic design function, or is not water dependent but has no practicable alternative as described in subsection (C) below;

(2) Will have as few adverse impacts as is practical to the wetland's functional characteristics and its existing contour, vegetation, fish and wildlife resources, shoreline anchoring, flood storage, general hydrological conditions, and visual amenities. This impact determination shall also consider specific site information contained in the adopted wetlands inventory and the economic, social, environmental, and energy (ESEE) analysis made part of the supporting documentation of the comprehensive plan;

(3) Will not cause significant degradation of groundwater or surface-water quality;

(4) Will provide a buffer area of not less than 50 feet between the wetland boundary and upland activities for those portions of regulated activities that need not be conducted in me wetland;

(5) Will provide offsetting replacement wetlands for any loss of existing wetland areas. This Mitigation Plan shall meet the standards of subsection (D).

(C) A finding of no practicable alternative is to be made only after demonstration by the applicant that:

(1) The basic purpose of the project cannot reasonably be accomplished using one or more other practicable alternative sites in Mulmomah County that would avoid or result in less adverse impact on a wetland. An *alternative site* is to be considered *practicable* if it is available for purchase and the proposed activity can be conducted on that site after taking into consideration costs, existing technology, infrastructure, and logistics in achieving the overall project purposes;

(2) The basic purpose of the project cannot be accomplished by a reduction in the size, scope, configuration, or density of the project as proposed, or by changing

the design of the project in a way that would avoid or result in fewer adverse effects on the wetland; and

(3) In cases where the applicant has rejected alternatives to the project as proposed due to constraints, a reasonable attempt has been made to remove or accommodate such constraints.

(D) A Mitigation Plan and monitoring program may be approved upon submission of the following:

(1) A site plan and written documentation which contains the applicable information for the replacement wetland as required by MCC .6372 and .6376 (A);

(2) A description of the applicant's coordination efforts to date with the requirements of other local, State, and Federal agencies;

(3) A Mitigation Plan which demonstrates retention of the resource values addressed in MCC .6376 (B)(2);

(4) Documentation that replacement wetlands were considered and rejected according to the following order of locational preferences:

(a) On the site of the impacted wetland, with the same kind of resource;

(b) Off-site, with the same kind of resource;

(c) On-site, with a different kind of resource;

(d) Off-site, with a different kind of resource.

[Added 1990, Ord. 643 § 2]

GOAL 5 OPEN SPACES, SCENIC AND HISTORIC AREAS AND NATURAL RESOURCE

GOAL: To conserve open space and protect natural and scenic resources.

Provide programs that: (1) insure open space, (2) protect scenic and historic areas and natural resources for future generations, and (3) promote healthy and visually attractive environments in harmony with the natural landscape character. The location, quality and quantity of the following resources will be inventoried:

a. Land needed or desirable for open space;
b. Mineral and aggregate resources:
c. Energy sources;
d. Fish and wildlife areas and habitats:
e. Ecologically and scientifically significant natural areas, including desert areas;
f. Outstanding scenic views and sites:
g. Water areas, wetlands, watersheds and groundwater resources;
h. Wilderness areas:
i. Historic areas, sites, structures and objects;
j. Cultural areas;
k. Potential and approved Oregon recreation trails:
1. Potential and approved federal wild and scenic waterways and state scenic waterways.

Where no conflicting uses for such resources have been identified, such resources shall be managed so as to preserve their original character. Where conflicting uses have been identified the economic, social, environmental and energy consequences of the conflicting uses shall be determined and programs developed to achieve the goal.

Cultural Area: refers to an area characterized by evidence of an ethnic, religious, or social group with distinctive traits, beliefs, and social forms.

Historic Areas: are lands with sites, structures and objects that have local, regional, statewide or national historical significance.

Natural Area: includes land and water that has substantially retained its natural character and land and water that, although altered in character, is important as habitats for plant, animal or marine life, for the study of its natural historical, scientific or paleontological features, or for the appreciation of its natural features.

Open Space: consists of lands used for agricultural or forest uses, and any land areas that would, if preserved and continued in its present use:

APPENDIX C: WATER RIGHTS AND WATER RESOURCE PROJECT ANALYSIS

WATER RIGHTS AND PERMITS

Instream and Out-of-Stream Water Rights: All waters within Oregon are publicly owned and controlled by the state, in accordance with state laws. With few exceptions, a permit from Oregon Water Resources Department (OWRD) must be obtained to claim rights to surface or groundwater. This includes both the instream uses and diversions of surface waters. State laws recognize prior appropriation as the basis for water right allocation. During periods of water shortage, the permittee with the oldest water right has priority over junior claims. In addition, a water right can be attached to the land where the permit was established, and transferred to subsequent owners. An established water right is forfeited after five consecutive years of non-use (ORS 540.610).

Instream waters of the Sandy Basin are protected through State Scenic Waterway legislation, the Federal Wild and Scenic Rivers Act, and state legislative withdrawals. Oregon Statute (ORS 390.835) states "It is declared that the highest and best uses of the waters within scenic waterways are recreation, and fish and wildlife uses. The free-flowing character of these waters shall be maintained in quantities necessary for recreation, and fish and wildlife uses." **The current policy of the BLM (BLM Manual Section 7250.06) is to cooperate with state governments under the umbrella of state law to protect all water uses identified for public land management purposes, including those necessary for flow-dependent values on designated Wild and Scenic Rivers.** The Wild and Scenic Rivers Act specifies that waters should be reserved or protected only in minimum quantities necessary to accomplish the purposes of the Act. However, Wild and Scenic River designation does not affect existing water rights, individual household domestic use or perfected rights to instream flows on the Sandy River prior to the date of designation (October 28, 1988). In addition, State Scenic Waterway protection of stream flows is subject to existing prior water rights.

The Oregon Supreme Court held in Diack v. City of Portland and Oregon State Water Resources Commission that scenic waterway statutes protect instream flows from water diversions that may degrade scenic waterway values. This interpretation means new permits for the use of water will not be granted within or above a scenic waterway if the proposed use detrimentally affects flows necessary to maintain these values. As a result of the "Diack decision", the Oregon State Water Resources Commission approved the *'Clackamas River Scenic Waterway and Sandy Scenic Waterway Flow Needs Assessment* in January 1992 establishing minimum stream flows needed to protect fisheries and recreation resources on the Sandy River below the Bull Run River confluence. This flow assessment was completed and adopted on a month-by-month basis. Flow levels of 1,700 cfs in December; 1,900 cfs in January and February; 2,000 cfs in March through May; 1,700/1,500 cfs in June; 800/700 in July; 550 in August through September; 700 in October and 1700 in November, are considered necessary for protection of salmon and steelhead habitat and to protect other aquatic life, wildlife and recreation uses in the Sandy River (WRD 1992). These flows are currently being used for operational and management guidelines by the Water Resources Commission. The data are used to help the commission make decisions about future water rights requests not to establish minimum perennial streamflows or instream water rights. Under state law, only the Oregon Department of Fish and Wildlife (ODFW), Oregon Parks and Recreation Department (OPRD) or the Oregon Department of Environmental Quality (DEQ) may apply for instream water rights. ODFW is one of two state agencies to have filed for instream water rights for the lower Sandy River as of 199 1. OPRD has applied for instream,water rights for boating only.

Naturally occurring low flows below 1,500 cfs are often a problem in the Sandy River July through October, and the commission has acknowledged that these flow requirements may not be adequate to fully meet all recreational and angling needs. The OWRD conducted an instream flow assessment for recreation on the Sandy River. Instream flow needs (Diack flows) were determined and approved in January 1992. The recom-

mendations have been shared with the three state agencies so they may apply for instream water rights. These "Diack flows" are not rules and do not make it possible for the other federal agencies to apply for instream water rights. Only the three state agencies (ODFW, ODEQ & OPRD) are entitled to apply for rights at any time. Diack flows do not compel these agencies to apply for instream water rights, nor must the agency apply for the amount of flow approved by the Water Resources Commission (WRC). Again, the Diack flows are data the WRC has committed to using in water rights decisions for the basin.

Statutes pertaining to water in the Sandy River Basin prior to the Sandy River's designation as a Wild and Scenic River allocate waters in the Bull Run and Little Sandy rivers for exclusive municipal use by the City of Portland. In addition, Portland General Electric claims pre-wild and scenic designation water rights to the Little Sandy, and Sandy rivers for power generation. The City of Portland has a legislative right to all waters of the Bull Run Watershed. The Bull Run Watershed is the primary water supply for the Portland metropolitan area and serves a population of approximately 730,000 customers in Multnomah, Clackamas and Washington counties. The Bull Run water system supplies high-quality water for residential, commercial, and industrial uses and is important in maintaining the public health and economic welfare of the Portland metropolitan area. Section 105 (c) of the Omnibus Oregon Wild and Scenic Rivers Act of 1988 states that nothing in the Act (or subsequent river plan) shall preclude or impair the City of Portland's use of water from the Bull Run and Little Sandy Rivers for municipal water supply. (Claims to Bull Run and Little Sandy rivers have not been adjudicated.)

PROCEDURE TO EVALUATE WATER RESOURCES PROJECTS

INTRODUCTION

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

The procedure also applies to congressionally identified study rivers (Section "5a" rivers), which are afforded interim protection from projects which would affect "free-flow" characteristics in Section 7(b) of the Act. Although not protected from such projects in the Act, rivers identified for study through the land management planning process (Section "5d rivers") are also afforded protection via agency policy (Forest Service Planning Handbook 1909.12, Chapter 8.12 and BLM Manual 8351 Section .52).

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

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

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

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

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

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

ISSUE

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

Lack of a standardized procedure to analyze effects has contributed to the difficulty of making an adequate analysis of water resource projects as required by Section 7, manual direction (FSM 2354 and BLM Manual 8351), and the Forest Service Handbook (FSH 1909.12, chapter 8). The balance of this paper describes a standardized analysis procedure that incorporates the following principles:

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

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

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

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

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

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

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

PROCEDURE

Background: In developing this procedure we recognize that:

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

- section 7 and promulgating rules (36 CFR 297 Forest Service, 43 CFR 8351.2 BLM) require an analysis of effects associated with a proposed water resources project. The analysis of activities deemed acceptable must clearly demonstrate consistency with management goals and objectives.

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

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

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

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

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

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

   a. Project proponent(s)
   b. Purpose (clearly describe the need for the project)

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

c. Location
d. Duration of proposed activities
e. Magnitude/extent of proposed activities
f. Relationship to past and future management

3) Describe How the Proposed Activity Will Directly Alter Within-Channel Conditions.

Address the magnitude and spatial extent of the effects the proposed activity will have on in-channel attributes. Special attention should be given to changes in features which would affect the outstandingly remarkable and other significant resource values.

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

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

a. What is the position of the proposed activity relative to the riparian area and floodplain?
b. Does the proposed activity result in changes in:
   1. Vegetation composition, age structure, quantity, vigor, etc.?
   2. Relevant soil properties such as compaction percent bare ground, etc.?
   3. Relevant floodplain properties such as width, roughness, bank stability or susceptibility to erosion, etc.?

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

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

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

a. Does the proposed activity affect:
   1. Ability of the channel to change course, re-occupy former segments, or inundate its floodplain?
   2. Streambank erosion potential, sediment routing and deposition, or debris loading?
   3. The amount or timing of flow in the channel?
   4. Existing flow patterns?
   5. Surface and subsurface flows?
   6. Flood storage (detention storage)?
   7. Aggradation/degradation of the channel?

b. Does the proposed activity affect biological processes such as:
   1. Reproduction, vigor, growth and/or secession of streamside vegetation?
   2. Nutrient cycling?
   3. Fish spawning and/or rearing success?
   4. Riparian dependent avian species needs?
   5. Amphibian/mollusk needs?

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

a. Consider and document:
   1. Changes that influence other parts of the river system.
   2. The range of circumstances under which off-site changes might occur (e.g., as may be related to flow frequency).
   3. The probability or likelihood that predicted changes will be realized.

b. Specify processes involved, such as water, sediment, movement of nutrients, etc.

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

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

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

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

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

The determination should permit those water resource projects that are consistent with the legislation designating the affected wild and scenic river and the management objectives for the river as defined in the comprehensive river management plan, or in the case of study rivers, the proposed activities would not result in a reduced classification

recommendation and is consistent with Forest Plan standards and guidelines or BLM Resource Management Plan direction. Permissible water resources projects will, to the extent practicable, maintain or enhance the free flowing characteristics of the river. Water resource projects that have a direct and adverse affect on designated river values or management objectives are not permitted.

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

a. The specific purpose of the project is to protect or enhance the values for which the river was designated, restore the natural characteristics of the river, and/or improve the water quality of the river;
b. The associated impacts on free flowing characteristics of the river are minimized to the extent practicable; and,
c. The proponent and manager of the project is a federal, state, or local governmental entity.

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

INCORPORATION OF SECTION 7 DETERMINATIONS IN THE NEPA PROCESS

The Code of Federal Regulation states:

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

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

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

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

For study rivers identified via the land management planning process (i.e. Section 5d rivers), utilize the Section 7 procedure with the decision document referencing that an

analysis was conducted to evaluate the potential effect of the proposed project on free-flow and the outstandingly remarkable values. Note, that Section 7 is not required for 5d rivers, but agency policy (FSH 1909.12 8.12, BLM Manual 8351) provides direction to protect the free-flowing condition and outstandingly remarkable values.

The responsible official changes with the status of the river and whether or not another federal agency is involved. For proposed water resources projects on a 3a or 5a river, in which there is another federal agency "assisting by loan, grant, license or otherwise...," the Regional Forester or the BLM District Manager is the responsible official (reference FSM 2354.04e, BLM Manual 8351 .04d). If there is no other federal agency "assistance" for a project on a 3a or 5a river, the appropriate line officer signs the decision document. Decision documents for water resources projects on a 5d river are signed by the appropriate line officer.

OVERSIGHT and REVIEW

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

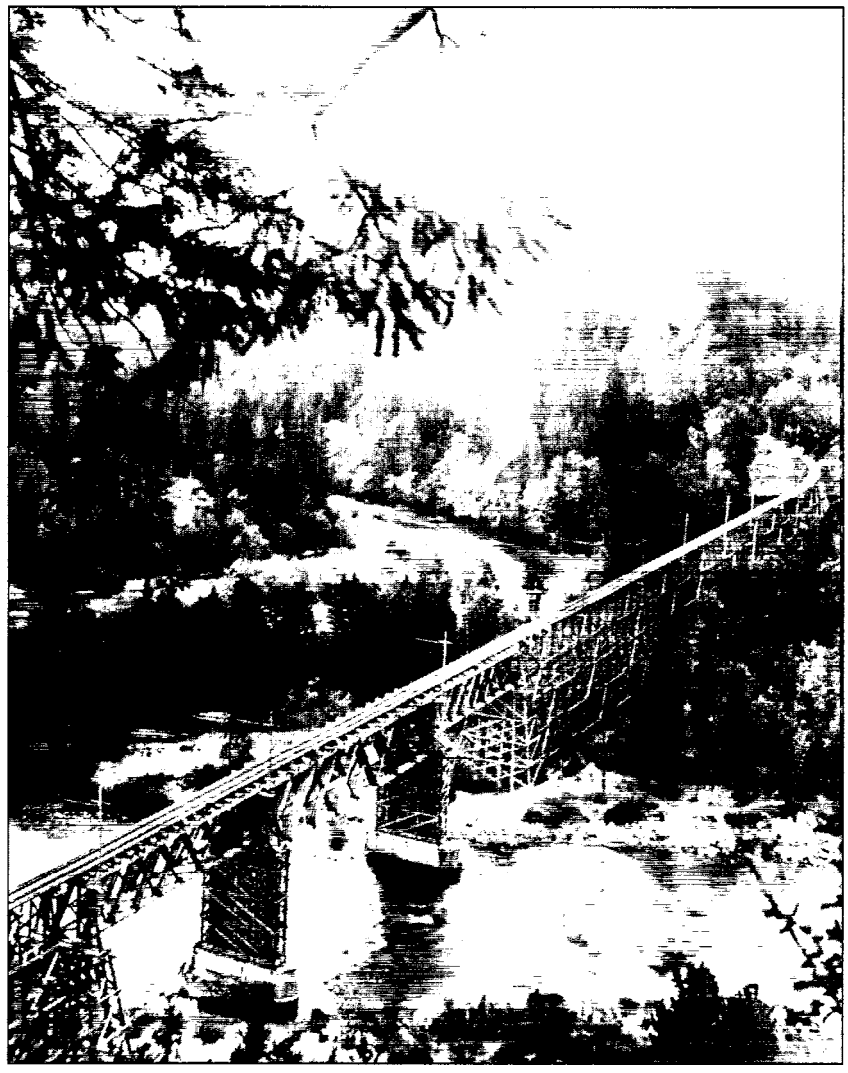
SUMMARY

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

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

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

APPENDIX D: NAVIGABILITY AND STATE OWNERSHIP OF THE BED AND BANKS



Navigability and State Ownership of the River Bed and Banks

State ownership of the beds of navigable bodies of water 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 bodies of water remained in the ownership of the United States or its grantees. The navigability of the Sandy River from its mouth (river mile 0) to its headwaters (RM 55) has not been established. Currently, both the state and federal government, and in some cases private property owners, claim ownership of the river's bed and bank. This river plan does not propose to address the navigability issue for any part of the Sandy River. Rather, this river plan is intended to provide a management philosophy and direction for the designated segment of the river.

Under state law, the Division of State Lands (DSL) is responsible for the management of the beds and banks of navigable waters (ORS 274.005-274.590). DSL is the administrative arm of the State Land Board (the Board), composed of the Governor, Secretary of State, and State Treasurer. Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Fund. These assets include the beds and banks of Oregon's navigable waterways and are to be managed for the greatest benefit of the people of this state, consistent with the conservation of this resource under sound techniques of land management. Protection of public trust values of navigation, fisheries, and public recreation are of paramount importance.

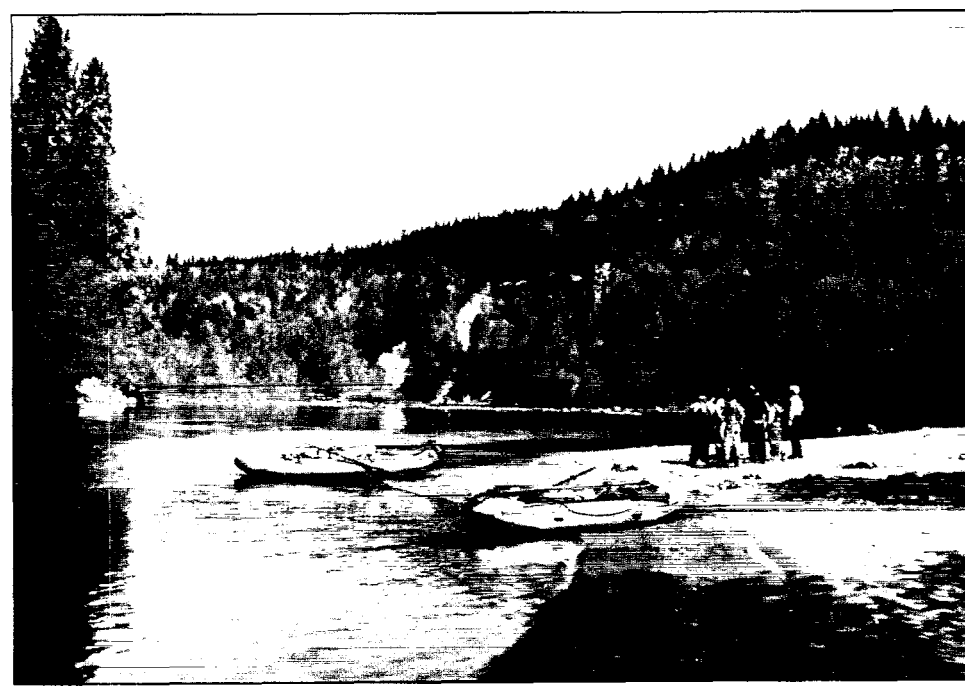
The original federal test for determining navigability was established in the Daniel Ball case over 100 years ago. This U.S. Supreme Court admiralty case clarified that rivers "are navigable in fact when they are used, or susceptible of being used, in their ordinary condition, as highways of commerce..." Interpreting this requirement, subsequent court decisions have adopted this test for title purposes and have ruled that a body of water 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 bed and banks of the Sandy River from its mouth to river mile 37.5 near Brightwood, OR. The position of the BLM is that the navigability of the river has not been established.

For purposes of managing the designated Wild and Scenic portion of this river (where navigability has not been established), any non-federal activities or land uses such as new utility or transportation corridors and boat ramps or other similar facilities that impose into or cross a waterway below ordinary high water will 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. Within Oregon State Scenic Waterways, special authorization is needed from the Board and DSL for "any alteration of the beds and banks" of the Sandy River within the designated segment.

APPENDIX E: LIST OF PREPARERS, INTERAGENCY PLANNING PARTICIPANTS AND OTHER CONTRIBUTING AGENCIES



LIST OF PREPARERS AND INTERAGENCY PLANNING PARTICIPANTS

Bureau of Land Management, Salem District

Bob Ratcliffe, River Planning Team Leader, Outdoor Recreation Planner, and Writer/Editor

Interdisciplinary Team Members

Singh Ahuja, Geologist
John Barber, Hydrologist
Debra Carey, Mapping and Graphics Specialist
Steve Dowlan, Wildlife Biology Technician and graphics
Jim England, Wildlife Biologist
Randy Gould, Forester and Visual Resource Specialist
Bob House, Fisheries Biologist
Mark Kinslow, GIS/Mapping Specialist
Duane Lewis, Editor
Frances Philipek, Archeologist
Dave Roberts, Fisheries Biologist
Larry Scofield, Botanist

Interagency Group Members and Cooperators

John Borge, Clackamas County Dept. of Transportation and Development
Susan Caldwell, The Nature Conservancy
Charlie Ciecko, Multnomah County Park Services Division
Gray Clifford, Multnomah County Planning Department
Greg Fritts, Clackamas County Dept. of Transportation and Development
John Lilly, Oregon Division of State Lands
Cathy Macdonald, The Nature Conservancy
Jay Massey, Oregon Department of Fish and Wildlife
Ray Miller, Oregon Department of Forestry
Gary Miniszewski, River Planner, Oregon State Parks and Recreation Dept.
Tom Paul, Oregon Water Resources Department
Joe Pesek, Oregon Department of Fish and Wildlife
Richard Robbins, Portland Water Bureau

Federal, State, and Local Governmental Agencies and Private Organizations

contributing to the

SANDY WILD and SCENIC RIVER and STATE SCENIC WATERWAY MANAGEMENT PLAN 1988-1993

FEDERAL AGENCIES

Bureau of Land Management: (The lead agency for the plan.)

The mission of the Bureau of Land Management (BLM) is the responsibility of the balanced management of the Public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the people of the United States of America. Management is based on the principles of multiple-use and sustained yield; a combination of uses that takes into account the long term needs of future generations for renewable and non-renewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

United States Department of Agriculture Forest Service

The United States Department of Agriculture (USDA) Forest Service administers the National Forest System lands. The Forest Service is responsible for the administration of the upper portion of the Sandy River and will take the lead for that segment of the river through the development of a separate management plan. The Forest Service will work closely with Clackamas and Multnomah Counties and other state agencies that have jurisdiction around the Sandy River.

The Mount Hood National Forest will be the primary public contact for issues relating to wild and scenic river management. Some of the issues include: safety, public information and education, special use permit compliance, resource protection, project planning and implementation, monitoring of social and physical conditions, etc.

The federal government has no authority regulating private lands in or around the wild and scenic river boundaries. Land use is the concern of local and state government.

The Wild and Scenic River Act (WSRA) prohibits the use of condemnation in the fee title purchase of lands if 50 percent or more of the land is already in public ownership. The act does provide the federal government to 1) purchase land from willing sellers, 2) enter land exchanges, or 3) acquire scenic easement agreements, if necessary.

United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act of 1973 (as amended). The Bureau of Land Management consults with USFWS to obtain a biological opinion on appropriate courses of action when a determination has been made that a threatened or endangered species, or a critical habitat may be affected by a proposed management action. A decision could mean the proposed action is modified or abandoned.

STATE AGENCIES

Department of Agriculture

The Department of Agriculture has the authority to work towards long-term planning for agricultural resources. This authority allows the department to assure adequate water supplies for all phases of agricultural resources. The department is assisted by the Soil and Water Conservation Division, the Soil and Water Conservation Commission, and 45 Soil and Water Conservation Districts (one per county) around the state.

Department of Environmental Quality

The Department of Environmental Quality (DEQ) regulates and guards against the deterioration of air and water quality in the state of Oregon. DEQ implements the Statewide Water Quality Management Plan. The plan establishes standards of water quality for each of the Oregon Water Resources Department's 18 river basins. Beneficial uses of rivers and streams that are protected by DEQ are:

- aesthetic quality
- anadromous fish passage
- boating
- fishing and hunting
- industrial water supplies
- irrigation
- livestock watering
- private
- public
- resident fish and aquatic life
- salmonid rearing and spawning
- water contact recreation
- wildlife

The standards set for water quality are to maintain the highest possible levels of dissolved oxygen and the lowest possible levels for temperature, bacteria, dissolved chemicals, and toxic materials. The DEQ's anti-degradation policy states that high quality waters would be protected from degradation, unless the Environmental Quality Commission, based on economic or social needs, finds it necessary to make an exception. DEQ also sets standards and procedures for onsite sewage systems, issues permits for dredge and fill of wetlands, and maintains water quality monitoring stations throughout Oregon. Any person proposing an action with a potential impact to water quality or that would create wastes that would flow into public waters must first obtain a permit from DEQ.

Department of Geology and Mineral Industries

The Department of Geology and Mineral Industries (DOGAMI) has no authority over sites within the beds and banks of rivers. DOGAMI's role in developing a wild and scenic river would be in designating past mining sites and indicating current activity in the area.

Department of Land Conservation and Development

The Department of Land Conservation and Development (DLCD), along with the guidance and authority of the Oregon Land Conservation and Development Commission (LCDC) works with cities, counties, and state agencies to develop and maintain Oregon's comprehensive land use plans and regulations. As part of these responsibilities, DLCD ensures that cities, counties, and state agencies have included scenic waterways in their Goal 5 planning pertaining to natural resources. Goal 5 planning requires comprehensive plans that will 1) ensure open space, 2) protect scenic and historical areas and natural resources, and 3) promote healthy and visually attractive environments. In Goal 5 planning, cities, counties, and

state agencies must inventory the resource, identify conflicting uses which could impact the resource, and develop implementation strategies to resolve conflicting uses. They must notify State Parks and Recreation Department of proposed changes in land use within scenic waterway corridors. Counties are required to protect identified resources through mandatory plans, policies, and zoning requirements.

Division of State Lands

The Division of State Lands (DSL) is the administrative arm of the State Land Board (the Governor, Secretary of State, and State Treasurer). Under constitutional and statutory guidelines, the Board is responsible for managing the assets of the Common School Funds as well as for administering the Oregon Removal-Fill Law. The School Fund's assets include the river beds and banks of Oregon's navigable waterways, and are managed for the "greatest benefit for the people of this state consistent with the conservation of this resource under sound technique of land management."

DSL is responsible for protecting and conserving the beds and banks of scenic waterways. Any alteration to the bed or banks of a scenic river requires approval by the Land Board and a permit issued by the DSL. DSL works closely with the State Parks and Recreation Department to ensure that any changes to the bed or banks of a scenic river are consistent with the scenic waterway management plan.

Oregon Department of Fish and Wildlife

The Oregon Department of Fish and Wildlife (ODFW) manages fish and wildlife resources in the state, regulates all commercial and recreational harvests of fish and game, and coordinates with other agencies regarding habitat preservation. ODFW is authorized to request instream water rights to protect fish and wildlife resources. ODFW technicians and biologists provide technical assistance, to other agencies, for riparian habitat protection and maintenance, river bed and bank alterations, water withdrawal, and any use of the water's surface. ODFW surveys many game and non-game species. The statistics may be used to determine habitat needs.

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) manages state-owned forests and enforces the Forest Practices Act. The Forest Practices Act protects water quality, soil, fish, and wildlife from adverse impacts from forest activities. The Forest Practices Act regulates reforestation, road construction and maintenance, harvesting, chemical application, and disposal of slash. An ODF notification is required for logging and other forest operations.

On non-federal lands, the Forest Practices Act the Forest Practices Act does not address special requirements for operations within scenic waterway corridors. The act does, however, have rules to protect riparian management areas. Riparian management areas include the riparian area and the riparian area of influence. Under these rules, a proposed commercial forest operation within the riparian management area of a Class 1 stream must be described in a written plan. The plan includes any operation within 100 feet of a class 1 stream. The plan must describe how the operation will meet standards determined by the Forest Practices Act, and then be submitted to ODF for approval. In these sensitive areas, close coordination is required. ODF directive 6-l-O-002 outlines specific procedures for coordinating the Forest Practice program and the Oregon Scenic Waterways program for operations in a scenic waterway corridor. The goal of coordination is

keeping all the parties informed, of the responsibilities, requirements, and planned activities, so that the process is efficient and effective.

Oregon State Parks and Recreation Department

The Oregon State Parks and Recreation Department, under the authority of the Oregon State Parks Commission (Oregon Revised Statute (ORS) 390.805 to ORS 390-925) is responsible for the purchase, improvement, maintenance, and operation of Oregon's state park system. Additional responsibilities are supplying technical assistance to local governments concerning park matters, developing and maintaining the Statewide Comprehensive Outdoor Recreation Plan (SCORP), administering the Federal Land and Water Conservation Fund matching grant program in Oregon, and administrating the Oregon Scenic Waterway Program (OSWP).

OSWP is operated through a notification and review process. The general guidelines for OSWP are Oregon Administrative Rules (OAR) 736-40-005 to 736-40-095. Specific guidelines have been devised for this segment of the Sandy River as they are for all river segments.

The Scenic Waterways Act and the Oregon State Parks and Recreation Commission's rules require the evaluation of land use changes and development proposals within 1/4 mile from each side of the river. Land use changes and development proposals must be evaluated for their potential impacts on aesthetic and scenic values, considering the river. Property owners who want to build roads or houses, develop mines, harvest timber or begin with similar projects, must provide written notification to the Oregon Parks and Recreation Department before beginning the project. The Department's evaluation of the project will be coordinated with the local, state, and federal natural resource agency that has regulatory responsibilities. The State Parks and Recreation Department will determine if the project or development is compatible with the scenic waterway within the Department's river classification administrative rules. The landowner may begin the project upon written approval of the Department. The Department, and the Commission if necessary, will work with the landowner to reach a settlement of any conflicts. When an agreement cannot be reached within one year of the original notification, the Commission must either pay the property owner for the land, or the development rights, or allow the project to proceed. The administrative rules process and the Sandy River rules are attached in Appendix A.

The State Parks work closely with Federal agencies such as the United States Forest Service, and the Bureau of Land Management to ensure their actions are compatible with scenic waterway laws, rules, and resource management recommendations. In addition to working with federal agencies, the state Parks Department works closely with county planning staff and other State agencies to ensure development on private lands is compatible with the river environment.

Oregon Water Resources Department

Oregon Water Resources Department (OWRD) is responsible for the management and distribution of the state's water resources. The Water Resources Commission, a seven-member panel appointed by the Governor, develops policy through the preparation of river basin plans for each of Oregon's 18 river basins. The Commission uses river basin plans to classify stream flow for domestic, municipal, recreation, industry, irrigation, and other uses. The plans, which reflect how water is currently used, and its future use and distribution, are adopted as administrative rules.

OWRD issues water rights on all waters in the state and enforces the exclusion of dams, impoundments, and placer mining in scenic waterways, and on tributary streams within scenic waterway boundaries. The Scenic Waterways Act requires the Water Resources Commission to review proposed land condemnations, and to review scenic waterway management plans and additions proposed by State Parks and Recreation Department for designation by the governor. The Water Resources Commission must assure that any adverse effects to fish, wildlife, and recreation are not created by a water right in or above a scenic waterway.

Minimum perennial stream-flows are administrative designations established by the Water Resources Commission, A law passed in 1987 by the Legislature allows for the conversion of minimum perennial stream-flows to instream water rights. Three State departments may apply for these instream rights: Oregon State Parks and Recreation Department, Oregon Department of Fish and Wildlife, and the Department of Environmental Quality. Once granted, the instream right is held by OWRD in trust for the people of Oregon.

Oregon Department of Transportation - Highway Division

The Oregon Department of Transportation (ODOT) is responsible for planning, designing, re-constructing, posting signs, maintenance of the State highways for public safety, and the management of motor vehicle use. The state highway that passes through the Sandy Wild and Scenic corridor is Crown Point Highway.

A Memorandum of Understanding, approved by the State Highway Engineer and Regional Forester for the Pacific Northwest Region Forest Service, provides the basis for coordinating issues related to state highways through National Forest lands. ODOT lacks special requirements for highways within State scenic waterways. However, 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 Sandy Wild and Scenic River is classified as a recreation river, the 4(f) requirement applies to the Sandy Wild and Scenic River corridor.

Oregon State Historic Preservation Office

The State Historic Preservation Office (SHPO) was created by the National Historic Preservation Act of 1966. Among SHPO's many roles, is the evaluation of cultural property in consultation with federal agencies or public nominations, to determine if the property qualifies for listing on the National Register of Historic Places. Properties that qualify for listing are protected according to the type and nature of the property.

Oregon State Marine Board

The State Marine Board registers motorized watercraft, establishes equipment and operating requirements for the safety of the environment, regulates the use of boats on Oregon waters, and provides training for county sheriffs and state police officers who patrol the waters. State Marine Board regulations prohibit motorized craft on the Sandy upstream of the Stark Street Bridge.

In accordance with OAR 250-30-030, permit systems for commercial and non-commercial boating activities can be established by the Board for both state scenic waterways and federal wild and scenic rivers. Outdoor guides and outfitters must register with the Board.

LOCAL OR REGIONAL GOVERNMENTS, AGENCIES, AND PRIVATE ORGANIZATIONS

Local Governments

The local governments involved with Sandy River Scenic Waterway are Clackamas County and Multnomah County. The counties must include the scenic waterway in their comprehensive land use planning and zoning under Goal 5 (natural resources). The counties must also provide law enforcement and search and rescue.

Northwest Power Planning Council

The Northwest Power Planning Council (NPPC) was authorized by the Northwest Power Act of 1980. Four states (Idaho, Montana, Oregon, and Washington) make up the Northwest Power Planning Council. The council consists of two persons from each state whose job is to: (1) develop a reliable and economical 20-year electrical power plan (2) protect and re-build fish and wildlife populations, and (3) involve the public in the decision-making process. The council works with a variety of local, state, and federal agencies, as well as with concerned environmental groups and individuals, to strike a balance between the needs of electrical power and the survival of the fish and wildlife.

Portland General Electric

Portland General Electric (PGE) provides electrical power to approximately 40% of Oregon's residents. Part of the source of the electrical power comes from the operation of the Marmot Diversion Dam on the Upper Sandy River. The diversion dam diverts water to Roslyn Lake and the Bull Run Powerhouse which creates the electricity.

PGE coordinates water flows on the Sandy River with the Oregon Department of Fish and Wildlife (ODFW) to maintain minimum flow levels required for fisheries management systems which ODFW oversee. PGE also coordinates water flow levels with the Portland Water Bureau to maintain the needs of the city depending on the time of year.

Portland Water Bureau

The Portland Water Bureau (PWB) provides water for residential, commercial, and industrial use for 730,000 customers in the Portland Metropolitan region. The primary source of municipal water supply is the Bull Run watershed, a 106 square mile drainage area within the Sandy River basin. The Bull Run is an unfiltered source and is managed in cooperation with the U.S. Forest Service under the terms of PL 95-200 (Bull Run Act), a memorandum of understanding, and the Mount Hood Forest Plan. Water quality is monitored to ensure compliance with state and federal drinking water standards and to detect short and long-term trends. The PWB cost-shares with the U.S.Geological Survey to monitor stream flow and reservoir levels throughout the Bull Run watershed and at a gaging station located on the Sandy River below its confluence with the Bull Run River. Portland General Electric operates hydropower facilities on the two major reservoirs in the watershed. Reservoir levels and flow rates through the hydropower facilities are managed in coordination with water supply operations. The PWB owns land on the upstream boundary of the Sandy Wild and Scenic River Corridor. The agency also manages Dodge Park, located near the confluence of the Bull Run River and the Sandy River.

The Nature Conservancy

The Nature Conservancy is an international membership organization committed to the global preservation of natural diversity. The Conservancy's mission is to find, protect, and maintain the best examples of communities, ecosystems, and endangered species in the natural world. Since incorporation in 1951, the Conservancy has protected five and a half million acres throughout the United States, Canada, and Latin America. In Oregon, The Conservancy manages 49 preserves totalling over 40,000 acres. Approximately 450 acres are within the Sandy Wild and Scenic corridor.

ACRONYMS

ACEC	Area of Critical Environmental Concern
BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
DEQ	Department of Environmental Quality
DEIS	Draft Environmental Impact Statement
DEQ	Department of Environmental Quality
DLCD	Department of Land Conservation and Development
DSL	Division of State Lands
EA	Environmental Assessment
EIS	Environmental Impact Statement
ETS	Endangered, Threatened, or Sensitive species
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FERC	Federal Energy Regulatory Commission
FLPMA	Federal Land Policy and Management Act of 1976
FY	Fiscal Year
GLO	Government Land Office
GWEB	Governor's Watershed Enhancement Board
IFIM	Insueam Flow Incremental Methodology
LAC	Limits of Acceptable Change
LCDC	Land Conservation Development Commission
MFP	Management Framework Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Protection Act
NPPC	Northwest Power Planning Council
NWSRS	National Wild and Scenic Rivers System
NRHP	National Register of Historic Places
O&C	Oregon and California Act of 1937
OAR	Oregon Administrative Rules
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
ODSL	Oregon Division of State Lands
OFPA	Oregon Forest Practices Act
OHV	Off-Highway Vehicle
ORS	Outstanding Natural Area
ONHP	Oregon National Heritage Plan
OPRD	Oregon Parks and Recreation Department
ORS	Oregon Revised Statutes
ORV	Off-Road Vehicle
OSMB	Oregon State Marine Board
o s u	Oregon State University
OWRD	Oregon Water Resources Department
PGE	Portland General Electric
PWB	Portland Water Bureau
RM	River Mile
RMP	Resource Management Plan
RNA	Research Natural Area
ROD	Record of Decision
SCA	Student Conservation Association
SCORP	Statewide Comprehensive Outdoor Recreation Plan
s c s	Soil Conservation Service

SEC	Specialized Environmental Concern
SHPO	State Historical Preservation Office
TNC	The Nature Conservancy
USC	United States Code
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USGS	United States Geological Survey
WSA	Wilderness Study Area
WSRA	Wild and Scenic Rivers Act

☆ U.S. GOVERNMENT PRINTING OFFICE: 1993—790-122 / 81612 REGION NO. 10