

**MANAGEMENT  
PLAN**

**SYCAN WILD & SCENIC RIVER**

**NATIONAL  
WILD AND SCENIC  
RIVERS SYSTEM**



# MANAGEMENT DIRECTION

## BACKGROUND

Under the 1988 Omnibus Oregon Wild and Scenic Rivers Act, a fifty-nine mile segment of the Sycan River was designated as Wild and Scenic. The Sycan was one of forty rivers added to the Wild and Scenic Rivers System within the State of Oregon. The Act requires Federal agencies to prepare a comprehensive management plan for each river under their administration.

The river management plan provides for protection and enhancement of resource values in the river corridor, and allows for public use and enjoyment of those resource values. The plan further provides the necessary direction for the river corridor and adjacent areas that affect the corridor. Management activities outside the Wild and Scenic River boundaries must protect the values for which the river was designated.

Because the Sycan Wild and Scenic River flows through both the Fremont and Winema National Forest, both of these forests have worked together to develop the Sycan Wild and Scenic River Management Plan. The Fremont National Forest was designated as the lead Forest for the river planning process; however, each Forest will be responsible for on-the-ground management of its portion of the management area (the river and river corridor).

Included in the Sycan W&S River Management Plan is a description of the desired condition for the river corridor, as well as standards and guidelines and possible management actions designed to achieve the desired condition for the river corridor. Additionally, a monitoring plan is provided to ensure effective and timely implementation of the river management plan.

## OUTSTANDINGLY REMARKABLE RIVER VALUES

Outstandingly Remarkable Values (ORVs) are those values which cause a river to be designated by Congress as Wild and Scenic under the Wild and Scenic Rivers Act. These values are determined by

comparing the resources of the river under study with the resources of other rivers in the region. Those values which are found to be unique, rare, or exemplary and are significant at a regional or national level are considered "outstandingly remarkable". For the Sycan W&S River, the regional area was Klamath and Lake Counties; this area is within SCORP regions 9 and 11.

The Outstandingly Remarkable Values for which the Sycan River was designated are:

**SCENIC:** The basalt canyon and water sculptured boulders, the vastness and panoramic view of the Sycan Marsh, and the diversity of vegetation are either unique or exemplary features in the region.

**GEOLOGIC:** The steep, narrow basalt canyon and the gigantic water sculptured boulders in the Coyote Bucket area are very unique geologic features.

**FISHERIES:** The diversity of fish species within the river, including several category 2 sensitive species is especially unique. The river also provides an opportunity to restore and/or improve habitat for two threatened and endangered species.

**WILDLIFE:** The diversity of species, including sensitive and threatened species, and wetland habitat of the Sycan Marsh are unique in the region. The Sycan Marsh also has the highest concentration of nesting greater sandhill cranes in the United States.

## RELATIONSHIP OF THE PLAN TO THE FOREST L&RMP

National Forest planning is accomplished at the programmatic level and through individual project plans. Forest Land and Resource Management Plans (Forest L&RMPs), provide forest-wide and area-specific standards and guidelines, and are developed at the programmatic level of planning.

Forest L&RMPs are the result of extensive analysis of the outputs and effects of a range of alternatives which is documented in an accompanying Environmental Impact Statement (EIS). Public input is considered at several points throughout the analysis. The final Forest L&RMP is based on the alternative selected as the Preferred Alternative by the decision maker (generally the Forest Supervisor).

River management plans are also developed at the programmatic level and are tiered to the Forest L&RMP. Implementation of the standards and guidelines within a river management plan may call for amending the Forest L&RMP to which it was tiered. Implementation of the Sycan Wild and Scenic River Management Plan will require the amendment of both the Fremont and Winema L&RMPs in order to incorporate the new and revised standards and guidelines described in the River Management Plan.

Individual project plans are designed to achieve the goals and objectives of the programmatic level plans and are often tiered to a programmatic level plan. Site-specific NEPA analysis must be done for each individual project plan, however. For example, the management actions listed in the Sycan Wild and Scenic River Management Plan will be carried out through individual project plans which are tiered in a NEPA analysis to the River Management Plan.

## **MANAGEMENT ROLES OF OTHER AGENCIES**

Successful implementation of the Sycan Wild and Scenic River Management Plan will require close coordination and cooperation between numerous federal, state and local government agencies. The primary roles and responsibilities of these management partners are outlined below. Specific plans and policies that may affect the designated corridor are described under the agency responsible for that plan or policy.

### **FEDERAL AGENCIES**

#### **Forest Service**

The Fremont and Winema National Forests are responsible for managing and administering the National Forest System lands within the Sycan

W&S River corridor. Each Forest will be responsible for on-the-ground management of its portion of the river corridor. Full implementation of the management plan will, however, require close coordination among the two Forests, Klamath and Lake Counties, the Klamath Tribe and several of the Oregon State agencies which have jurisdiction in the area.

Bly Ranger District on the Fremont, and Chiloquin Ranger District on the Winema will be the primary public contact for issues relating to the Wild and Scenic River management, including: safety, public information and education, special use permit compliance, resource protection, project planning and implementation, and monitoring of social and physical conditions on and along the river.

The Federal government does not have authority to regulate what happens on private land within or outside of the Wild and Scenic River. Land use controls on private lands are solely a matter of state and local county zoning.

The Wild and Scenic Rivers Act specifically prohibits the use of condemnation in the fee title purchase of lands if 50 percent or more of the land within the boundary is already in public ownership, as is the case with the Sycan Wild and Scenic River. The W&SR's Act does provide the Federal government with authority to purchase land from willing sellers, or enter into land exchanges or scenic easement agreements if deemed necessary to maintain the outstandingly remarkable values that resulted in the river's designation.

#### **U.S. Fish and Wildlife Service**

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

#### **Army Corps of Engineers (COE)**

A permit must be obtained from COE prior to initiating any activity which involves dredging, excavating and/or depositing of fill and dredged

material into a Federal Wild and Scenic River. COE and the Oregon Division of State Lands have a joint application for this permit. Specifically, COE is responsible for authorizing dredge and fill activities of less than 50 cubic yards.

#### **STATE AGENCIES**

##### **Oregon Department of Fish & Wildlife (ODFW)**

The Oregon Department of Fish and Wildlife is responsible for developing State programs and policies for management and protection of fish and wildlife resources, including habitat, and for regulating recreational and commercial harvesting of fish and game. ODFW is authorized to request instream water rights to protect fish and wildlife resources. Agency technicians and biologists provide technical assistance for riparian habitat production and maintenance, riverbed or riverbank alteration, water withdrawal, or any use of the water's surface.

The ODFW's Fish and Wildlife Commission is charged with management of the Sycan River for wild trout. Additionally, the Commission, in 1981, adopted a Fish Management Plan for the Sycan River which emphasized: 1) improvement of riparian habitat by working closely with land management agencies and landowners; 2) improvement of summer flows from Sycan Marsh to Torrent Spring; and 3) documentation of species and size composition and catch data for the fish population. A progress report in November, 1987, indicated that several projects were underway to improve riparian habitats; that it may not be possible to improve low summer flows; and that nothing special had been done in regards to documenting species and size composition and catch data.

##### **Oregon Water Resources Department (WRD)**

The WRD carries out the programs and policies of the Water Resources Commission (WRC). The Commission develops coordinated, integrated state water resources policy aimed at developing and preserving Oregon's water resources. The WRC is most directly involved in the protection of State Scenic Waterways. However, the WRC can also protect fish, wildlife, and recreation values on designated state and federal rivers through: a) establishment and maintenance of instream water rights and minimum perennial streamflows; b)

water use policies in basin programs to guide evaluation of proposed developments; c) water use classifications; d) water right application review and permit conditioning; and e) water use regulation.

##### **Oregon Department of Environmental Quality (DEQ)**

The DEQ is responsible for protecting water quality in all "waters of the state", including those of Wild and Scenic Rivers and their tributaries. DEQ implements the Statewide Water Quality Management Plan, which establishes standards of water quality for each of WRD's eighteen river basins. Beneficial uses of rivers and streams that are to be protected by DEQ are: public, private, and industrial water supplies; irrigation; livestock watering; anadromous fish passage; salmonid rearing and spawning; resident fish and aquatic life; wildlife; hunting and fishing; boating; water contact recreation; and aesthetic quality. Dissolved oxygen is to be kept to the highest possible levels. Temperature, bacteria, dissolved chemical substances, and toxic materials are to be maintained at the lowest possible levels. DEQ also has standards and procedures for on-site sewage systems, issues permits for dredge and fill of wetlands, and maintains water quality monitoring stations throughout Oregon. DEQ has the ability to apply for in-stream water rights to protect and maintain water quality standards.

##### **Oregon Division of State Lands**

The Division of State Lands 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, among other things, responsible for administering the Oregon Removal-Fill Law which protects State 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 waterway. The permit-review process involves coordination with the natural resource and land use agencies from the local through the federal levels. As mentioned previously, the COE is responsible for authorizing a permit for fill or removal of less than 50 cubic yards of material within the State's waterway.

## **LOCAL GOVERNMENTS**

### **County Comprehensive Plans**

The Sycan Wild and Scenic River flows through Lake and Klamath Counties. Private land within the river corridor is regulated and managed according to the policies set forth in either the Lake County Comprehensive Plan (1990) or the Klamath County Comprehensive Plan (1981), depending on which county the private land is in.

The Lake County Comprehensive Plan supports maintaining minimum stream flows for all beneficial uses. Additionally, agriculture, grazing, forestry, parks and recreation uses are considered consistent with natural/scenic/open space values dependent on resource carrying capacities.

The Klamath County Comprehensive Plan contains policies to preserve open space and protect natural and scenic resources in Klamath County. The plan further calls for inventories of the location of fish and wildlife areas and habitats; outstanding scenic views and sites; water areas, wetlands, watersheds, and groundwater sources; and potential wild and scenic waterways and state scenic waterways.

## **OTHER GROUPS & ORGANIZATIONS**

### **The Nature Conservancy (TNC)**

The Nature Conservancy is a private, non-profit organization whose primary function consists of the acquisition of land which it believes should be under management by a public agency. The land usually has some specific environmental or conservation value attached to it. TNC owns almost all of the approximately 24,000 acre Sycan Marsh, a part of which is within the boundary of the Sycan W&S River corridor. Currently, TNC is leasing its portion of the Marsh to the ZX Ranch until the year 2020. TNC is working with the ZX Ranch to develop a Coordinated Resource Management Plan for grazing within the entire Sycan Marsh. It is hoped that management of the Sycan Marsh within the river corridor will be consistent with the management direction provided by the Sycan Wild and Scenic River Management Plan.

### **The Klamath Tribe**

The entire river corridor is within lands claimed by the Klamath Indians in the Treaty of 1864, and thus

is part of the historic use area of the Tribe. With the Termination Act of 1954, the Klamath Tribe retained non-exclusive hunting, fishing and trapping rights to an area that includes most of the river corridor. The Klamath Tribe has also indicated that sacred sites exist within Segment 1 of the Sycan W&S River.

The Fremont and Winema National Forests recognize the Klamath Tribe as a sovereign government with rights similar to that of a state. This government to government relationship creates a unique partnership with the Tribe. The Forest Service has an obligation to consult, cooperate, and coordinate with the Klamath Tribe in making resource management decisions, including decisions concerning management of the Sycan Wild and Scenic River.

The Forest Service does not, however, relinquish or share responsibility for administrative or resource management decision-making with the Tribe. There is no authority through treaty, statute, or inherent sovereignty granted to the Tribe for co-management of resources on the two Forests. Given this, the Fremont and Winema National Forests do not recognize a co-management right either retained by or granted to the Klamath Tribe.

## **MANAGEMENT DIRECTION FOR THE SYCAN WILD & SCENIC RIVER**

### **INTRODUCTION**

This chapter provides the overall direction for management of the Sycan Wild and Scenic River. Management direction is given in the form of goals, desired conditions (both general and specific to the resource values), standards and guidelines, and management actions necessary to achieve the desired condition.

*Note:* Management goals, desired conditions, standards and guidelines, and management actions apply to the river and river corridor (henceforth, referred to as the river corridor), unless otherwise specifically noted. Standards and guidelines described in the Fremont and Winema L&RMPs, which incorporate State Best Management Practices, will be followed for management activities outside the river corridor, allowing for high quality water to enter the Sycan River System.

## MANAGEMENT GOALS

The management goals for the Sycan Wild and Scenic River must be consistent with the Wild and Scenic Rivers Act, and Forest Service guidelines for the management of federal lands in W&SR River corridors. These goals lead to the desired condition for the river corridor. They are realistic to achieve, have at least some quantifiable parameters, and are based on information gathered during the scoping phase of the planning process.

The management goals for the Sycan River are as follows:

Protect and enhance the Wild and Scenic River values (geology, scenery, wildlife and fisheries) for which the river was designated.

Achieve and maintain a free-flowing condition.

Maintain a visual quality objective of retention.

Minimize structural improvements and ensure that they blend with the natural setting.

Provide opportunities for livestock grazing when it is consistent with other resource values.

Insure that water quality meets Federal non-degradation standards.

Achieve the minimum instream flows needed to preserve the river ecosystem, and to maintain and/or enhance the fisheries value.

Preserve and protect archeological values according to current laws and regulations, and meet Klamath Tribe desires for management of these values to the extent possible.

Maintain and/or improve existing fish and wildlife values.

Provide for appropriate user access to meet the objectives of the Sycan Wild and Scenic River Plan.

Manage the river corridor to preserve the natural character of the area. User restric-

tions, if needed, should be minimal and subtle; moderate opportunities for solitude should be present.

## DESIRED CONDITIONS & STANDARDS & GUIDELINES

Desired Conditions describe the desired state of the resources within the river corridor. Management of the resources within the river corridor is intended to maintain or create the desired condition for the corridor in general, as well as for each of the resource values within the corridor.

The desired condition for the Sycan W&SR is consistent with the Forest Service guidelines for management of Federal lands within W&SR corridors, is responsive to the management goals and objectives established for the River, and reflects the public's desire for management of the River and River corridor. The desired condition for the river corridor in general and for the specific resource values (e.g., vegetation) is described below.

The statements that describe the desired condition are written in the present tense as though the river and river values already meet the condition(s) desired.

Standards and Guidelines (S&Gs) state the bounds or constraints within which all practices will be carried out in achieving the planned goals and objectives of the Sycan Wild and Scenic River Management Plan. The intent of the S&Gs is to help the manager stay within the constraints prescribed by law, as well as provide environmental safeguards for management activities.

Specific terminology used in the S&Gs identifies the type of direction and degree of compliance required. Correct interpretation of the terms is critical to understanding the intent of the direction. A Standard is signified by the use of the word "shall" or "should". The definitions for these words are as follows:

*Shall:* the action is mandatory in all cases.

*Should:* the action is required, unless justifiable reason exists for not taking action. This direction is intended to require a practice unless it entails unacceptable hardship or expense. Exceptions to "should" restrictions are expected to occur infrequently.

A Guideline is signified by the use of the word "may". The definition of this word is as follows:

*May:* the action is considered to be optional.

While the Forest Service has responsibility for protecting and enhancing the Wild and Scenic River values within the river corridor, it does not have authority to regulate management of private lands within or adjacent to the corridor. The Sycan W&S River corridor includes about 3,392 acres of private land: several scattered small parcels of private land within Segment 1 of the river; and the sections of the Sycan Marsh within Segment 2. The Sycan Marsh is owned by The Nature Conservancy and is leased to the ZX Ranch until the year 2020. Currently, TNC is working with the ZX Ranch to develop a Coordinated Resource Management Plan for grazing within the entire Sycan Marsh.

Because of the existence of this private land within the Sycan Wild and Scenic River corridor, the Forest Service policy will be to cooperate and coordinate with private landowners in order to encourage them to meet the Standards and Guidelines outlined in the Sycan Wild and Scenic River Management Plan. The Wild and Scenic Rivers Act also gives the Forest Service the option to purchase land from willing sellers, or enter into land exchanges or scenic easement agreements if necessary to protect and enhance the outstandingly remarkable river values.

#### **Management Area-wide Desired Condition**

The Sycan River is a free-flowing river with management emphasis on protecting and enhancing the values of scenery, geology, fisheries, and wildlife in the segments where they are determined to be outstandingly remarkable. Visitors to the river have the opportunity to experience the outstanding natural scenery of the area, including attractions such as the late seral and climax stage ponderosa pine scattered throughout the river canyon, and fish and wildlife habitat. Instream flows enhance the scenic value of the river by providing the sights and sounds of a free-flowing river to visitors to the river corridor. Water quality meets Federal non-degradation standards. Management activities and/or improvements do not detract from the natural appearing landscape. A ROS setting of Semi-Primitive Motorized provides adequate access to the river, yet assure opportunities for solitude.

Visitor management is minimal and subtle.

#### **Management Area-wide Standards & Guidelines**

Representatives from the Winema and Fremont National Forests shall meet as needed to coordinate management activities. Such meetings shall occur no less than annually.

An analysis shall be conducted prior to implementation of any water resource project within the river corridor in order to determine if the project will cause direct and adverse effects on the values for which the river was designated (as per Section 7 of the Wild and Scenic Rivers Act).

#### **Vegetation Management Desired Condition**

##### ***Coniferous Species***

*Ponderosa pine and mixed-conifer forest types:* The impression a person has when visiting the river corridor is that of being in a late seral or climax stage forest that shows few effects from management activities. Forested areas have a natural density of snags. Large ponderosa pine trees have an open and park-like appearance. Saplings and pole-size trees often are evident and occur in clumps.

*Lodgepole pine:* Lodgepole pine stands within the river corridor range from dense pole-like stands to open stands with trees up to 24 inches in diameter. The lodgepole pine stands may show evidence of insect and disease activity. Stands generally appear to be even aged, with limited reproduction.

##### ***Deciduous Species***

*Aspen:* Several age classes of aspen provide scenic diversity within the river corridor. Management activities limit fir and/or other conifer species encroachment into stands of aspen. Management of browsing pressure allows regeneration to occur. (Note: currently some of the aspen is decadent, with little regeneration. In 15 to 20 years the larger size classes of aspen will have suffered some decline; however, in 40 years the current regeneration will be moving into the larger size classes.)

*Cottonwood:* Cottonwood stands show signs of vigor and appear to follow natural cycles of reproduction and mortality. In areas where cottonwoods occur there is a heavy layer of decaying natural

material on the ground. There are areas with cottonwoods that attract visitors because of the desirable recreation setting they provide.

### **Shrub Species**

Shrub species are present in forested and non-forested areas.

Dryland shrub species such as mountain mahogany, bitterbrush, a variety of sagebrush, chokecherry and serviceberry perpetuate naturally. They provide forage and habitat for a variety of wildlife species.

Shrub species associated with moist environments include a variety of willow species, red osier dogwood, and mountain alder.

### **Vegetation Management Standards & Guidelines**

The following specific S&Gs from the Fremont and Winema L&RMPs shall continue to be implemented:

No scheduled timber harvest shall occur within the river corridor. (Fremont L&RMP Standards and Guidelines for Management Area 11; Winema L&RMP Standards and Guidelines for Management Area 5.)

Salvage harvest of merchantable timber damaged severely by catastrophic fire or windthrow may be conducted only if the Outstandingly Remarkable Values (ORVs) are protected and enhanced. (Winema L&RMP Standards and Guidelines for Management Area 5.)

The following new S&Gs shall be implemented for vegetation management within the river corridor:

Some vegetative manipulation, including incidental timber harvest, may be done on an irregular basis to preserve and/or enhance stand characteristics when necessary to accomplish management objectives. Examples of acceptable reasons for incidental timber harvest include bald eagle habitat management, meeting desirable stand conditions or providing clearings for scenic vistas.

Any vegetative manipulation, including incidental timber harvest, shall protect and

enhance the ORVs, and should result in only minor amounts of timber being removed from the river corridor.

Firewood gathering for commercial or home-use shall not be allowed within the river corridor. Only that firewood gathered in incidental amounts for use by visitors for campfires shall be allowed within the river corridor.

Vegetation seedlings may be planted if necessary to meet Wild and Scenic River objectives.

Stocking level control of conifer and deciduous species shall be consistent with Wild and Scenic River objectives.

Vegetation management should be utilized to provide a variety of successional stages within the river corridor.

Vegetation management shall allow for the perpetuation of aspen and cottonwood in their seral stage.

Shrub species shall show vigorous growth, with 70% of annual leaders remaining intact after browsing.

### **Riparian Area Desired Condition**

There is a diversity of sizes and types of natural riparian vegetation along the Sycan W&S River, and a minimum of bare soil along the river bank. A healthy riparian area contributes to watershed improvement by reducing sediment in the river, and by lowering the water temperature through increased stream shading.

The riparian area is further characterized by abundant mesic species and root systems that protect and stabilize stream banks. Vegetation is well-distributed within fluvial zones such as streambanks, active channel shelves, active floodplains, and overflow channels. Encroaching riparian vegetation provides stable undercut banks, overhanging vegetative cover, shade along the channel margins, and a narrowing channel. The vegetation that shades the stream results in lower water temperature extremes during summer months. The saturated zone is elevated and the subsurface storage of

water is increased. There is reduced encroachment of meadow areas by shrub and coniferous species because of higher water tables.

The desired condition of the riparian areas has the following characteristics:

Native grasses, grasslike vegetation, sedges, and forbs are well established. They reproduce and provide overhanging cover on streambanks. Seedheads develop and cast seeds during normal years. Willow 6 feet or more in height occur in areas where willows have historically been established, or can be established.

The distinctive plants within the zone create a visual diversity that helps to identify the zone. Additionally, deciduous plants such as willows provide fine litter, such as falling leaves, which serve as a source of nutrients for the algae and the small invertebrates at the bottom of the food chain. Large debris, such as fallen trees, create habitat for fish and other species, stabilize the floodplain and provide nutrients as the debris decomposes. Shade from trees and shrubs helps to keep the stream temperatures lower, slow stream algae growth and influence the composition of the vegetation in the riparian zone.

#### **Riparian Area Standards and Guidelines**

The following sections of the Winema L&RMP's Forest-Wide Standards and Guidelines for Soil and Water shall continue to be implemented:

Riparian Ecosystems (Streams, Stream-side Areas, Floodplains and Wetlands) (pp. 4-74 to 4-75)

All S&Gs under the section entitled "Stream-side Areas and Floodplains" shall be met, with the exception of #12-13 which states: "intensity of harvest treatment and spatial distribution of cutting units shall ensure that hydrologic conditions are maintained and improved". This statement does not apply to the river corridor, as there is to be no scheduled timber harvesting within the corridor. (p. 4-75)

The following specific S&Gs from the Fremont

and Winema L&RMP shall continue to apply to the river corridor:

#### **Management Area-wide Standards and Guidelines (from the Fremont L&RMP Standards and Guidelines for Management Area 15):**

*Site-specific prescriptions shall be required for all project activities that affect aquatic/riparian systems (Forest Service Manual 2526, R6 Supplement #42).*

*In cases of unresolved conflict, soil, fish, water, and wildlife shall receive preferential consideration.*

*Watershed, wildlife, and fisheries habitat rehabilitation and improvements shall be required to meet goals for aquatic/riparian systems.*

*Nonforested riparian zones shall be managed to increase the presence of late seral or climax vegetative community types.*

*Fencing of aquatic/riparian systems may be required when other means cannot meet management area goals.*

#### **Perennial Streams and Water Bodies (from the Fremont L&RMP Standards and Guidelines for Management Area 15):**

*Vegetation management activities within the river corridor riparian area shall be directed toward providing or meeting the following conditions or characteristics:*

- *diversity in conifer and deciduous tree species;*
- *diversity in age classes;*
- *an abundance of deciduous shrubs and trees;*
- *high (composite) canopy closure - shade to stream;*

*Fire management of the riparian area calls for the following:*

- Machine constructed fire lines should not be constructed in riparian areas during fire suppression activities. Perpendicular crossings, with subsequent rehabilitation, are permitted, but discouraged if alternatives exist.

- Use of prescribed fire shall be limited to:

*Burning of activity fuels located in the upland portion of the river corridor riparian area.*

*Burning of natural fuels for the purpose of enhancing riparian dependent values.*

*Fish and wildlife management requires that, as a minimum, instream fisheries habitat improvement shall be coordinated with range, watershed, recreation, and the Oregon Department of Fish and Wildlife (ODF&W).*

*Specific riparian objectives designed to meet a variety of resource needs shall be developed by an interdisciplinary team on a livestock allotment basis.*

#### **Seeps and Springs:**

*Management shall be directed toward providing or meeting the following conditions or characteristics in the riparian portion:*

- an abundance of deciduous trees or shrubs;
- an abundance of standing dead trees;
- an abundance of conifer trees greater than 10 inches d.b.h.; and good water flow and quality.

The following new S&Gs shall be implemented for vegetation management within the river corridor:

*Vegetation management within the river corridor riparian area shall be directed toward providing or meeting the following conditions or characteristics:*

- strive to retain at least 1.5 snags of 10 to

*20 inches d.b.h. and 1 snag greater than 20 inches d.b.h. per acre and at least 2 downlogs per acre of 12 inch diameter on the small end and 25 feet in length with the bark and sapwood intact. However, in cases of conflict between snag requirements and stream shade requirements, the decision shall be biased toward stream shade requirements.*

- a high amount (as per Fisheries Management S&Gs) of large woody debris in the stream channel and upper and lower banks, for stream channel and bank stability and structural fish habitat.

*Livestock grazing in the river corridor shall be managed so that it does not exceed the following use level for the forage component:*

- Where streambanks or channels are highly erodible, grazing would occur only where it would not have destabilizing effect on the streambank.
- All other riparian areas will be managed under the Forest Range Environmental Study (FRES) Management Level C as described in the Fremont L&RMP Standards and Guidelines for Management Area 15.

*No increase over natural levels of streambank degradation (existing at the time of Wild and Scenic designation) shall be caused by, or perpetuated by, livestock.*

#### **Scenic Resources Desired Condition**

Scenery within the river corridor is natural appearing with little evidence of management activity. This desired condition is satisfied through management for a Visual Quality Objective (VQO) of foreground Retention. Additionally, middleground and background areas that are visible from the river and/or riverside roads or trails are managed for a VQO of Partial Retention.

Scenic qualities include diversity of natural landscape elements such as rockform, landform, and vegetation. Vegetation is primarily coniferous with late seral and climax stage ponderosa pine

scattered and in clumps, and lodgepole pine flats intermingled with water related riparian vegetation such as willows and other deciduous shrubs. Expanses of sagebrush, bitterbrush, and juniper in the drier areas lead diversity. Rocks and boulders continue to line the river, increasing in size and quantity in the Coyote Bucket area. Several springs continue to seep from the lower reaches of the canyon walls to flow into the river. All of these natural elements add visual diversity to the scenery within the river corridor.

Wildflowers in the spring and early summer provide a mosaic of color. Aspen and other deciduous vegetation provide opportunities for viewing fall colors.

Snags (in the density described in the Riparian Area S&Gs, and Wildlife S&Gs), add unique characteristics to the landscape by providing a contrast in color, form, and texture.

#### **Scenic Resources Standards and Guidelines**

##### **General**

The following specific S&Gs from the Fremont and Winema L&RMPs shall continue to be implemented:

Natural qualities of the river corridor shall be retained by meeting a VQO of foreground Retention as viewed from the river and/or a riverside road or trail. (Fremont L&RMP Standards and Guidelines for Management Area 11; Winema L&RMP Standards and Guidelines for Management Area 5.)

Inventories of visual quality shall be maintained or updated; existing visual condition and desired condition, as a minimum, shall be mapped. (Winema L&RMP Forest-Wide Standards and Guidelines for Scenic Resources.)

The following new S&Gs shall be implemented for management of the scenic resources:

A middleground and background VQO of Partial Retention as viewed from the river and/or a riverside road or trail shall be met.

Natural scenic diversity shall be maintained

by minimizing management actions that reduce diversity of landform, rockform and vegetation.

Best Management Practices implemented for other management projects shall be developed to meet or exceed the designated VQOs. These VQOs shall meet the standards described in USDA Handbook #462 ("National Forest Landscape Management", Volume 2, Chapter 1, Visual Management System).

When a catastrophic pest outbreak occurs, an assessment shall be done prior to taking action to suppress the outbreak. The assessment shall be done: 1) to determine which Wild and Scenic River values within the river corridor, as well as which values outside the river corridor, might be affected by the outbreak; and 2) to select the most appropriate method to suppress the outbreak considering these values.

Integrated Pest Management (IPM) strategies should be utilized to prevent unacceptable insect and disease damage in the river corridors. For operational consideration, manual, mechanical and silvicultural methods should also be emphasized.

Temporary departures from VQO shall be allowed when necessary in areas highly susceptible to insect and disease epidemics in order to protect forest health and long-term scenic values.

Beaver dams shall be allowed to remain a part of scenic and ecological conditions unless they become a threat to facilities or private property.

##### **Foreground Retention Area:**

The following new S&Gs shall be implemented for management of scenic resources within the viewshed of the Sycan W&S River managed as foreground Retention:

All new stumps shall be cut flush to the ground. Visible new ground disturbances should be reshaped and vegetation reestablished with a native ground cover.

Existing late seral and climax stage trees shall be maintained as per the Fisheries' S&Gs.

Maintenance of all native tree, shrub, grass, and riparian vegetation communities shall be emphasized.

All new developments and facilities such as roads, trails, bridges, revetments, weirs, fences, utilities, buildings, etc. shall meet the Retention VQO in design and appearance.

Standing dead trees or snags of all sizes and species shall be left for visual, wildlife, and ecological reasons in the density described under S&Gs for Riparian Area and for Wildlife. Standing dead trees or snags may be removed if considered a hazard (as described under Recreation Management S&Gs).

Prescribed burning in natural mosaic patterns shall be allowed within the river corridor as a tool for landscape management as per Riparian Area and Fire Management S&Gs. Visual evidence of prescribed burns or wildfire burns should be accepted as part of the natural character of the river corridor.

#### ***Middleground & Background Partial Retention Area***

The following new S&Gs shall be implemented for management of scenic resources within the viewshed of the Sycan W&S River managed as middleground or background Partial Retention:

Timber harvest shall be allowed in middleground and background visual zones that are not within the river corridor itself. Only uneven-aged management practices shall be allowed in these zones, however.

All developments and facilities shall meet the VQO of Partial Retention in their design and appearance as viewed from the river and adjacent roads and trails within the river corridor.

The middleground viewing zone shall be managed to provide for the long-term maintenance of trees approximately 30 inches in diameter. A supply of smaller diameter trees shall also be maintained in order to perpetuate

the existence of the large diameter trees in these zones.

#### **Recreation Management Desired Condition**

Recreation activities within the river corridor are primarily related to viewing the scenery, camping and/or picnicking, hunting, fishing, bird watching, nature study, and non-motorized boating. The river provides a pleasant viewing experience for visitors to the area. Riparian and/or water dependent vegetation provide scenic diversity and seasonal variations in vegetative color to enhance the visitor's experience. Water flows in the river year around (except in drought years when some sections may naturally lack water) and give visitors to the area the feeling of being in a river environment.

The river shoreline is largely undisturbed and has a natural appearance. Roads and/or trails remain visually inconspicuous from the river. The existing power line remains the only utility corridor crossing the river.

A Recreation Opportunity Spectrum setting of Semi-Primitive Motorized (as defined in the Sycan W&S River Environmental Assessment, and in the Glossary), is met. In general, users experience a semi-primitive motorized setting, and opportunities for solitude and challenge in a natural environment are moderate to high. Because of the isolation of the area there may be periods of time when visitors to the area face a moderate degree of challenge and risk.

Trail and road access to the river remain limited. Campers and picnickers enjoy moderate opportunities for solitude. People who hunt and fish find a natural appearing environment that enhances their pursuits. Fishermen/boaters/floaters of the river find relatively few conflicts between users. The float season continues to be associated with peak flows and remains relatively short (two to four weeks).

Recreation activities remain limited in the Sycan Marsh because of ongoing ranching operations and the associated cattle grazing. Access to the Marsh for recreation users also remains very limited.

#### ***Use Levels***

Use will be generally highest during holiday periods, and lowest mid-week. The remoteness of the

## *Sycan River Management Plan*

area, mosquitoes, ticks, limited road and trail access to the river, low flows, late season snow during some years, and fire restrictions during other years all will continue to affect actual use levels in any given year.

Use levels within the corridor are within capacity for the river corridor and do not negatively impact the Wild and Scenic River values. A Limits of Acceptable Change (LAC) program is initiated if use levels increase above the river corridor's recreational use capacity.

### *Visitor Health and Safety*

Visitors to the river corridor are able to enjoy a safe recreational experience and are provided adequate information regarding safe behaviors.

Adequate sanitary facilities exist at river access points, and human waste does not enter the river.

Hazard trees are removed from areas immediately adjacent to river access points where visitors tend to concentrate.

Fences that cross the river are not a hazard to boaters and/or floaters of the river.

### *Recreation Management Standards & Guidelines*

The following new S&Gs shall be implemented for recreation management within the river corridor:

The river corridor shall be managed to provide a Semi-primitive Motorized recreation setting.

Recreation development within the river corridor shall be limited to trails and dispersed recreation sites, with improvements only for basic sanitation and protection related items.

Visitor constructed improvements shall be removed unless under special use permit.

Visitor health and safety shall be considered in all administrative and management activities that take place within the river corridor.

Existing river crossings, including bridges, shall be appropriately maintained and, if necessary, reconstructed to meet the intended

use. Reconstruction shall not impede the free-flowing nature of the river, however (refer to General Standards and Guidelines).

River fords should be signed to discourage crossings by motor vehicles.

Any toilet facilities placed within the river corridor shall be at least 200 feet from the high water mark of the river and/or any tributaries entering the river.

Wire fences shall not be allowed to cross the river where they could be a hazard to boaters. Fences that cross the river should be designed to be removed with ease.

Hazard trees should be removed from any area immediately adjacent to river access points. An access point is defined as the intersection of a trail or road with the river. A hazard tree is defined as a standing tree that has no visible green needles or leaves, or a tree that shows obvious effects of damage so that a prudent person would deem it to be unsafe. The area immediately adjacent to a river access point is defined as that area within 200 feet of the area regularly used by the majority of the visitors using the access point.

### *Water Quality & Flow Desired Condition*

#### *Flow*

The river has a continuous year around free-flow throughout all segments. Water flows enhance the scenic value of the river by providing a "river experience" for visitors to the corridor.

In the short term, annual spring peak flows continue to "flush" the system. This moves sediment through the system, cleans the pools, and maintains a healthy channel morphology. Changes caused by peak flows are significantly reduced because of the improved conditions of riparian areas. The desired condition for the long-term includes an aquatic system that has a good distribution of woody debris and/or log complexes that create a variety of aquatic habitats (see desired condition for fisheries).

#### *Water Quality*

Water temperatures typify near natural conditions as riparian vegetation has recovered. Fish mortal-

ity from high water temperature is minimal.

Turbidity and/or sediment loads is also near natural levels. Low standard roads within the river corridor that have contributed to increased sediment loads in the past are stabilized and/or revegetated, and all new projects within the watershed meet or exceed Forest Service Best Management Practices.

Human waste and/or "gray-water" does not enter the river or contribute to reduced water quality.

#### **Water Quality and Flow Standards & Guidelines**

The Fremont L&RMP Forest-wide Standards and Guidelines for Watershed Management and the Winema L&RMP Forest-wide Standards and Guidelines for Soil and Water shall continue to be implemented.

The following specific S&Gs from the Fremont and Winema L&RMPs shall continue to be implemented:

Best Management Practices (BMPs) shall be implemented for every project that occurs within the Sycan Watershed. (Winema L&RMP Forest-Wide Standards and Guidelines for Water Quality.)

BMPs for all activities, including grazing, shall, as a minimum, reflect those items discussed in the Pacific Northwest Region publication entitled, "General Water Quality Best Management Practices" (November 1988). (Winema L&RMP Forest-Wide Standards and Guidelines for Water Quality.)

The following new S&Gs shall be implemented:

BMPs shall insure that Federal non-degradation standards are met within the river corridor.

The impact of project activities immediately adjacent to the river corridor on Wild and Scenic River values should be considered prior to implementation of these projects, and an assessment should be done as to the effects of these projects on protection and enhancement of these values.

#### **Wildlife Desired Condition**

The river corridor above and below the Sycan Marsh is characterized by late seral and/or climax stage timber stands that provide abundant habitat for snag dependent species. Vegetative conditions detailed in the "Desired Conditions for Vegetation within the River Corridor" provide adequate cover for big game wildlife species. Abundant opportunities exist for viewing game and non-game species.

The juxtaposition of rock outcrops, cliffs and crevices, rimrock, and talus slopes to the riparian areas and water provide habitat for small mammals, including such species as bobcats, marmots, and bats.

The greater sandhill cranes that nest within the Marsh find adequate habitat to meet their needs. High quality waterfowl habitat includes nesting and breeding areas. This habitat also provides foraging areas for bald eagles.

Bird watching opportunities remain abundant throughout the length of the river corridor.

#### **Wildlife Standards & Guidelines**

There shall be continued implementation of the S&Gs found in the following sections of the Fremont L&RMP's Forest-Wide Standards and Guidelines for Fish and Wildlife Management and of the Winema L&RMP's Forest-Wide Standards and Guidelines for Fish, Wildlife and Sensitive Plants:

##### **Fremont L&RMP:**

Aspen Stands (p. FP 103)  
Raptors (p. FP 106-108)

##### **Winema L&RMP:**

Raptors and Colonial Nesting Birds (p. 4-48)  
Cliffs, Caves, and Talus Habitat (p. 4-52)  
Hardwood Habitat (p. 4-52)  
Meadows (p. 4-52)  
Miscellaneous Wildlife Sites (p. 4-52 and 4-53)

Additionally, the following specific S&Gs from the Fremont and Winema L&RMPs shall continue to be implemented:

Dead and defective trees shall be maintained to carry at least 100% of the potential population of cavity-dependent species except where

safety concerns (hazard trees in developed and dispersed campsites) dictate a lower level of habitat. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

Snags and leave trees should be retained in the same species composition of the stand impacted by management activities. Where dead trees are not available for present numbers of snags, green trees shall be retained and made into snags to meet the desired level for that area. These green trees should be of low value, cull, limby or deformed. If such trees are not available, then higher value trees should be made into snags to meet the desired level. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

The number of dead trees needed for habitat, as well as green replacement trees for wildlife habitat through the rotation, shall be retained as shown in the supplements to the Tables 24-26 referenced on pages FP 104-105 of the Fremont L&RMP. The number of dead and live trees are those present at the completion of the project and retained through a full rotation. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

Special big game habitats such as mineral licks or fawning cover should be protected. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

Special elk habitats such as mineral licks, calving areas and elk wallows should be protected. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

Beaver dams should be protected and encouraged where their construction would benefit riparian area objectives. (Fremont L&RMP Forest-Wide Standards for Fish and Wildlife Management.)

At the Forest level, fish and wildlife habitat shall be managed to maintain viable populations of all existing native and desired non-native plant and animal species. Distribution of habitat shall provide for species viability and maintenance of populations throughout their existing range of the Forest. (Winema L&RMP Forest-Wide Standards and Guide-

lines for Fish, Wildlife, and Sensitive Plants.)

The following new Standards shall be implemented for wildlife management within the river corridor.:

The primary emphasis for mule deer habitat management within the river corridor shall be on fawning and fawn rearing.

Cliffs, caves and/or talus habitats in forested stands should be protected by management of the shade provided by nearby trees. At least 80% of the potential natural shade should be retained through use of buffer strips, leave trees, or other methods.

#### **Fisheries Desired Condition**

Riparian areas provide fish with suitable water quality, adequate food, and the necessary habitats for all stages of their life cycle including spawning, rearing and migration. Populations of wild trout are healthy and stable, and well distributed throughout the upper segment (above the Marsh). Within the Marsh, the barriers to fish migration have been removed, and flow occurs throughout the river corridor yearlong. Flows below the Marsh occur yearlong and the river is populated by a diversity of fish species. Emphasis is given to the maintenance and/or enhancement of habitat for threatened, endangered, proposed, and sensitive species. This includes habitat for the redband trout (*Oncorhynchus mykiss*) above the Marsh, and habitat for the Lost River (*Deltistes luxatus*), short-nosed (*Chasmistes brevirostris*), and the Klamath largescale (*Catostomus snyderi*) suckers below the Marsh.

No specific desired condition for woody debris, pool/riffle ratios, or a bank-to-depth ratio has been established for the Sycan Marsh. These specific items will be addressed in the Coordinated Resource Management Plan that is being developed for the entire Sycan Marsh.

#### **Fisheries Standards & Guidelines**

Standards and Guidelines in this section are designed to meet the long-term desired condition for fisheries. (Long-term is defined as more than 20 years; short term is 5 to 20 years; and immediate is from the present to 5 years.)

*Note:* The desired conditions and Standards and Guidelines are meant to describe important ecosys-

tem conditions and factors that can lead to good fish habitat. However, it should be recognized that although the desired condition and Standards and Guidelines described for fisheries relate specifically to the channel and floodplain, watersheds are systems in which upslope/channel and upstream/downstream linkages are important in the protection and restoration of these ecosystems.

The following new S&Gs shall be implemented for fisheries management within the river corridor:

**The Lower Sycan (Segment 3 as defined in the Environmental Assessment):**

A late seral/climax stage conifer tree density of 15 trees per 100 feet of stream reach should be equally distributed within 100 feet on either side of the stream channel.

There should be a large log density within the stream channel of 25 per mile of channel. A large log is defined as one which is at least 50 feet long and 20 inches in diameter.

There should be a 40% surface area of pool habitat type.

There should be a stream channel bankfull width to depth ratio of 10:1 or less.

**The Upper Sycan (Segment 1 as defined in the Environmental Assessment):**

**Water temperatures:**

3rd order streams or lower should have temperatures of 55 degrees F or less.

4th order streams or higher should have temperatures of 58 degrees F or less.

**Stream canopy closure:**

Perennial streams (class I, II, and III) should have 80% shade cover of the stream surface area, or 100% of site potential.

**Late seral/climax stage conifer trees within 100 feet of stream channel:**

Class I, II, and III streams should have 15

trees per 100 feet of stream reach that are equally distributed.

Class IV streams should have 10 trees per 100 feet of stream reach that are equally distributed.

**Woody debris in stream channel:**

Lodgepole pine and aspen stands should have 20 pieces per 1000 feet of stream channel with the pieces having a minimum diameter of 12 inches and at least 35 feet in length.

Pine and pine associated stands should have: (1) 10 pieces per 1000 feet of stream channel with the pieces having a minimum diameter of 20 inches and at least 35 feet in length; and (2) 10 pieces per 1000 feet of stream channel with the pieces having a minimum diameter of 12 inches and at least 35 feet in length.

**Pool Habitat:**

If the stream gradient is 1 1/2% or less then 50% or more of the stream should be pool habitat.

If the stream gradient is 1 1/2% to 3% then 40% or more of the stream surface area should be pool habitat.

If the stream gradient is greater than 3% then 30% or more of the stream surface area should be pool habitat.

**Bankfull width-to-depth ratio:**

Unconstrained valley floors should have a ratio of 10 to 1, or less.

Constrained valley floors should have a ratio of 7 to 1, or less.

**Proposed, Endangered, Threatened, or Sensitive Species Desired Condition**

Recovery plans and conservation strategies have not been completed, with the exception of a bald eagle recovery plan. When plans and strategies are completed, a specific desired condition for PETS species, as well as Standards and Guidelines to

meet the desired condition, will be developed.

Until a specific desired condition can be established, a general desired condition for PETS species may be described with the following characteristics:

- Viable populations of PETS species; and
- Habitat quantity and quality of PETS species is maintained or increased.

#### **Proposed, Endangered, Threatened, or Sensitive Species Standards & Guidelines**

The following sections of the Fremont L&RMP Forest-wide Standards and Guidelines for Fish and Wildlife Management and of the Winema L&RMP Forest-wide Standards and Guidelines for Fish, Wildlife and Sensitive Plants shall continue to be implemented:

Threatened, Endangered, Sensitive Species  
(Fremont L&RMP, pp. FP 108-109)  
Endangered, Threatened or Sensitive Species  
(Winema L&RMP, p. 4-47)

#### **Transportation System Desired Condition**

Roads are inconspicuous and generally well-screened. River crossings are limited to existing crossings. There is no off-road vehicle use within the river corridor.

All existing "water chances" are rehabilitated as necessary.

The major access points into the river corridor are passenger car accessible. The river "fords" may not be suitable for passenger car crossing.

#### **Transportation System Standards & Guidelines**

The following new S&Gs shall be implemented for management of the transportation system within the river corridor:

A road management plan shall be developed in cooperation with other interested parties.

No new permanent roads shall be built within the river corridor. Existing roads shall be managed as per the road management plan.

Temporary, low standard roads may be constructed for the purpose of furthering wildlife, fisheries, vegetative health or recreation objectives. However, at this time there is no foreseeable need for such construction.

Road access to the river should continue to average about one access point per 5 miles of river.

Road management activities, such as dust abatement, shall not use water from the river.

#### **Fire Management Desired Condition**

No unnatural fuel loading exists within the river corridor.

#### **Fire Management Standards & Guidelines**

The following specific S&Gs from the Fremont and Winema L&RMPs shall continue to be implemented:

Fire suppression tactics such as confinement and containment shall be used during periods of low to moderate fire danger. (Winema L&RMP Standards and Guidelines for Management Area 5.)

Fuel treatment methods which minimize the use of heavy equipment shall be favored. (Winema L&RMP Standards and Guidelines for Management Area 5.)

Also see "Riparian Area S&Gs" section for additional fire management direction.

The following new S&Gs shall be implemented for fire management within the river corridor:

Prescribed fire, using low to moderate fire intensities, should be used to maintain preferred vegetative communities, to reduce hazardous fuel accumulations, and/or to meet other management area objectives when such activities and objectives protect and/or enhance the outstandingly remarkable river values. Burning prescriptions shall also allow for protection and/or enhancement of the outstandingly remarkable values.

During wildfires, preference shall be given to those suppression methods and strategies that are cost-effective and limit the area burned, and that have the least effect on, or can enhance, the outstandingly remarkable river values.

During high or extreme wildfire danger, aggressive attack using all appropriate methods to minimize resource damage should be carried out so long as the methods protect the outstandingly remarkable river values, or the affected area can be rehabilitated to achieve the desired condition within one recreational year following the fire.

A prescribed fire plan that covers the river corridor shall be approved before using prescribed fire in the Wild and Scenic River corridor.

Naturally caused ignitions may be allowed to burn if they meet conditions in an approved prescribed burn plan, if funds and necessary staffing are available, and if approved as required by direction in Forest Service Manual 5140.

No management activity shall be allowed to increase fuel loadings above that level which occurs naturally in the river corridor. Pre-existing unnatural fuel loadings should be scheduled for either prescribed fire or other non-site disturbing treatment methods.

## **MANAGEMENT ACTIONS**

Management actions are distinct actions designed to resolve major issues and help attain the desired condition for the Sycan Wild and Scenic River. The management intent is that these actions be implemented as soon as the necessary funding can be secured through the agency's budgeting process.

### **Vegetation Management**

Underburning of older aspen stands shall stimulate coppice regeneration.

### **Riparian Area Management**

Develop Allotment Management Plans for riparian areas.

Reintroduce woody riparian vegetation at suitable locations.

### **Reduce General Road Density:**

Annually identify roads which will not be used in the succeeding 10 years for harvest activities, obliterate or effectively close these roads, and plant obliterated roads using native species.

### **Water Quality and Flow**

Actively defend any adjudicated Federal reserved water rights.

Establish Best Management Practices for grazing within the river corridor, and include these BMPs in the permittee's Allotment Management Plan. BMPs for all other project activities should be included within the implementation and/or project plan.

Cooperate, as appropriate, with The Nature Conservancy in the Coordinated Resource Management Planning process for the Sycan Marsh.

Treat all existing and new gully erosion within the river corridor that is adding accelerated levels of sediment to the river.

### **Recreation Management**

The Pikes Crossing bridge has been the site of several accidents during the last 10 years. This bridge, and the approaches to the bridge should be evaluated to determine the safety of the facility. Reconstruction and realignment of the road approaches to the bridge may be necessary to meet safety concerns.

Any unauthorized constructed improvements discovered within the river corridor shall be removed as soon as possible.

### **Wildlife Management**

Examine timber stands for opportunities for cultural treatment to move stands more rapidly toward the desired condition.

Make green trees into snags as necessary to provide habitat at the 100% of biological potential level for cavity dependent species.

## *Sycan River Management Plan*

### **Fisheries Management**

#### **Reduce Sediment Delivery:**

Provide watershed, stream, and reach Best Management Practices (BMPs). Monitor and document implementation and effectiveness of BMPs.

#### **Fish Habitat and Riparian Area Management Restoration:**

Develop a fish habitat and riparian vegetation restoration plan that uses stream survey data to establish areas where fish habitat, stream shading and bank stability are deficient. Use the plan to map and prioritize future planting and fish habitat improvements. Develop management strategies that insure the establishment, growth, and succession of riparian vegetation.

#### **Fishery Management and Trout Stocking:**

Encourage the re-establishment of native game and nongame fish throughout their historic range.

Encourage the ODFW to prepare a fishery management plan for the Sycan River Watershed.

Prohibit Rainbow trout stocking in the Sycan River Watershed.

#### **Water Quantity:**

Water rights should be allocated for threatened, endangered and sensitive fish species and stream channel maintenance flows.

#### **Proposed, Endangered, Threatened or Sensitive Species**

Cooperate with the National Fish and Wildlife Department to prepare recovery plans for the PETS species within the river corridor. Develop conservation strategies for PETS species within the river corridor.

#### **Transportation System**

Develop a road management plan in cooperation with other interested parties.

Rehabilitate existing water channels where necessary.

To reduce the negative impact of sediment on water quality within the river corridor:

Identify and reduce road-caused sediment sources within the river corridor. Upgrade all unimproved roads in riparian areas that must be retained for management purposes. Identify specific existing problem areas and implement measures to prevent further erosion. This will be an ongoing process wherein each year at least 10% of the roads in the basin will be treated.

To relocate or upgrade existing roads in river corridor and prohibit establishment of new permanent roads in river corridor:

Establish a road relocation priority list for fish habitat and riparian restoration. Plant roads that were obliterated for relocation purposes with native plant species. Prohibit establishment of new parallel roads in stream-side areas, and minimize stream and riparian area crossings.

### **Range Management**

#### **Livestock Management in Riparian Areas:**

Review Allotment Operating Plans or Allotment Management Plans for compliance with the DCs, goals, and S&Gs of the Sycan W&S River Management Plan.

Livestock access to streams should be restricted or prohibited in order to protect trees and shrubs. Partial or full enclosure shall be provided in identified grazing/browsing problem areas. Enclosures shall be used to monitor the progress of vegetation establishment and recovery.

All livestock allotments in the river corridor shall be a high Forest priority for preparation of Allotment Management Plans.

Perform stream surveys to determine existing level of streambank degradation.