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Department of
Agriculture

Forest Service

Pacific
Northwest
Region



1994

Upper Sandy National Wild and Scenic River

Management Plan

Mt. Hood National Forest Zigzag Ranger District



MT. HOOD NATIONAL FOREST LOCATION MAP

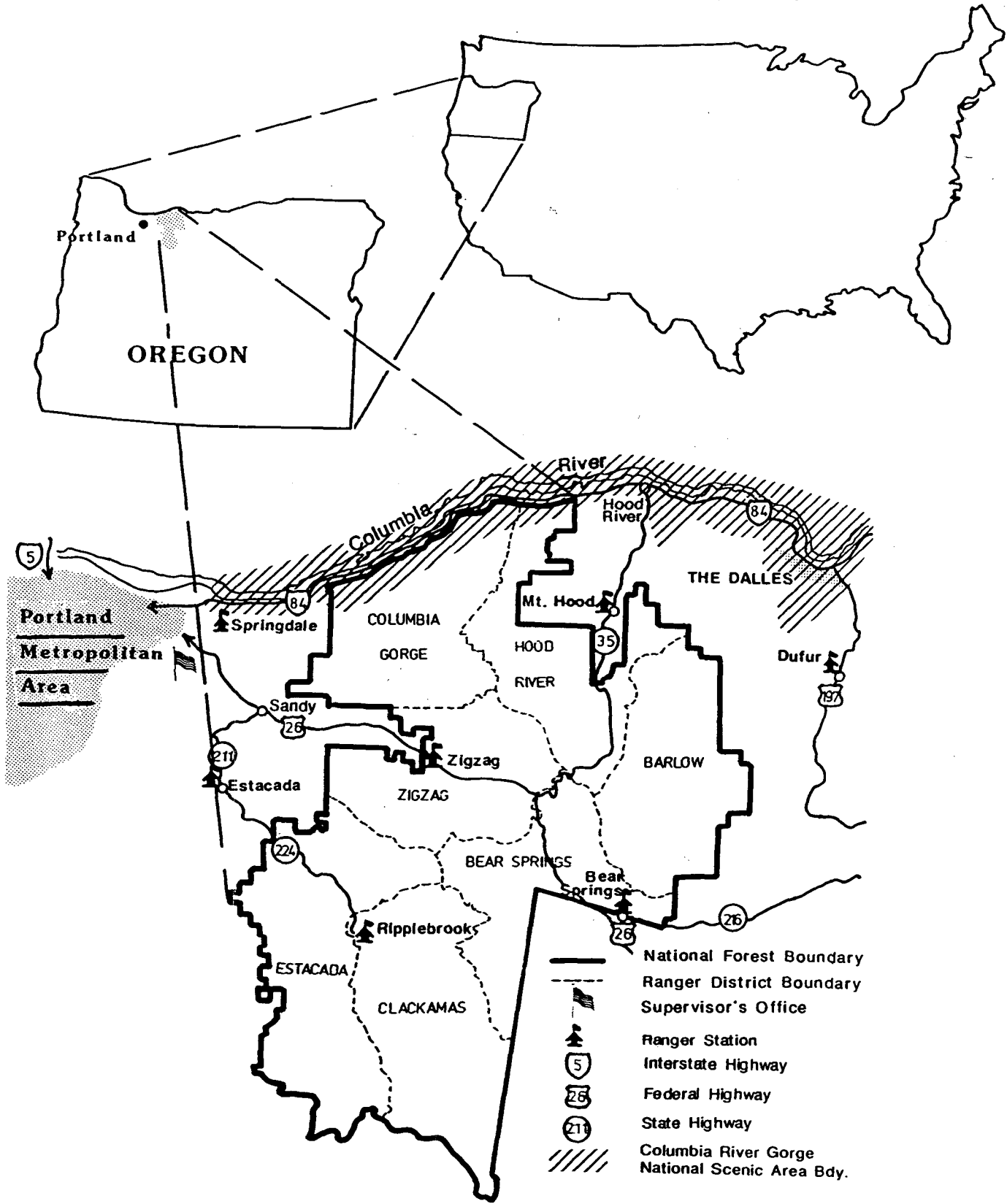


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**Decision Notice
and
Finding of No Significant Impact**

Upper Sandy National Wild and Scenic River

**Environmental Assessment
and
Management Plan**

Forest Plan Amendment No. 6

Clackamas County, Oregon

USDA - Forest Service
Mt. Hood National Forest
Zigzag Ranger District

Decision Notice

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The upper portion of the Sandy River was designated a Wild and Scenic River in the Omnibus Oregon Wild and Scenic Rivers Act of 1988 (PL 100-557). Three segments of the Sandy river were designated through this act. The upper two segments, covering a length of 12.4 miles, go from the river's headwaters on the west slope of Mt. Hood to the boundary of the Mt. Hood National Forest and is to be administered by the U.S. Forest Service (see attached map). The third designated segment is downstream between Dodge Park and Dabney Park and is administered by the Bureau of Land Management, Oregon State Parks and Recreation Department, and Multnomah and Clackamas Counties. A separate River Management Plan was completed for this lower segment in 1993 and can be obtained from the BLM office in Salem.

This decision notice designates the management direction for the upper two designated segments on the Mt. Hood National Forest. The following segments are affected:

Segment 1 - The 4.5 mile segment from its headwaters to the section line between sections 15 and 22, township 2 south, range 8 east as a **wild river**.

Segment 2 - The 7.9 mile segment from the section line between sections 15 and 22, township 2 south, range 8 east to the Mt. Hood National Forest Boundary at the west section line of section 26, township 2 south, range 7 east as a **recreational river**.

The Wild and Scenic Rivers Act directs managing agencies to develop a management plan for the protection and/or enhancement of the outstandingly remarkable values for the designated river and associated corridor. The outstandingly remarkable values for the upper Sandy River include Scenery, Recreation, Fisheries, Geology, and Botany.

The Environmental Assessment (EA) for the upper Sandy River Management Plan documents the results of analyzing alternative strategies for managing the river corridor and the effects of those management strategies. Utilizing the information in the EA, this Decision Notice establishes new corridor boundaries for the upper Sandy National Wild and Scenic River land allocation and adopts new management direction for the area within those boundaries.

The River management plan describes the conditions which need to be achieved and/or maintained in order to protect the river's values, and prescribes standards and guidelines to govern activities within the boundaries that could affect the river's values. A number of activities are proposed for implementation in the corridor to help achieve those conditions. It also establishes a program for monitoring activities within the area to help insure that the desired results are achieved.

Although the River Management Plan establishes standards and guidelines, monitoring elements, and potential projects or activities, actual accomplishment will depend upon final budget allocations.

Decision

This decision affects two areas:

- The Wild and Scenic River Corridor.
- Management Areas directly adjacent to the Wild and Scenic River corridor as identified in the Mt. Hood National Forest Land and Resource Management Plan, (Forest Plan).

Based on the analysis documented in the Environmental Assessment, it is my decision to select alternative D with modifications since I feel it provides the best mix of management options to meet the requirement of protecting and/or enhancing the outstandingly remarkable values of the river corridor and provide continued public use of the river.

It is also my decision to establish a new Management Area, A1 (Wild and Scenic River - Sandy River) based on the boundary described in Appendix B of the River Management Plan. This boundary was changed from the interim boundary to better comply with the Wild and Scenic Rivers Act, to protect outstandingly remarkable values, and to make it more manageable by following identifiable and describable landmarks. This new management area replaces the B1 area allocation boundary for the upper Sandy River in the Forest Plan. The B2 Scenic Viewshed Management Area allocation boundary adjacent to the lower portion of the river corridor will also change to coincide with the new A1 allocation. The A4 Special Interest area allocation, and A2 Wilderness area allocation will not change and will overlay the A1 allocation. Where standards and guidelines for these management areas, as well as the General Forest standards and guidelines differ, the standards and guidelines that are the most restrictive to vegetation and access management will predominate.

It is also my decision to amend specific parts of the Forest plan in order to implement alternative D.

Alternative D, the Management Area adjustments, the Forest Plan amendments and the reasons for the decision are described in other sections of this Decision Notice.

The modifications to alternative D mentioned above are:

- Using the wider corridor boundary that is used in alternatives B and C. This was done to eliminate a narrow strip of land that would have been a B2, Scenic Viewshed land allocation between the wilderness boundary and river corridor boundary. By eliminating this strip, it allows for more consistent management of this area.
- Pursue closing the road to the upper Ramona Falls Trailhead to provide a greater level of protection to wilderness values in the Mt. Hood Wilderness.
- Eliminate programmed (regulated) timber harvest in the recreational segment of the river corridor to better protect scenic values along the river. Timber harvest may still occur if necessary to protect, enhance, or restore river values such as improving wildlife habitat and protection of overall forest health.
- Limit the initial size of the group campground that may be constructed to a maximum of 3 sites capable of handling 20 to 25 individuals each.
- Change the Visual Quality Objective within the corridor in the recreational segment from Partial Retention to Retention. The VQO for structural facilities, both new and existing, and for fisheries enhancement/restoration structures will change from Modification to Partial Retention. The VQO for the wild segment will remain preservation within the corridor. There will be no changes to the VQO for the viewshed outside the corridor.

Description of Alternative D With Modifications

The overall objectives of this alternative are:

- To maintain the river's free-flowing characteristics.
- To manage for the protection and/or enhancement of the outstandingly remarkable scenic, recreational, fishery, geologic, and botanical values, and other resource values in a balanced way.

Recreation

On National Forest lands, some additional recreational opportunities would be allowed within the corridor. These include allowing for the construction of a new small group campground; new hiking, mountain bike, equestrian trails, and interpretive trails and facilities including the Cascade Streamwatch Three Creeks site as proposed in the Cascade Streamwatch Environmental Assessment. A new sno-park would also be developed to meet the needs of winter recreationists and reduce conflicts with private land owners in the corridor. Existing campgrounds may be improved to better serve the recreating public and to reduce resource impacts in the campgrounds.

Some dispersed camping sites would be hardened and others eliminated where substantial resource damage or conflicts with other river values and private lands are taking place. The road to the upper Ramona Falls trailhead would be closed to provide greater protection to wilderness values in the Mt. Hood Wilderness. Improvements would be made to the lower trailhead to better accommodate those users displaced from the upper trailhead. A greater emphasis would be placed on interpreting the river and unique geologic, botanical, and other values in the corridor and would be coordinated through the development of a comprehensive interpretive plan.

There would be no change in the Recreation Opportunity Spectrum classes for the river corridor. Other recreational related projects could be considered only as long as they fulfill the goals and objectives of the river plan.

Access and Travel Management

Within the corridor, some system and non-system roads will be closed if they are not needed for the management of the river corridor and protection of its values and where resource damage or substantial dumping or other illegal activities are taking place. The current motorized winter vehicle restriction on Forest Road 1825 will be retained to protect nordic skiing opportunities in the corridor. Existing roads and bridges may be reconstructed to meet the needs of forest users.

Hydrology

A water quality monitoring program will be developed to determine baseline water quality for the river and its tributaries and once determined, will monitor for the protection of that water quality. State water quality standards will be met or exceeded and future activities in the corridor will be evaluated to identify and implement actions to improve existing water quality. Activities outside the corridor may be affected in order to meet this requirement.

Fisheries

Fisheries habitat restoration and improvement activities will be implemented as long as they preserve the overall free-flowing character of the river. Habitat restoration will be coordinated with Oregon Department of Fish and Wildlife (ODFW) in order to maximize the effectiveness of the work. Most habitat restoration work will take place in the river's tributaries but some may take place in the mainstem of the river. Objectives will be to increase habitat diversity and available spawning and rearing habitat, especially for wild fish populations.

The responsibility for management of fish stocks lie with ODFW. The Forest Service will continue to work closely with ODFW and other agencies in the development of fish stock management for the entire Sandy River subbasin.

Botanical

The river corridor's unique early-successional plant communities will be highlighted and protected throughout the corridor. Efforts will be undertaken to minimize spread and eliminate, if possible, noxious weeds and non-native plants, especially where they threaten unique botanical values.

Timber and Other Forest Products

There will be no programmed, (regulated), timber harvest within the corridor. Harvest activities may occur only if they are to protect, enhance, or restore river values or protect forest health. Permits for harvest of mushrooms, firewood, and other forest products will be allowed as long as other river values are protected. The permits for mushrooms and firewood will be for personal use only. Because of the importance of the area, especially for forest products such as mushrooms, impacts of harvest will be closely monitored, and if substantial adverse effects are taking place, additional curtailment or elimination of the harvest of these products in the corridor may be implemented.

Scenic Resources

Protection and enhancement of scenic resources will be emphasized in the river corridor. Within the recreational segment, the visual quality objective (VQO) will be changed from Partial Retention to Retention within the corridor. For structural facilities and fisheries habitat enhancement/restoration structures, the VQO will change from Modification to Partial Retention. This change provides a higher level of protection for scenic resources within the corridor than has been in place under interim direction since the river was originally designated in 1988. Facilities such as the proposed small group campground and Cascade Stream Watch's Three Creeks Site would still be able to be developed but will be designed to meet the above VQO's. No changes will be made to the VQO for the viewshed outside the corridor.

Heritage Resources

Protection of heritage resources will continue as required by Forest Service Policy and law as well as expanding cultural resource representation in interpretive programs. In addition, the portion of the Pacific Crest Trail that passes near the Sandy River Guard Station is scheduled to be relocated further away from this historic structure to reduce visitation at the building and better protect its historical values.

Reasons For The Decision

Coordination with other Management Agencies and Organizations

There will be a high level of coordination with other agencies which also have management responsibilities within and adjacent to the river corridor. These will include a variety of agencies such as ODFW, Clackamas County Planning Department and local planning organizations.

Throughout the planning process, the public told us they wanted protection of the river and its unique values. They wanted to see the overall character of the river corridor and quality of the recreational experience similar to what they are now. In addition, they realized the importance of protecting the natural resources that make the river corridor special and were the basis for the river being designated. There were differences in opinion expressed on the level of public use that should be allowed in the corridor in the future, and if any new facilities should be allowed, since increased numbers of visitors to the river corridor have the potential to change the quality of recreational experience.

I have selected Alternative D with the modifications listed above since I feel that it provides the protection and enhancement of the rivers unique natural resources, meets the desires of many members of the public, and meets some of the anticipated increase in demand for outdoor recreational opportunities from the growing Portland metropolitan area. The alternative also provides for monitoring that will provide the Forest Service with sound data and help in identifying future problems. In addition, when projects are implemented, public participation in those planning efforts will allow Forest Service managers to continue their awareness of how the public wants their river managed.

Specific reasons for selecting Alternative D, with modifications, are listed below. The reasons are first listed in relation to the planning issues identified in the EA. Following those issues, I have listed other reasons for my selection. My reasons are:

Recreation

Alternative D, with modifications provides for limited additional recreational opportunities within the recreational segment of the river corridor. While some members of the public wanted no new development within the corridor, others requested additional facilities be developed in the corridor, including those that could be developed under this alternative. Since the area is easily accessible to the growing Portland metropolitan area, demand for recreational opportunities will be increasing in the future. By allowing limited growth in the recreational segment of the river corridor, facilities can be built that can meet some of this increased demand while still being designed to protect the river's unique values. In addition, the increased emphasis on interpreting the unique natural values in the area will improve the visitors knowledge of protecting river values while allowing them to enjoy the Sandy River. No new actions are proposed for development in the wild segment of the river corridor, though there are some actions that will mitigate impacts from recreational use in that segment.

There are also projects identified in the implementation schedule, such as closure of some dispersed camping sites and hardening of other sites, as well as improvements to existing facilities, that will reduce adverse impacts taking place at this time.

I feel that the selected alternative balances the need to provide for increasing use in the corridor and enhances the river corridor's outstandingly remarkable recreation value, and at the same time, protects other outstandingly remarkable values while preventing and reducing resource damage.

Old Maid Flats Special Interest Area

In addition to its wild and scenic river designation, the Old Maid Flats area is also designated a Geologic Special Interest area because of the geologically recent mudflow from Mt. Hood. The unique geology is also one of the river's outstandingly remarkable values. As identified in the EA for this management plan, botanical values are also unique and are tied closely to the geology of the area. I felt it was unnecessary to make this area a Botanical Special Interest area as well, since its botanical values are more than adequately protected through management direction and by their being identified as one of the outstandingly remarkable values in the river corridor. The river management plan requires that the unique botanical values found in the corridor be protected and/or enhanced.

Access and Travel Management

Alternative D, with modifications, addresses the concerns raised about unnecessary roads and the problems associated with them such as trespassing on private lands, garbage dumping and other illegal activities being within the corridor. The selected alternative provides the opportunity to close unnecessary roads, while still allowing for new development of roads and trails to a limited degree to meet the needs of forest users.

Probably the most disputed road closure allowed in the management plan is the closure of the road to the upper Ramona Falls trailhead. There were members of the public that told us they felt the road should stay open to allow for continued easy access to Ramona Falls, a popular destination for many recreationists. Others, however, felt that the road should be closed since it is extremely rough, has erosion problems, and provides easy access to an area of the Mt. Hood Wilderness that is heavily impacted from high use. Almost all of those individuals agreed that the lower trailhead should be the primary trailhead, thereby increasing the hiking distance to Ramona Falls approximately one mile each way. This increased distance should reduce numbers of visitors to the falls area as a result of the increased hiking distance. Since the Ramona Falls area is within the Mt. Hood Wilderness and the numbers of visitors to the area currently exceed our Forest Plan standards and guidelines for the wilderness, I feel that closure of the road will be a reasonable way to reduce visitation to the falls, at least to a degree. Use of the lower trailhead and trail to the falls will still allow a reasonable day hike for most individuals wishing to hike to the falls. Additional use limitations within the wilderness will be implemented through the Mt. Hood Wilderness management planning efforts. This will allow for continuity of management direction throughout the entire wilderness, of which the wild segment of the upper Sandy River is a part.

Fisheries

The entire Sandy River has been identified as an extremely important area for anadromous and native fish species, including some that are at extremely low population levels. The selected alternative promotes fisheries habitat restoration and improvement activities in the river corridor that will assist in the recovery of those fish stocks. In addition, the Forest will be working closely with ODFW so habitat management actions will assist in the State's fish population management objectives. Any projects to be implemented within the upper Sandy River itself, before being implemented, will be evaluated and designed to insure that the free-flowing character of the river will be protected.

Ecosystem Function/Biodiversity

The selected alternative provides the opportunity to maintain a high level of biodiversity within the river corridor. There will be human influence which may affect ecosystem function to a slight to moderate degree in localized areas, but overall, natural ecological process will still be allowed to operate to insure biodiversity throughout the corridor. By allowing these natural processes to continue, natural regeneration and other healing processes may take place, providing the greatest opportunity for a healthy forest ecosystem. The selected alternative also allows for some active management of vegetation in the corridor if it is necessary to enhance ecosystem function, enhance forest health, and maintain biodiversity.

Scenic Quality

Several members of the public commenting on the EA felt that a higher level of protection to scenic quality was necessary than was proposed in Alternative D. As a result, the Visual Quality Objective (VQO) within the recreational segment of the corridor will be Retention with a VQO of Partial Retention for structural facilities and fisheries habitat enhancement/restoration structures. This provides a higher level of protection for scenic values than previous management direction and what was originally proposed in the preferred alternative when the EA was released for public review. It still allows for the development of some facilities that have been proposed such as the Cascade Stream Watch's Three Creeks site and small group campground since those facilities can be designed to meet the Partial Retention VQO. I did not feel it was necessary to change the VQO for the viewshed adjacent to the corridor and that scenic values in that area is adequately protected under the current Partial Retention in place for the foreground and middleground of the viewshed.

Protection/Enhancement of Outstandingly Remarkable Values

With any river management plan, we must ensure that we are protecting those values for which the river was originally designated. The selected alternative provides a high level of protection for all the natural values of fisheries, scenery, geology, and botanical values, and balances that protection and enhancement with providing recreational opportunities, which was also identified as one of the outstandingly remarkable values along the river.

Timber Harvest

Overall feeling from the public was that eliminating the programmed (regulated) timber harvest component from the river corridor was more compatible with the objective of protecting scenic values in the river corridor. Programmed harvest was already eliminated within most of the river corridor under interim guidelines and the elimination of it from the remainder of the corridor reduced the allowable sale quantity (ASQ) for the Forest by only .05%. Because this reduction in ASQ is very small and the fact that going from programmed, or regulated, to non-programmed, or unregulated, timber harvest is more compatible with the protection of river values, I have decided to eliminate it from the remainder of the river corridor. Timber harvest may still take place within the corridor using both even and uneven aged management techniques when the management actions are necessary to protect, restore or enhance river related values and to provide for balanced, healthy forest and aquatic ecosystems.

Corridor Boundaries

River corridor boundaries were modified from the interim boundary to better protect identified river values and to make them more easily identifiable on the ground. The boundary was widened in the much of the lower river corridor in order to include the entire Old Maid Flats mudflow since it is that geologic feature that is one of the river's unique values. In the upper, or wild, segment, the corridor was narrowed since the river's values are associated primarily with the river itself. I did decide to use the wider boundary found in alternatives B and C where the river corridor boundary in the lower two miles of the corridor will be the same as the wilderness boundary. By doing this, it eliminates the narrow strip of Forest Service land between the corridor boundary and the wilderness found in alternatives A, D and E, and allows for more consistent management direction for those lands.

The boundary shown on the attached map and as shown and described in the River Management Plan will be presented to Congress for its final approval of the corridor boundaries. It is anticipated that Congress will approve the boundary shown since it is within the 320 acre per river mile limitation stated within the Wild and Scenic Rivers Act and meets the objective of including and protecting the river's unique values.

Consistency With Future Management Direction

As a result of controversy surrounding the management of federal forest lands within the Pacific Northwest, an Environmental Impact Statement is soon to be released that will provide additional management direction for the management of Bureau of Land Management and National Forest Lands, especially as it relates to protection of old-growth dependent species. This additional management direction, often referred to as the President's Forest Plan, will modify and amend current Land Management Plan direction, including some of the direction contained in this plan. As a result, the direction in this plan will ultimately be reconciled to the direction in the President's Forest Plan. Until that is done, the direction contained in the President's Forest Plan will overlay the direction contained in this plan. Where any conflict between direction exists between the River Management Plan and the President's Forest Plan, the direction that is most restrictive to vegetative management and access will predominate.

Amendments Made to the Forest Land and Resource Management Plan (Forest Plan)

In addition to implementing Alternative D, with the modifications mentioned above, this decision also constitutes Amendment No. 6 to the Forest Plan. Those changes are listed below:

- Change the land allocation for the upper Sandy River from a B1 allocation to a new A1 allocation. This change is the result of eliminating regulated timber harvest within the corridor.
- Change the river corridor boundary to better protect river values. This new river corridor will be shown as an A1 allocation. Other overlaying "A" allocations such as A2 Wilderness and A4 Special Interest Area will not change. The B2 allocation adjacent to the river corridor will be modified to coincide with the new A1 allocation boundary. As mentioned above in the "Corridor Boundaries" section, Congress must approve the final river corridor boundary and it is anticipated that Congress will approve the boundary shown on the attached map and as shown and described in the River Management Plan.

- Provide replacement management direction for the new A1 allocation. The replacement direction is contained in Chapter 3 of the upper Sandy National Wild and Scenic River Management Plan and reflects any changes to standards and guidelines necessary to implement the alternative as described above.

I have determined that these amendments are non-significant amendments to the Mt. Hood Forest Plan for the following reasons:

- These changes affect only the designated river corridor, much of which is already within the interim Wild and Scenic River corridor and is already being managed as a Wild and Scenic River.
- Changing from regulated to non-regulated timber harvest within the corridor reduces the Allowable Sale Quantity for the Forest by 99 thousand board feet (MBF) annually, less than .05% of the Forest Plan's timber output level of 189,000 MBF annually. There are no other significant changes to other resource outputs on the Forest.
- The standards and guidelines, management actions, and specific activities identified in the River Management Plan are consistent with the original Forest Plan management goals and desired future condition for the upper Sandy Wild and Scenic River. Changes are overall refinements based on more detailed analysis than was conducted in the Forest Plan.
- The adjustments of management area boundaries and direction included in the River Management Plan do not make significant changes in the multiple use goals and long-term land and resource management direction for the Forest.

Other Alternatives Considered in Detail

Alternative A (No Action)

Alternative A would have continued with the current management direction for National Forest Lands. Current State, county, and applicable local regulations would apply to private lands within the corridor, as they do will all the other alternatives. While called a "no action" alternative, it does not mean that no actions will take place within the corridor. A number of activities would still be able to take place within the corridor.

I did not select this alternative since it did not provide as well defined management direction for the river corridor as did any of the other alternatives. The other alternatives were much more specific as to what types of actions would be implemented and their specific management focus. This alternative boundary also did not provide the level of protection to the unique river values that were found in the other alternatives.

Alternative B

The goal of this alternative was to minimize further human influence in the river corridor, maximizing natural values and attributes and allowing natural process to operate to the maximum extent possible within the corridor.

I did not select this alternative since it primarily emphasized enhancing non-recreational resource values, minimizing recreational opportunities. Recreation was also one of the outstandingly remarkable values on the upper Sandy River. With the Mt. Hood National Forest being one of the eleven urban forests in the nation, and with projected increases in recreational use in the future, I feel that alternative B is too restrictive as it relates to future recreation use on the Forest and in the river corridor.

Alternative C

The goal of this alternative was to enhance the natural values and attributes of the river and to provide for public use opportunities only where they would enhance those values. No new recreational facilities would be provided in this alternative other than interpretive facilities.

While I did not select this alternative in its entirety, I did use certain aspects of the alternative to modify Alternative D, my selected alternative. Those aspects that I used include eliminating programmed, or regulated, timber harvest in the corridor; closing the road to the upper Ramona Falls trailhead, using a more restrictive VQO within the corridor, and using the wider corridor boundary of this alternative and Alternative B.

I did not select the remainder of the alternative since, as I mentioned above, the Mt. Hood National Forest is an urban forest with a growing population, as well as the fact that recreation is also one of the river's outstandingly remarkable values. I feel that the alternative was still too limiting as it related to recreation opportunities. Recreation use on the Mt. Hood National Forest will be increasing in the future and there will be a need to meet that demand. I feel that Alternative C unnecessarily limited the Forest's options to meet that demand, though it had many good characteristics related to protection of river values that I incorporated into the selected alternative. As mentioned in the reasons for the decision, I feel that limited additional recreation opportunities may still be provided beyond current levels, and the river's other outstandingly remarkable values can still be protected and/or enhanced.

Alternative E

The goal of this alternative was to emphasize public use potential and opportunities in the river corridor while still providing protection to the river's other values. Of all the alternatives, this alternative would have provided the greatest level of recreational opportunities.

I did not select this alternative since it enhances primarily the recreational resource, placing much less emphasis on protecting and/or enhancing other resource values. It also was the most expensive alternative. Since other non-recreational values were also found to be outstandingly remarkable, I feel it did not emphasize those values adequately.

Public Involvement

Extensive efforts were taken to involve the public in the development of the alternatives and River Management Plan to insure a high level of public participation in the planning effort. Numerous steps were taken during all stages of the planning process to ensure viewpoints of interested individuals were considered. A summary of the public involvement effort and listing of individuals with whom information was shared and/or who were consulted with is listed in the EA.

During the planning effort, a mailing list of key interest groups, individuals, elected officials, community organizations, government agencies, and landowners adjacent to the river were compiled. Information about the planning process, public meetings, workshops, newsletter and planning updates were mailed to keep all those interested in the planning efforts informed.

The EA was released for public review in January of 1994. Individual who had provided comments during the planning effort were sent a copy of the EA for their review. Other interested individuals on the mailing list were sent a summary of information from the EA. In all, over 100 EA's and 170 summaries were mailed out. In addition, over 20 additional individuals not listed in the EA were sent copies of the EA for comment after they expressed an interest in the river planning effort. In response, 12 letters commenting on the EA were received from different individuals and organizations. Those letters, along with all the other letters and comments received during the planning effort are contained in the analysis file for the EA.

The River Management Plan, which explains in greater detail the management direction for the river corridor, incorporates many comments received from the public during the planning effort and further clarifies the intent of Alternative D, with the modifications that I selected. Ways the River Management Plan and the Decision Notice address points in the letters include:

- Describing the rationale of why additional recreational facilities are being allowed in the corridor, and under what conditions they may built.
- Highlighting the fact that regulated timber harvest is being eliminated from the river corridor in order to better protect scenic values, while still allowing some harvest to take place in order to better protect and/or enhance river values and protect forest health.
- Describing the rationale for allowing closure of certain roads, especially the road to the upper Ramona Falls trailhead.
- Describing the rationale for the change in Visual Quality Objectives in the recreational river segment corridor.
- Describing the rationale for the location of the river corridor boundary.
- Identifying tentative timelines for implementation of specific projects along with an estimation of cost of implementation.
- Identifying items to be monitored to provide additional feedback on effectiveness of management actions and direction.

The River Management Plan takes into account the desires and concerns of those who expressed their views to us and provides for a balanced way for protecting and enhancing all the outstandingly remarkable values and allowing for continued public use of the special river area.

Finding of No Significant Impact and Compliance With Laws

Following a review of the environmental assessment, I have determined that this is not a major federal action that will significantly affect the quality of the human environment, therefore, an Environmental Impact Statement is not necessary and will not be prepared. This determination is based on the following considerations:

- Irreversible and irretrievable commitments of resources and adverse cumulative or secondary effects will not exceed those discussed and evaluated in the Final Environmental Impacts Statement for the Mt. Hood Forest Land and Resource Management plan.
- Direct, indirect, and cumulative environmental impacts were analyzed and discussed in the upper Sandy River Environmental Assessment and were not found to be significant.
- There will be no significant impacts to wetlands, floodplains, prime farm lands, range lands, minority groups, women, or consumers.
- The River Management Plan protects and/or enhances the identified outstandingly remarkable recreational, scenic, geologic, fishery, and botanical values found in the river corridor.
- Activities planned in the wild and scenic river corridor will not adversely affect the environment beyond or downriver from the designated corridor.
- River Management Plan direction is not expected to cause any significant impacts to any threatened, endangered, or sensitive plant or animal species. Site-specific biological evaluations will be done for specific projects planned in the corridor and necessary mitigation measures to protect those species will be undertaken during implementation of those specific projects.
- The River Management Plan is in compliance with relevant Federal, State, and local laws, regulations, and requirements designed for the protection of the environment. The River Management Plan meets the State of Oregon water and air quality standards.

Biological evaluations for animals and plants have been completed and are included in the analysis file of the Environmental Assessment. These evaluations assess the impacts of the River Management Plan on all threatened, endangered, and sensitive species (TE&S species) that could potentially be found in the Wild and Scenic River corridor. The evaluations include a conclusion that there will be no effect or no impact at this level of decision to TE&S species present. Further site-specific surveys and appropriate interagency consultation, if necessary, will be conducted during project planning.

Implementation

This decision may be implemented 30 calendar days after the Decision Notice is published in the Oregonian.

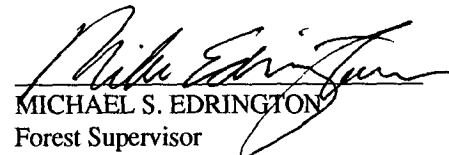
Each project identified in the River Management Plan will require additional environmental analysis prior to implementation, with the appropriate levels of analysis, in compliance with National Environmental Policy Act requirements.

Right to Appeal

This decision is subject to appeal pursuant to 36 CFR 217. Written Notice of Appeal of this decision must meet the direction contained in 36 CFR 217.9 (Content of a Notice of Appeal) and must include the specific reasons for the appeal. Two copies of the written Notice of Appeal must be filed with the Reviewing Officer, John Lowe, Regional Forester; P.O. Box 3623; Portland, Oregon 97208-3623, within 45 days of the date the legal notice of this decision appears in the Oregonian.

For further information, please refer to the upper Sandy National Wild and Scenic River Environmental Assessment, or the upper Sandy National Wild and Scenic River Management Plan, and/or contact Paul Norman, Planning Team Leader, at the Zigzag Ranger District; 70220 E. Highway 26; Zigzag, OR 97049; (503)622-3191 or (503)666-0704.

Responsible Official:


MICHAEL S. EDRINGTON
Forest Supervisor
Mt. Hood National Forest
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Gresham, OR 97030

2/24/94
Date

Upper Sandy National Wild and Scenic River

Management Plan

Mt. Hood National Forest
Zigzag Ranger District
Clackamas County, Oregon

Deciding Official:

Michael S. Edrington, Forest Supervisor
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Recommending Official:

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Chapter 1

Introduction

Introduction

The upper 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. The Sandy River was one of these 40 rivers. Three segments of the Sandy River were designated through the Omnibus Oregon Act. The upper two segments, covering a length of 12.4 miles, go from the river's headwaters on the west slope of Mt. Hood to the boundary of the Mt. Hood National Forest. The Mt. Hood National Forest is responsible for the administration of these river segments, and this Management Plan covers that portion of the river. A third segment downstream on the Sandy River from Dodge Park to Dabney Park was also designated in the 1988 Act. A separate river management plan has been developed for that segment of the river by the Bureau of Land Management, Oregon State Parks and Recreation Department and Clackamas and Multnomah Counties and was completed in September of 1993.

Much of the area in the river corridor is also identified as the Old Maid Flats Geologic Special Interest Area (SIA) in the Mt. Hood Forest Land and Resource Management Plan, (also called the Forest Plan). The SIA is identified as an A-4 land allocation in the Forest Plan. Both the management direction for the SIA and the river management direction contained in the Management Plan will apply within those areas where both land allocations overlap. Map 1.2 shows the Wild and Scenic River Corridor boundary.

The purpose of this management plan is to provide for a comprehensive approach for managing, protecting, and enhancing the free-flowing natural character of the river and its associated values and natural attributes. This plan describes a desired future condition of the corridor and provides management direction in the form of Standards and Guidelines, identification of projects to be implemented, and monitoring guidelines within the corridor.

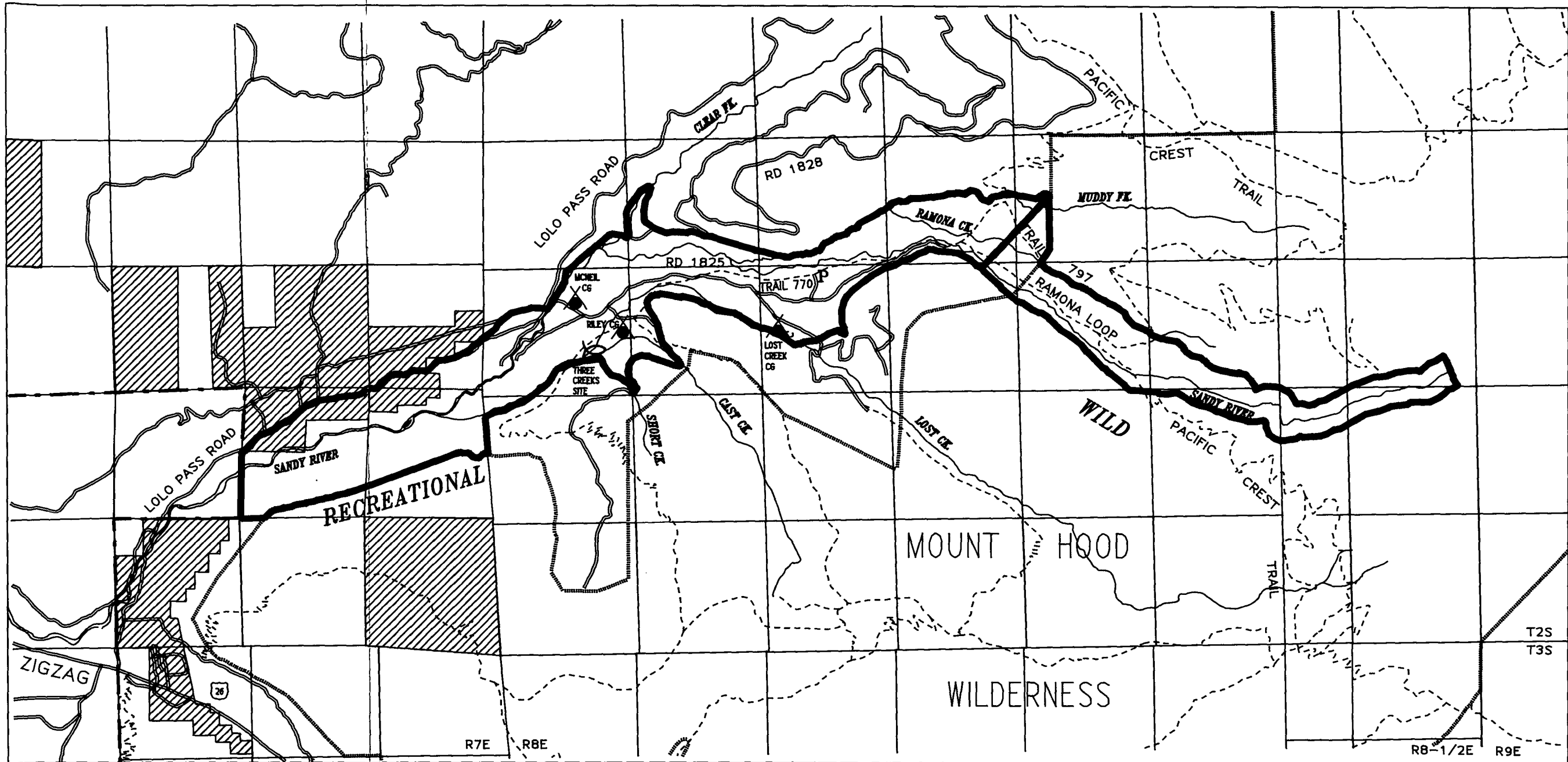
It must be realized that implementation of those activities and monitoring efforts identified in the river management plan are dependent upon available funding. If budget allocations are insufficient, those project and monitoring activities proposed in this management plan may need to be rescheduled. 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.

Wild and Scenic River Legislation

In 1968, Congress passed the National Wild and Scenic Rivers Act, establishing a nationwide system of outstanding free-flowing rivers. The primary purpose of the Act is to balance river development with river protection and conservation. The Act specifically prohibits river from future hydropower development and requires managing agencies to protect and enhance those values for which the river was designated.

As defined by the Act, a National Wild and Scenic River must be undammed and have at least one outstandingly remarkable resource value (ORV) to be include din the system. ORV's are those values which are **river related** (owe their existence or location to the river) and are **rare, unique, or exemplary** in character. Rivers may be added to the system either by an act of Congress or by order of the Secretary of the Interior upon official request by a State.

Map 1.2 Interim Management Boundary



SANDY WILD & SCENIC RIVER FINAL RIVER CORRIDOR BOUNDARY

1:55000
1" = .87 MILE

- P PARKING
- X CAMP GROUND
- Y CASCADE STREAMWATCH
- 26 HIGHWAY 26
- ▨ PRIVATE LAND W/IN NF BOUNDARY

- PROPOSED CORRIDOR BOUNDARY
- - NATIONAL FOREST BOUNDARY
- ▬ WILDERNESS BOUNDARY
- ROAD
- - - TRAIL
- ~ RIVER
- + SECTION LINE

Some of the underlying principles of the Act are:

- to keep selected rivers or river segments in a free-flowing condition and to recognize their importance to our natural and cultural heritage.
- to include all types of free-flowing rivers in the system, whether in very remote areas or flowing through developed areas.
- to designate rivers because of their existing attributes and uses, including a river's natural, recreational, and cultural values.
- to recognize the need to provide for partnerships among landowners; Federal agencies; and local, State, and tribal governments in determining the future of the river area and managing its resources.

Under the Wild and Scenic Rivers Act, designated rivers were classified as wild, scenic or recreational, depending on the level of development and access present at the time of designation. Wild rivers are the most natural appearing and the least accessible. Little or no development is present, such as roads or campgrounds. Scenic rivers have shorelines that are largely undeveloped with few access points. More types of land uses and developments are compatible with management goals on a scenic river than on a wild river. On river segments with the Recreational designation, the shoreline is more developed and the road parallels the river more closely and may even dominate the landscape. There may be some development along the banks, and some existing impoundments or diversions.

Due to the different level of existing development, the upper two segments of the Sandy River as described in the Omnibus Oregon Wild and Scenic Rivers Act as:

Segment 1 - The 4.5 mile segment from its headwaters to the section line between sections 15 and 22, township 2 south, range 8 east as a **wild river**; to be administered by the U.S. Forest Service.

Segment 2 - The 7.9 mile segment from the section line between sections 15 and 22, township 2 south, range 8 east to the Mt. Hood National Forest boundary at the west section line of section 26, township 2 south, range 7 east as **recreational river**; to be administered by the U.S. Forest Service.

Method of Plan Preparation

The upper Sandy River Management Plan was developed from the upper Sandy National Wild and Scenic River Environmental Assessment (EA). The EA was released in January 1994 and evaluated a range of five alternative management scenarios for managing the upper Sandy River. Additionally, the EA weighed environmental consequences of each management scenario. Based on input from the public and a variety of agencies, the management direction contained in this plan was identified as the preferred management strategy. This plan provides a more comprehensive list of actions, with specific target dates and estimated implementation costs, along with the final management direction and guidelines for the river.

How this Document is Organized

Chapter 1 provides an introduction to the River Management Plan.

Chapter 2 summarizes the outstandingly remarkable values found along the river, describes the Desired Future Condition of the river corridor, and identifies the general resource management objectives for the river corridor.

Chapter 3 contains specific management direction for the river corridor in the form of Standards and Guidelines.

Chapter 4 lists specific management actions to be implemented under the direction of the River Management Plan. Most of these actions will require additional site-specific analysis and as a result of that analysis, costs and scheduling of the actions may change. Implementation of those actions is also dependent upon available funding.

Chapter 5 identifies a monitoring program to evaluate the effectiveness of management actions taken along the river and to insure that river values are being protected and/or enhanced.

The Appendices provide support and additional information to the main document and includes a procedure to follow when evaluating water resource and other projects that could affect the river's values, a description of the river corridor boundary, and a list of preparers.

Chapter 2

Outstandingly Remarkable Values/ Desired Future Condition

General Management Objectives

The Sandy River Management Plan provides the direction for management of the upper Sandy River and lands within the river corridor. This chapter describes those values which were found to be outstandingly remarkable for the upper Sandy River, followed by the Desired Future Condition for all the resources along the river. These sections are then followed by the overall resource management objectives for the upper Sandy River.

Outstandingly Remarkable Values

The intent of the Wild and Scenic Rivers Act is to maintain the free-flowing character of the designated river and to protect its values. Those values were termed by Congress as "outstandingly remarkable values." Outstandingly remarkable values are values or opportunities in a river corridor which are directly related to the river and which are rare, unique, or exemplary from a regional or national perspective. The Management Plan for the upper Sandy River provides for balanced protection and enhancement of all values found to be outstandingly remarkable:

- scenery,
- recreation,
- fisheries,
- geology, and
- botanical.

A summary of these values is below. A more detailed description of these values can be found in Appendix A of the upper Sandy Wild and Scenic River Environmental Assessment, which is the Resource Assessment for the upper Sandy River.

Scenery

The river corridor, from the Sandy's headwaters on the west slopes of Mt. Hood downstream to McNeil campground, provides much scenic diversity as it flows through a steep river canyon, over water falls, past rock pinnacles and large open sandy faces, and across a broader mudflow plain. The wide variety of vegetation and features with little or no evidence of human alteration, as well as impressive views of Mt. Hood throughout the river corridor and especially in the middle and upper portions of the corridor, make scenic quality along the upper Sandy River an outstandingly remarkable value.

Recreation

The upper Sandy River provides a wide variety of recreational opportunities along its length ranging from hiking, equestrian, and interpretive trails, sport fishing, developed and dispersed camping opportunities, mushrooming, and even limited kayaking opportunities for experienced kayakers. It is this wide variety of high quality recreational opportunities and the fact that they are so close to a major metropolitan area that makes recreation an outstandingly remarkable value for this section of the river.

Fisheries

The upper Sandy River and its tributaries contains a diversity of increasingly rare, genetically important native fish stocks. The river and its tributaries provide spawning and rearing habitat for early- and late-run coho, spring chinook, and winter and summer steelhead, as well as containing native cutthroat trout populations. It is the presence of these increasingly important fish stocks and the availability and quality of suitable important habitat for those stocks that make fisheries an outstandingly remarkable value.

Geology

There are several geologic features related to vulcanism, glaciation, and erosion found along the upper Sandy River. The Old Maid Flats area is an excellent example of a multiple debris flow deposit that provides unique interpretive opportunities with easily observable erosional processes as well as showing the free-flowing characteristics of the river. In this area, there are also buried snags and tree casts or wells (from snags completely rotted away) that are some of the best examples of a buried forest found in the Pacific Northwest. The Old Maid Flats area has also been recognized by a Geologic Special Interest Area designation in the Mt. Hood Land and Resource Management plan, further recognizing the unique geologic characteristics of the area.

Botanical

Largely tied to mudflow features mentioned above and the unique soil conditions of the mudflow, the upper Sandy River basin, especially the Old Maid Flats area, contains unique and relatively rare plant communities, especially for the west side of the Cascades. These include a unique early successional plant community consisting primarily of lodgepole pine on the recent debris flow deposit, as well as associated plants and edible mushrooms not commonly found elsewhere in the area. It is the rarity of these plant communities that make botanical values outstandingly remarkable.

Recreation

A wide variety of high quality recreation experiences will continue to attract a growing number of users to the upper Sandy River. Use levels will rise as the population of the Portland metropolitan area grows and those living in the metropolitan area continue to look for more recreation experiences in a natural forested setting. Actions will be taken to reduce resource problems at parking and access points along the river and provide facilities to reduce sanitation problems. Areas within the river corridor will be managed for a variety of non-motorized recreational opportunities. Motorized use will take place only on designated roads and trails marked open for this use. Overall, the types of use along the river will be very similar to what is currently taking place, though limitations will be placed on locations of where certain activities will take place. Motorized use will be allowed only if appropriate locations for that use can be identified.

Facilities

In order to accommodate increasing use, existing uses, improvements, and high visitor use areas will have been upgraded and improved to provide better sanitation facilities, improved interpretive opportunities, reduced resource problems, and improved access to the river in selected locations. All new and upgraded facilities will be designed to blend in with the natural setting and will meet visual quality standards. Restroom facilities will be provided in higher use locations so proper sanitation is maintained. A smaller group campground will provide visitors the opportunities for multiple families camp together and enjoy the area. Facilities in the corridor will provide a less developed recreation experience while privately owned facilities and resorts outside the corridor will provide a much wider range of amenities and a more developed recreation experience to recreationists. The proposed entrance facility near the junction of roads 1825 and 1828 will provide information to visitors on the river's unique values and the enjoyment, protection, and enhancement of those values.

Trails

Existing trails in the corridor will receive greater use than at present. Trails will be maintained to a high standard to safely accommodate the greater use and to control impacts to other resources. A limited number of new trails will be developed in the recreational segment to provide additional opportunities, and a portion of these will be designed to accommodate equestrian and mountain bicycle use, as well as hiker use. These trails will also be designed to allow recreationists to experience the river corridor's unique values, while insuring those values are protected. Educational and interpretive media will be used at most trailheads to educate trail users about proper etiquette when hiking, horse riding, mountain bike riding, and dispersed camping along the trails. The road to the upper Ramona Falls Trailhead will be closed and rehabilitated and the lower trailhead will be improved, including having restroom facilities so proper sanitation is maintained. This improved trailhead will likely serve as a trailhead for other trails in the corridor that do not go into the wilderness. The existing trail bridge across the river by the upper trailhead will be removed and replaced with a more visually pleasing bridge in a location that does not have the hazard of having the bridge footings washed out as is happening to the existing bridge.

There will be more opportunities for persons with disabilities to explore the outdoors as existing trails are improved and new trails are constructed to barrier-free standards, especially interpretive trails at Lost Creek Campground and Cascade Streamwatch's Three Creeks Site. Trail use will be non-motorized unless suitable locations for a motorized trail can be found within or passing through the corridor. Any river or access trails will not cross private lands unless landowners have granted permission, agreements reached or willing seller easements have been acquired.

Overnight Camping

There will be a slight increase in developed camping opportunities with the development of a smaller scale group campground in the corridor. The three existing campgrounds (Riley, Mc Neil, and Lost Creek) will be upgraded to better define camping sites, have some sites designed to meet the space needs of smaller recreational vehicles, reduce resource problems such as erosion and provide potable water.

There will be a reduced number of dispersed campsites from current levels and the sites that remain will be designed and located to protect riparian values. Dispersed sites and access roads near or immediately adjacent to private land in the lower river corridor will also be closed to reduce trespass problems and illegal dumping.

Privately owned campgrounds outside the corridor will offer a full range of amenities including facilities to support recreational vehicle camping for all sizes of recreational vehicles. There will also be increased emphasis on informing visitors of other recreation opportunities outside the corridor and at private recreational facilities to disperse use to areas not as heavily impacted as the river corridor.

Interpretation/Public Information

Development of Cascade Streamwatch's Three Creeks Site will provide a unique opportunity to highlight the Sandy River and its tributaries' importance to the anadromous fish stocks in the river, as well as provide the opportunity to highlight other unique river values found in the corridor. In addition, interpretive trails at Lost Creek Campground and new trails in the corridor will provide additional opportunities to share with recreationists, including those with disabilities, the uniqueness of the upper Sandy River corridor, and how they can protect the area.

Wilderness

Wilderness values will be protected through a coordinated Mt. Hood Wilderness management planning effort identifying carrying capacities within the wilderness and the wild segment of the corridor. All use restrictions within the wilderness will be coordinated and implemented through wilderness management direction.

Recreational Fishing Opportunities

Fishing opportunities in the upper Sandy River will be managed in coordination with Oregon Department of Fish and Wildlife (ODFW) and the Sandy Subbasin Fish Management Plan. Overall direction for the management of fish stocks will be the responsibility of ODFW. Responsibility of management of the fishery habitat will rest with the Forest Service on Federal lands. The long-term goal for upper Sandy fish populations will be an increase in naturally reproducing wild stocks. Emphasis will be on a catch and release fishery along the river and its tributaries. Educational facilities, signing and programs will help anglers become more aware of fishery stock management and protection of the native anadromous and resident species.

Fisheries and Fish Habitat

Habitat quality for resident and anadromous fish will be maintained or improved with the emphasis on naturally reproducing wild stocks. No further degradation of habitat will occur 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 practices afford better protection for these areas in the future. Fish habitat and watershed restoration measures will facilitate this process. Fish species distribution will be understood and documented throughout the river corridor. Sensitive aquatic invertebrate habitat will be documented and protected. State and Federal fish management agencies, as well as county personnel, will be working cooperatively with each other and many public individuals and groups. Future habitat management in the Sandy River drainage will be guided by the planned Sandy River Subbasin Fish Management Plan following its completion and adoption.

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 wild anadromous and resident fish populations. Fisheries management activities, (including habitat restoration, fishing regulations and improved enforcement) will provide for the protection of wild stocks and for continued high quality fishing experiences. Extensive education efforts will increase awareness and promote stewardship of fisheries resources by the public, resulting in improved conservation of fish stocks.

Water Quality and Quantity

As described in the Upper Sandy National Wild and Scenic River Environmental Assessment, water quality and quantity in the river can be variable. Streambank erosion and landsliding along the unstable volcanic mudflow deposits of the Muddy Fork can result in high levels of natural stream turbidity during periods of winter peak flows. Glacial melt during the mid to late summer months gives the Upper Sandy river a pale green opacity or milky gray color. Summer stream temperatures can be high when streamflows are low due to a lack of snowmelt runoff.

The existing quality and quantity of water in the Upper Sandy river will be maintained. The range of baseline water quality conditions for stream temperature, turbidity, pH, and dissolved oxygen in the Upper Sandy river will have been determined. Macro-invertebrate indices in the Clear Fork and Lost Creek tributaries will have been identified. U.S. Forest Service management actions occurring within the Upper Sandy river watershed will be monitored, to insure that Best Management Practices are implemented and effective, and water quality in the river corridor is not degraded. The water quality and quantity of the Upper Sandy river will continue to provide a foundation for the outstandingly remarkable values of the river, including its scenery, fishery, and recreational activities.

Areas where non-point source pollutants have been entering the river in the past will have been corrected, assuming the problems are controllable by available technologies. In addition, emphasis will have been placed on restoring dispersed recreation campsites in riparian areas along the river, where soil has been compacted and riparian vegetation lost.

Botany/Ecology

The array of ecosystems in the river corridor will fall within the historic range of ecosystems appropriate for northwestern Oregon and will not completely resemble those that are present today. These ecosystems will be a result of mainly natural processes and, to a limited extent, human manipulations. Native plant communities and their habitats will be conserved and protection will be provided for federal, state, and Oregon Natural Heritage Program rare, sensitive, threatened and endangered species. Noxious weed species will be eliminated throughout the corridor. Management activities and facility development will be done to limit any adverse impacts to vegetation, and revegetation activities will be done with local native species, where possible.

Parts of the early successional plant community at Old Maid Flats will slowly transform into a more typical Western Hemlock Zone forest-type. Other parts, through limited silvicultural treatments, may still resemble the lodgepole pine community that exists today. The diversity of mushrooms, mosses and lichens will change concurrently with the evolution of plant communities. Not enough information is available to predict how the abundance of some prized edible species, such as the matsutake, will change with time.

Wildlife

Habitat quality for wildlife species will be maintained or improved throughout the river corridor and wildlife species populations will increase above current levels or remain stable. There will be a strong management focus on threatened, endangered, and sensitive species such as peregrine falcons, wolverine, harlequin ducks, goshawks, Townsend's big eared bat, and amphibian species. Snags and wildlife trees will be managed in recreation areas to optimize wildlife habitat and safety. Large, woody debris will be left on the ground to continue nutrient cycling and provide shelter for animal species which utilize such materials. In addition, education efforts will be emphasized to increase awareness of the importance and presence of wildlife species along the river and their specific habitat requirements, reducing adverse impacts from activities in the corridor.

Riparian vegetation and associated habitat will be improved by the closure of roads and specific dispersed sites along the river, also reducing siltation and improving water quality in the river. Disturbance and harassment will be reduced through closures and coordinated planning of future recreational sites and trails.

Heritage Resources

Heritage resources and traditional cultural properties within the river corridor will be documented and evaluated as to their significance and eligibility to the National Register of Historic Places. Resources found to be significant will be protected or their values conserved through proper scientific study and/or data recovery.

Proposed undertakings within the river corridor will be assessed for their potential to affect National Register, eligible, or unevaluated properties. When impacts to an historic property can not be avoided during implementation of an undertaking, appropriate mitigation actions are completed and documented.

When appropriate to facilitate protection and public appreciation, heritage resources within the river corridor will be interpreted.

The Upper Sandy River Guard Station will be evaluated to determine its significance and eligibility for inclusion on the National Register of Historic Places. If determined to be eligible, a nomination to the NRHP will be prepared and submitted. If eligible, the cabin will be managed using a Management Plan that identifies and protects the character defining elements of the structure.

Scenery

The desired future condition of the Wild and Scenic River Corridor will be one in which the existing natural appearing landscape conditions are maintained. The overall existing character and appearance of the corridor will remain basically unchanged from the present condition except on some private lands where there will be some limited development. On these lands, older disturbances will be come less apparent as these areas revegetate and regrowth occurs. Newer disturbances will be less obtrusive as natural screening is left as required by county zoning requirements.

Impacts to the visual character on Forest Service lands as a result of various project facility development in and adjacent to the corridor will be minimized by landscape architect assistance and will meet VQO guidelines.

With no scheduled harvest from federal lands within the corridor, the current forest types will, barring an unforeseen natural event, remain essentially unchanged except for the slow process of natural succession or minor harvest activities to enhance other outstandingly remarkable resources such as fisheries habitat improvements or recreation facilities.

Monitoring

Monitoring of the resources in the corridor will be ongoing and will be identifying any potential problems before they become serious so corrective action can be taken. A special program to monitor recreation use, impacts, and conflicts will be occurring on an ongoing basis. The number of visitors using the river corridor will not be limited unless monitoring suggests that unacceptable impacts to social or physical resources are occurring or are likely to occur soon. Limits or restrictions on use would only be implemented after less restrictive measures, including visitor education, have failed to address the problem.

**General Resource
Management
Objectives For
Upper Sandy River**

Monitoring will also be used to identify the impacts of special product harvests within the corridor. Efforts will focus on the effects of harvesting mushrooms, particularly the "Matsutake", and ground mosses. If monitoring determines unacceptable impacts are occurring, measures will be developed to address the impacts up to and including restrictions and prohibitions with the most severe measures implemented only if less restrictive ones fail to address the problems.

Private Property

Private property rights will be recognized and protected. A proactive user education program will create a greater awareness by recreation users of landowner concerns and rights, and should result in a reduction in the number of conflicts between user groups and private landowners. Information will be provided to landowners to assist them in the management of their lands to better protect the river's values.

Relationships

Cooperation between the Forest Service, The Bureau of Land Management, state agencies and Clackamas County will continue to be good, resulting in efficient, consistent management of the Sandy River basin, the upper Sandy River corridor, and the other wild and scenic river areas within the basin, specifically the lower Sandy River managed by BLM, the State of Oregon, and Clackamas and Multnomah Counties, and the Salmon River managed by the Forest Service and BLM. Publics will be given a meaningful opportunity to participate in decision making that affects the management of the river. Partnership opportunities will be expanded between governmental agencies and different groups that may be using the river and the adjacent and related lands.

The following management objectives 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 of those actions:

- Protect the river's free-flowing character, and protect and enhance its outstandingly remarkable values.
- Provide opportunities for a wide range of recreation opportunities along the river corridor managed 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 and chemicals
- Identify, provide, and protect instream flows which are necessary to maintain and/or enhance the outstandingly remarkable values of the upper Sandy River.
- Protect and enhance habitat for fish and wildlife species. Protect and enhance the stream channel conditions that provide high quality fish habitat.
- Protect threatened, endangered, and sensitive species of plants, fish and wildlife found in the corridor.
- Maintain and/or enhance the integrated ecological functions of rivers, stream, floodplains, wetlands, and associated riparian areas.

- Protect, and where necessary, seek to restore natural ecological and hydrologic functioning along the river.
- Provide for plant and animal community diversity and maintain and/or enhance healthy functioning ecosystems to sustain long-term productivity.
- Protect integrity of wilderness areas and associated wilderness values.
- Help to reduce conflicts between recreationists and private property owners and reduce trespass on private property.
- Strive for a balance of resource use and permit other activities to the extent that they protect and enhance the quality of the river's outstandingly remarkable values.
- Develop a partnership among landowners, county and state governments, and federal agencies in determining the future of the upper Sandy River and share in management responsibilities for the river.
- Strive to develop effective, compatible, and consistent land use management through coordination with local land use planning authorities.
- Emphasize user education and information. Establish as few regulations as possible and ensure that any regulations established are enforceable and enforced.
- Foster cooperative interpretation and environmental education efforts.
- Consider the needs of local communities regarding economic development. Recognize the public with its varied needs as partners and participants in managing the river corridor through awareness, interaction, and communication.
- Require all developments to harmonize with the natural environment.
- Have a management plan that is reasonable, cost-effective, viable and achieves protection of the river's outstandingly remarkable values.

Chapter 3

Management Direction for the Upper Sandy River Corridor

This chapter contains the specific management direction for the Forest Service lands within the upper Sandy River corridor. This direction describes the bounds and/or constraints which all activities on Forest Service lands that are necessary to implement the River Management Plan must operate. This direction is to be used in place of the B1 Wild and Scenic River Standards and Guidelines in the Mt. Hood National Forest Land and Resource Management Plan (Forest Plan) Standards and Guidelines. See below for relationship to other Forest Plan Standards.

Goal

The ultimate goal of the following Standards and Guidelines is to protect and enhance the resource values for which the upper Sandy River was designated into the Wild and Scenic River system.

Location

This Management Area applies to the designated corridor for that portion of the upper Sandy River within the Mt. Hood National Forest boundary. (Public Law 90-542, Wild and Scenic Rivers Act 1988)

The A1 Management Area for the upper Sandy River is the area contained within the final river corridor boundary on the Forest. (See Map 1.2, page 2.) The Forest Plan also identifies other Management Areas that are within this river corridor. The other Management Areas with prescriptions more restrictive to vegetation and access management (ie. A2, and A4) are designated within the wild and scenic river corridor on the Alternative Q map of the Forest Plan or on the Wildlife Resources Map, a supplement to Alternative Q. Prescriptions for A2 and A4 apply as shown on Alternative Q map and the A1 prescription also applies. Where the final river corridor boundary has expanded into the B2 Management Areas, the A1 Management Area direction applies. In areas where the A1 Management Area narrows from the interim corridor identified in the Alternative Q map, the adjoining B2 Management Area direction would apply, except in A4 Management Area boundaries, wherein the A4 Management Area direction would apply. In addition, all applicable Forest Wide Standards and Guidelines apply within the river corridor. If inconsistencies occur between prescriptions, the Standards and Guidelines most restrictive to vegetation and access management predominate.

Another Management Area representing Management Requirements, the B7 General Riparian Area (unmapped) is an inclusion within and overlaps some of the A1 Management Area boundaries. The B7 Management Area prescriptions, as well as the A1 prescription applies to this corresponding inclusion.

**A1 Designated
Wild, Scenic and
Recreational
Rivers -
Upper Sandy River**

The following Standards and Guidelines apply to National Forest lands within the Wild and Scenic River corridor for the upper Sandy River. The intent of the following Standards and Guidelines is to protect and enhance the outstandingly remarkable values for the upper Sandy River and to protect its free-flowing characteristics.

The following are taken from the B1 designated Wild and Scenic Rivers Standards and Guidelines in the Mt. Hood National Forest Land and Resource Management Plan, 1990, but have been modified to apply to the specific characteristics of the upper Sandy River and to clarify direction that may be confusing. An example of this would be that all Standards and Guidelines relating to scenic segments have been deleted since there are no scenic segments for area of river covered by this management plan. Standards and Guidelines that are new or are modifying the intent of the original Standards and Guidelines are highlighted with an asteric (*) before the specific Standard and Guideline.

A. General

- | | | |
|----|--|--|
| 1. | All management activities in the river corridors shall protect and/or enhance the identified outstandingly remarkable values. (FSH 1909.12, Chapter 8, 7/87). The outstandingly remarkable values shall be identified via environmental analysis for river-specific implementation management plans. River-specific plans shall be consistent with Management Area management direction. | A1-SAN-001
A1-SAN-002
A1-SAN-003 |
| 2. | The free-flowing characteristics of the river shall be protected (PL 90-542, Wild and Scenic Rivers Act, 1989.) | A1-SAN-004 |
| 3. | River characteristics necessary to support the existing classification of Wild or Recreational shall be protected during all management activities (47 CFR 173, 9/82). | A1-SAN-005 |
| 4. | Management activities shall be consistent with prescribed Recreation Opportunity Spectrum (ROS) classes (FSM 2311.1). | A1-SAN-006 |
| a. | Wild segments shall provide primitive non-motorized and/or semi-primitive non-motorized ROS settings. | A1-SAN-007 |
| b. | Recreational segments shall provide roaded natural ROS settings. | A1-SAN-008 |

B. Specific Resource Values

- | | | |
|-----|--|------------|
| 1. | Dispersed Recreation Facility and Site Construction, Administration and Management | |
| a. | Dispersed recreation improvements (e.g. trails) shall be provided to: | |
| (1) | Minimize site degradation in wild segments. | A1-SAN-009 |
| (2) | Provide for comfort and convenience of users in recreational segments. | A1-SAN-010 |

- b. River recreational use levels should be managed to maintain the prescribed ROS classes. A1-SAN-011
 - c. Recreational livestock use should be allowed in all segments, provided river banks, riparian vegetation, and scenic quality are protected from adverse impacts. A1-SAN-012
 - d. Recreational livestock may be tied, grazed or held overnight or for extended periods of time within the near-foreground areas (i.e. 100 feet) of campsites, trails, and key interest areas. A1-SAN-013
 - (1) Utilization of current year's vegetation growth should not exceed 30 percent (see Forestwide Range Management Standards and Guidelines). A1-SAN-014
 - (2) No more than 5 percent of an activity area should be in a detrimental soil condition from the combined impact of compaction, puddling and displacement (see Forestwide Soil Productivity Standards and Guidelines). A1-SAN-015
 - (3) Exposed mineral soil around campsites, trails and key interest areas should not exceed 25 percent of the activity area. A1-SAN-016
2. Developed Recreation Facility and Site Construction, Administration and Management
- a. Developed recreation improvements shall be provided to:
 - (1) Minimize site degradation in wild segments. A1-SAN-017
 - (2) Provide for comfort and convenience of users in recreational segments. A1-SAN-018
 - b. No new developed recreational sites shall be planned for wild segments. Existing developed recreation sites may be converted to dispersed sites. New developed sites may be allowed in recreational segments. A1-SAN-019
A1-SAN-020
A1-SAN-021
3. Wilderness
- Where B1 river corridors extend into A2 Wilderness Management Areas, A2 prescriptions predominate.
4. Visual Resource Management
- All management activities shall achieve the following visual quality objectives (VQO): A1-SAN-022
- a. The VQO for wild segments shall be Preservation as seen from the river, river banks, and trails within the B1 river corridor. A VQO of Retention may be allowed for recreation facilities. A1-SAN-023
A1-SAN-024

- *b. *The VQO for recreational segments within the corridor shall be Retention as seen from the river, river banks, Forest highways and roads, trails, and recreation facilities within the A1 river corridor. A VQO of Partial Retention may be allowed for structural facilities and fisheries habitat and restoration structures.* A1-SAN-025
A1-SAN-026
- c. Exceptions to the above VQOs may occur within "designated viewsheds" (see Forestwide Visual Resource Management Standards and Guidelines regarding designated viewshed VQOs). A1-SAN-027
- d. See Forestwide Visual Resource Management Standards and Guidelines for VQOs prescribed for trails.
- 5. Cultural Resources Management
See Forestwide Cultural Resources Standards and Guidelines.
- 6. Wildlife and Fisheries
 - a. Habitat improvement practices should be limited to those which are necessary for the protection, conservation, rehabilitation, or enhancement of river area resources. A1-SAN-028
 - b. Habitat improvement projects should not introduce non-native species that could significantly change the natural ecosystem. A1-SAN-029
 - c. Habitat improvement structures should mimic regular occurring natural events (as opposed to catastrophic); e.g. trees falling in and across the river, boulders falling in or moving down the river course, minor bank sloughing, erosion or undercutting, island building and opening or closing of existing secondary channels. A1-SAN-030
 - d. Habitat improvement structures shall not create unusually hazardous conditions or substantially interfere with existing, or reasonably anticipated, recreational use of the river such as fishing, kayaking, canoeing, rafting, tubing, or swimming. A1-SAN-031
- 7. Range Management
 - a. Existing commercial livestock grazing may be permitted, provided river banks and riparian vegetation are protected from adverse impacts (see Forestwide Range Standards and Guidelines regarding forage utilization). A1-SAN-032
 - b. Permits may be re-issued on vacant allotments if river related resource values are not compromised. Allotment Management Plans shall be consistent with Management Area management direction. A1-SAN-033
A1-SAN-034
 - c. Range improvements may occur in any river classification to protect or enhance river-related values. A1-SAN-035

- d. Corrals and loading chutes should not be permitted. A1-SAN-036
8. Timber Management
- a. Within wild river segments, regulated timber harvest shall be prohibited. Unregulated timber harvest and salvage activities may occur only for insect or disease control, fire, natural catastrophe, disasters, public safety or under specified conditions on valid mining claims (FSM 2354.42). A1-SAN-037
A1-SAN-038
- *b. *Within the recreational segment, regulated timber harvest should not occur. Timber harvest activities may occur but they shall be designed to restore, protect, or enhance identified river values or protect forest health and shall achieve the prescribed VQO throughout the river corridor.* A1-SAN-039
A1-SAN-040
- c. Timber salvage activities to harvest windthrown, insect attacked, fire damaged, diseased trees, or other similar natural tree mortality for protection of the Forest, Forest visitors or river-related resource values shall be permitted in the recreational segment. All river banks shall be protected during logging activities. A1-SAN-041
A1-SAN-042
9. Soil, Water and Air Quality
- a. Water quality shall be maintained or enhanced (See Forestwide Water Standards and Guidelines). A1-SAN-043
- b. Watershed management and improvement projects may be permitted. A1-SAN-044
- c. All wild and recreational rivers segments shall be managed to remain in a free-flowing and unpolluted state. A1-SAN-045
10. Minerals & Energy Management
- a. Mineral development under the mining (1872 Mining Law) and mineral leasing laws shall not be permitted within 1/4 mile of wild segment river banks. Provisions shall be made for valid existing mining and leasing rights. A1-SAN-046
A1-SAN-047
- *b. *Lands within the AI corridor for the recreational river segment shall be recommended for withdrawal from locatable mineral development under the mining law (1872 Mining Law). Provision shall be made for valid existing mining rights.* A1-SAN-048
A1-SAN-049
- c. All new dams, major water diversions, and hydroelectric power facilities shall be prohibited. A1-SAN-050
- d. Leaseable mineral (e.g. geothermal) permits shall include a "No Surface Occupancy" stipulation for that portion of the permit potentially affecting river resource values. A1-SAN-051
- e. Common variety mineral (e.g. sand and gravel) development shall not be permitted within any river segments. A1-SAN-052

- f. Plans of Operation for mineral exploration and development shall include reasonable, operationally feasible requirements to minimize conflicts with recreational activities and to protect the character of the landscape within the river corridor. A1-SAN-053
 - (1) Site disturbance from mineral activities shall be rehabilitated within 3 years following project completion. A1-SAN-054
 - (2) During project operation, disturbed soils shall be stabilized prior to the autumn high rainfall season. A1-SAN-055
 - g. All mineral exploration and development shall be done in a manner to protect river resource values. A1-SAN-056
11. Geology
- See Forestwide Geology Standards and Guidelines.
12. Lands and Special Uses
- a. National Forest System lands within river corridors shall be retained. See Forestwide Lands Program Standards and Guidelines. A1-SAN-057
 - b. Existing special uses, including recreation and non-recreation uses, may be allowed to continue where consistent with Management Area management direction. Special uses that do not meet Management Area direction shall be terminated or phased out. A1-SAN-058
A1-SAN-059
 - c. New special use permits may be issued within all segments when consistent with the Management Area management direction. A1-SAN-060
 - d. Construction of new utility and/or transmission lines (e.g. gas lines, geothermal and water pipelines, and electrical transmission lines) should not be allowed within any river segment. A1-SAN-061
 - e. Applications for licenses from the Federal Energy Regulatory Commission to construct any impoundment, water conduit, reservoir, powerhouse, transmission line, or other associated hydroelectric facility within any designated river segment shall be recommended for denial. A1-SAN-062
 - f. All non-hydroelectric dams not presently authorized by the Forest Service shall be prohibited. A1-SAN-063
13. Transportation Systems/Facilities; Travel and Access Management
- a. Within wild river corridors, new roads shall not be constructed and existing roads may be phased out and rehabilitated. A1-SAN-064

- b. Within recreational segments, new roads may be constructed. A1-SAN-065
 - c. Within the wild river corridors, motorized recreational use shall not be allowed. A1-SAN-066
 - d. Within the recreational river corridor, motorized use shall be limited. A1-SAN-067
 - (1) Motorized vehicles shall be permitted only on open roads. A1-SAN-068
 - (2) Off-road vehicles (ORV) may occur only on designated trails. A1-SAN-069
 - *(3) Motorized water craft use shall be prohibited in accordance with State of Oregon Marine board regulations for the upper Sandy River. A1-SAN-070*
 - e. Areas, roads and segments of rivers closed to vehicle use shall be posted. Administrative use of motorized vehicles shall be allowed in all river segments. A1-SAN-071
A1-SAN-072
 - *f. *Mountain bicycle use should occur only on roads and on trails designated for mountain bike use and off-trail travel should be discouraged. A1-SAN-073*
 - g. Pedestrian and equestrian use should be encouraged. A1-SAN-074
14. Fire Prevention and Suppression
- a. Off-road vehicle travel within the designated river corridors shall not be permitted except for emergency fire suppression purposes. A1-SAN-075
 - b. Use of tractors to construct firelines may be permitted only in emergency fire suppression situations. Fireline locations shall consider protection of river related resource values. A1-SAN-076
A1-SAN-077
 - c. Fire retardant "drops" should be directed to minimize entry of chemicals into water courses and to protect river values. A1-SAN-078
 - d. See Forestwide Forest Protection Standards and Guidelines.
15. Wood Residue Management
- a. See Forestwide Soils Productivity, Wildlife, and Forest Diversity Standards and Guidelines regarding coarse woody debris.
 - b. Prescribed burning may occur to protect or enhance river-related values. A1-SAN-079
16. Integrated Pest Management
- See Forestwide Timber Management Standards and Guidelines regarding Integrated Pest Management.

Chapter 4

Implementation Schedule

SANDY RIVER IMPLEMENTATION SCHEDULE SCHEDULE OF PLANNED ACTIVITIES AND COST ESTIMATES

This chapter outlines specific management actions to be implemented within each resource area. The plan, with its objectives (Chapter 2), management standards and guidelines (Chapter 3), the following actions, and the monitoring program (Chapter 5), make up the River Management Plan and are designed to provide for the balanced protection and enhancement of all the river's outstandingly remarkable values. Additional site specific analysis will still be needed to assess environmental effects prior to implementing any project. Dependent upon the analysis, projects may not be implemented or be modified to mitigate unacceptable impacts that may result from implementation. *Project implementation is dependent upon available funding. Projects may not be implemented if adequate funding is unavailable.*

RESOURCE	DESCRIPTION OF ACTIONS/ACTIVITIES	FISCAL YEAR	ESTIMATED COST
RECREATION Facilities	* Upgrade water system for McNeil and Riley Horse camp campgrounds to meet water quality standards. If feasible, may also run water lines to Lost Creek Campground.	1996-1998	\$ 150,000
	* Upgrade/Improve campsites in McNeil and Riley Horsecamp campgrounds to better define sites and design to meet the needs of smaller recreational vehicles (RV's).	1999-2001	\$ 110,000
	* Develop a barrier-free fishing platform in river corridor to allow better access to the river and/or tributaries for persons with disabilities. Fisheries and other values must be protected if developed. Project not to be developed if does not meet objectives of fish stock management direction identified in Sandy River subbasin plan or other applicable direction.	1999-2001	\$ 35,000
	* Construct entrance facility near junctions of Forest Roads 1825 and 1828 to provide information to forest visitors in the river corridor. Facility to be designed to provide information to the public either through signing or by being staffed dependent upon use levels in the river corridor.	1998-2000	\$ 70,000
	* Evaluate feasibility and need for group campground in river corridor and develop if needed and other resources are adequately protected. Group campground to be limited initially to a maximum of 3 sites each capable of accommodating 20-25 persons at one time.	1997-1999	\$ 20,000 feasibility, \$ 250,000 total if implemented
RECREATION Interpretive Facilities, Services, and Public Information.	* Develop a comprehensive interpretive plan for the river corridor. Plan would outline locations, types and focus of interpretive efforts and facilities in the river corridor, as well as costs and schedule for implementation of specific small scale interpretive items. Interpretation would primarily focus on natural attributes of the river corridor and their protection and enjoyment. These attributes include the unique geologic, botanical, fishery, wildlife, and scenic values, as well as other natural resource values in the area. Development of additional interpretive facilities and trails would require additional environmental analysis prior to development.	1997-1998	\$ 25,000
	* Complete Cascade Streamwatch interpretive facilities at the Three Creek sites as proposed in the Cascade Streamwatch Environmental Assessment. Appropriate mitigation measures shown in EA to be implemented to mitigate environmental effects from increased use in area resulting from visitors to facility, including necessary road improvements and coordination with Oregon Department of Transportation and Clackamas County Transportation Division.	1995-1998	\$ 350,000

RESOURCE	DESCRIPTION OF ACTIONS/ACTIVITIES	FISCAL YEAR	ESTIMATED COST
RECREATION Trails and Dispersed	* Evaluate and implement best method to close road to upper Ramona Falls trailhead and rehabilitate existing roadbed.	1996-1997	\$ 35,000
	* Improve lower trailhead parking and provide sanitation facilities. Replace existing bridge with new bridge that meets visual objectives and protects free-flowing character of the river. Location of bridge and trail to Ramona Falls from the lower trailhead may be relocated to improve the recreation experience and better meet recreation objectives.	1997-1999	\$ 220,000
	* Identify/evaluate dispersed camping sites/access points and harden acceptable locations to minimize impacts of heavy use along the river. Close/rehabilitate locations where resource damage is causing substantial impacts within riparian zone.	1995-1997	\$ 30,000
	* Develop sno-park to meet the needs of winter recreationists and design to incorporate other year-round uses to the extent possible. Location of sno-park would be near junction of Roads 1825 and Road 1800 (Lolo Pass Road)	2000-2002	\$ 120,000
	* Reroute Pacific Crest Trail away from the Sandy River Guard Station and provide natural screening to reduce user impacts to the Guard Station.	1997-1998	\$ 25,000
	* Close dispersed shooting site near junction of Roads 1800 and 1825 and direct users to alternate, suitable locations. Rehabilitate site to meet current Visual Quality standards.	1997-1998	\$ 15,000
	* Monitor boating use on the river every 5 yrs. Boating use is currently low, well below carrying capacity and not expected to reach capacity during planning horizon. When use appears to be reaching carrying capacity, a comprehensive Limits of Acceptable Change (LAC) process planning process will be implemented to further refine carrying capacity of the river. If use limits are reached or needed, a "freedom of choice" use allocation system will be used.	1995, 2000 2005	\$ 3,000 ea yr.
	* Develop and implement a comprehensive recreation monitoring survey and program utilizing LAC process to establish carrying capacity for remainder of corridor. Area within wild segment to be evaluated as part of Mt. Hood Wilderness planning efforts to allow for continuity of management direction throughout the entire wilderness area.	1996-1998	\$ 15,000
* Maintain winter road closure on Road 1825 to protect nordic skiing opportunities.	Ongoing	\$ 1,000/yr	
ACCESS AND TRAVEL MANAGEMENT	* Evaluate system and non-system roads and close if not needed for management of the river corridor.	1995-1997	\$ 20,000
	* Reconstruct Road 1825 bridge across Sandy river to accommodate higher levels of public use, resource protection, and public safety.	1999-2001	\$ 75,000
MINERALS	* Recommend withdrawal of lands within Recreational segment from locatable mineral development. Requires completion of EA and approval through BLM.	1995-1998	\$ 15,000

RESOURCE	DESCRIPTION OF ACTIONS/ACTIVITIES	FISCAL YEAR	ESTIMATED COST
HYDROLOGY Water Quality/ Quantity	* Develop and implement a program for baseline water quality and quantity , including temperature, turbidity, dissolved oxygen, pH, chemical (oil and gas), and macroinvertebrates in Clear Fork and Lost Creek and at trails crossing on river mainstem and Muddy Fork.	1996-2000	\$ 4,000/yr
	* Pursue and conduct watershed enhancement opportunities to reduce non-point source pollution and improve riparian area condition.	1995-1998	\$ 20,000
	* All projects with the potential to affect the free-flowing character of the river must have analysis completed to insure the free-flowing character is protected, (Section 7 analysis - see Appendix A)	Ongoing	Included in project costs
	* Develop parameters and Limits of Acceptable Change thresholds for water quality in Clear Fork and Lost Creek	1996-1998	\$ 5,000
FISHERIES	* Continue to work with ODFW in development of Sandy River Subbasin Fish Management Plan	1994-1995	\$ 5,200/yr.
	* Undertake habitat restoration/enhancement projects within tributaries and mainstem of river that would emphasize meeting the need of wild stocks of fish and be aimed at restoring the historical component of Large Woody Debris and other natural structures. Structures will be designed to protect free-flowing character of the river and to mimic naturally occurring events. Materials used will be of or mimic the appearance of natural materials. Those structures placed in the mainstem of the river below McNeil Campground will be designed to also minimize impacts to recreationists floating the river through design and adequate signing. All structures must be evaluated for impact to free-flowing character of river. See process in appendix A of river management plan.	Ongoing starting 1994.	\$ 750/structure
	* Identify, develop and/or improve current and additional river access points which protect river values.	Ongoing starting 1995	Dependent upon project scope
	* Work cooperatively with ODFW, other agencies, and landowners to improve anadromous habitat on the river and its tributaries.	Ongoing starting 1994	\$ 8,000/yr.
	* Develop a habitat monitoring program to provide feedback on habitat protection/improvement measures on public and private lands.	Ongoing starting 1995	\$ 3,000/yr
	* Evaluate impacts of management activities on TE&S species, limiting use where necessary to minimize impacts	Ongoing for specific projects	\$ 900/activity
	* Survey for presence of bull trout and potential habitat.	Ongoing	\$ 2,600/yr
	* Survey for presence of redband trout and potential habitat	1995-1998	\$ 8,600/yr
* Survey and evaluate streams, seeps and springs for presence/absence and potential habitat of the listed "sensitive" caddisflies.	1995-2000	\$ 2,000/yr	

RESOURCE	DESCRIPTION OF ACTIONS/ACTIVITIES	FISCAL YEAR	ESTIMATED COST
WILDLIFE	* Consult with US Fish and wildlife Service before proceeding with any management actions potentially affecting TE&S habitat or populations	Ongoing	\$ 600/yr
	* Work cooperatively with ODFW to determine habitat enhancement needs in corridor to meet both Forest Service and ODFW objectives. Undertake habitat improvement activities if they protect and/or enhance other river management objectives.	1995-1997	\$ 1,200/yr
	* Survey and evaluate cliff sites along river corridor for potential peregrine falcon presence, suitable habitat and hacking sites.	1995-1997	\$ 1,800/yr
	* Survey for presence of Goshawk and undertake habitat enhancement if needed.	1995	\$ 1,600
	* Survey and evaluate area in corridor for presence of wolverine and habitat effectiveness, particularly in wilderness.	1994	\$ 1,200
	* Evaluate impacts of recreational use on TE&S species, limiting use where necessary to minimize impacts.	Ongoing as needed	\$ 2,000/activity
	BOTANY	* Develop a comprehensive monitoring plan for plant communities in the river corridor.	1995
* Monitor plant communities in and around high use recreation areas and sites for evidence of undesirable impacts and develop and implement corrective measures as necessary.		1995, 1996, 1999, 2002, 2005	\$ 6,000
* Collect data from established ecology plots in alpine/subalpine area		1995, 1998, 2001,	\$ 750/yr
* Identify locations and sources of noxious weeds and non-native plants and undertake actions to reduce numbers and minimize spread.		1995-2000	\$ 5,000 +
* Seek partnership opportunities with universities and other organizations to develop a systematic botanical survey of the entire river corridor.		1995-1997	\$ 1,000/yr
* Develop interpretive pamphlets with instructions on how to protect botanical values in the corridor. Development of pamphlets would be tied to interpretive plan mentioned above.		1995	\$ 5,000
* Monitor impacts to mushrooms from harvest and if community is being adversely impacted, take corrective actions, including, if necessary, elimination of personal use mushroom harvest in the corridor.		1994-2004	\$ 6,000
* Monitor impacts to moss from moss harvest and to other harvested plants. Use photo points to monitor regeneration rates, species composition and coverage		Ongoing	\$ 200-500/yr

RESOURCE	DESCRIPTION OF ACTIONS/ACTIVITIES	FISCAL YEAR	ESTIMATED COST
SCENIC QUALITY	<ul style="list-style-type: none"> * Acquire scenic easements on private lands from willing sellers within corridor if considered important for maintaining scenic quality. * Evaluate potential locations for viewpoint development within corridor and develop viewpoints if other river values are protected and/or enhanced. Viewpoints would focus on providing additional views of Mt.Hood and other natural attributes in the area. * Evaluate areas in corridor not meeting current VQO standards. Develop plan for rehabilitation and implement as opportunities become available. 	<ul style="list-style-type: none"> As opportunities arise. 1995-1996 1995 	<ul style="list-style-type: none"> Variable \$ 4,000 \$ 4,000
CULTURAL RESOURCES	<ul style="list-style-type: none"> * Complete cultural resource inventories and assess effects of any proposed action or project that may potentially affect cultural resources and implement mitigation measures as necessary. * Evaluate found cultural resources and determine their eligibility to the National Register of Historic Places. * Protect cultural resources considered eligible for the National Register of Historic places or conserve values. Monitor eligible or evaluated properties as direct under Forest management plans. * Evaluate cultural significance of Sandy River Guard Station in conjunction with other shelters along the Timberline Trail. * Develop and implement a Management Plan for the Sandy River Guard Station.. 	<ul style="list-style-type: none"> Ongoing Ongoing Ongoing 1996-1997 1996-1997 	<ul style="list-style-type: none"> Variable Variable \$ 4,000/yr. \$ 10,000 \$ 15,000
PRIVATE LAND USE AND ACTIVITIES.	<ul style="list-style-type: none"> * Work with Clackamas County in review of current zoning regulations for compliance with Wild and Scenic River plan and effectiveness in implementation, including developing proposed changes to zoning ordinances and enforcement. * Provide feedback to Clackamas County on zoning variance requests and development proposals within the river corridor and how they relate to river management direction. 	<ul style="list-style-type: none"> Variable Ongoing 	<ul style="list-style-type: none"> \$ 2,500 \$ 1,000/yr

Chapter 5

Monitoring Program

MONITORING PROGRAM UPPER SANDY WILD AND SCENIC RIVER

The monitoring program below is the management control system governing the implementation of the River Management Plan. The specific objectives of the monitoring program are to determine whether: 1. planned Goals and Objectives are achieved; 2. management Standards and Guidelines are being followed; 3. management Standard and Guidelines are effective; 4. research beyond that identified is needed; and 5. if intensity of monitoring is commensurate with the risks, costs, and values involved in meeting plan objectives.

Implementation of the following monitoring elements will be based on the availability of funding. If adequate funding is not available, some monitoring activities may not take place. The Forest Service will make every effort to identify opportunities that would reduce actual cost for the monitoring. The following table outlines the key indicators, management standards and monitoring that will be conducted on the upper Sandy Wild and Scenic River by resource area.

RESOURCE VALUE TO BE MAINTAINED AND ENHANCED	KEY INDICATOR	MANAGEMENT STANDARD TO BE USED	MANAGEMENT ACTIONS TRIGGERED IF STANDARD IS NOT MET	MONITORING METHODS, SAMPLING PROCEDURE AND FREQUENCY
WATER QUALITY/ QUANTITY	Temperature	Temperature equal to or cooler than baseline established by 1995-1999 water years.	Identify possible sources of effluent. Increase and intensify sampling. Work with counties and DEQ to prepare corrective actions or plans.	Depending upon safe access grab samples will be taken at least five locations along mainstem river and tributaries on a bi-monthly basis for five years (95-99) to establish baseline, then on a quarterly (seasonally) basis thereafter. Other samples taken during significant "events" when possible. Responsibility: USFS District Fish Biologist. Cost: Initial \$7,000 and then \$5,000 annually
	Turbidity	Turbidity levels equal to or clearer than baseline established by 1995-1999 water years.		
	pH	Maintain pH between 6.5 and 8.5	Correct management practices or land use activities that may be contributing to temperature rise, turbidity, pH, reduced oxygen levels, or indications of gas/oil or chemicals.	
	Dissolved oxygen	Maintain dissolved oxygen equal to or greater than 90% of saturation at the seasonal low or 95% of saturation in spawning areas during the spawning through fry stages of salmonid fishes.		
	Chemical (oil and gas)	No oil and gas detectable either visually or by sense of smell.		
	Aquatic life	No negative change in macroinvertebrate indices of species and community composition in the Clear Fork, and Lost Creek; and Muddy Fork/mainstem at trail crossings as established in the 1995-1999 baseline.		

FISH HABITAT	<p>Quality and quantity of spawning gavels</p> <p>Rearing habitat and Pool quality</p> <p>Large Woody Material</p>	<p>Locate areas and measure substrate embededness, sediment deposition and frequency distribution during 1995, 2000. Maintain desired quality and quantity of spawning gravel established in baseline inventory.</p> <p>Any decrease in the inventory habitat type and extent on mainstem and major tributaries, maintain habitat quality and quantity at least at inventory levels.</p> <p>Any decrease in the number of large woody debris that meet minimum standard.</p>	<p>Identify cause of degradation to quality and quantity of habitat and mitigate or eliminate impact.</p> <p>Create additional habitat when possible through habitat improvement opportunities.</p>	<p>Conduct habitat inventories every five years, include area of spawning gavels.</p> <p>Select key sites, do substrate analysis annually for three years then every other year thereafter.</p> <p>Responsibility: USFS Fisheries biologists.</p> <p>Cost: \$ 7,600 every 5 yrs. for riparian surveys. \$ 1,200 for substrate analysis.</p>
FISH POPULATIONS	<p>Fish species composition</p> <p>Smolt production</p> <p>Creel census as indication of quality of sportfishing</p>	<p>Maintain species composition using inventory data and ODFW baseline data.</p> <p>Any decrease in smolt numbers compared to stream specific baseline information in excess of 10% basin wide mean for each year.</p> <p>Any decrease in five year average take of selected species.</p>	<p>Coordinate with ODFW to identify actions that may degrade wild fish species compositions or populations and assist in implementing mitigation or corrective measures.</p>	<p>Annual creel census, Marmot Dam Counts, redd counts on selected reaches, random shocking and inventory, report analysis of data every five years.</p> <p>Responsibility: USFS fisheries biologists in coordination with ODFW regional biologists.</p> <p>Cost: \$ 3,000 annually</p>
WILDLIFE HABITAT	<p>Populations of major species</p> <p>Amount and combination of habitat type</p>	<p>Negative change in river corridor use by selected species ie. neotropical birds, waterfowl, beaver, herptofauna, big game and listed species.</p> <p>No significant human-caused change in mix of habitat types within the corridor.</p>	<p>Identify cause of change, if human-caused correct practices or activities.</p>	<p>Conduct wildlife surveys on five year basis to correspond with habitat surveys. Count and record all nests, raptors, and waterfowl sightings on regularly scheduled surveys.</p> <p>GIS mapping of habitat type and extent (acres) using aerial photography interpretation, establish baseline year (1995) and replicate survey every five years.</p> <p>Responsibility: USFS natural resource specialist/wildlife biologists.</p> <p>Cost: \$ 2,000 annually; \$7,500 every 5 years.</p>

<p>RIPARIAN VEGETATION and WETLANDS</p>	<p>Amount of riparian habitat and wetlands .</p> <p>Proper functioning ecological condition as indicated by vegetative cover and streambank condition.</p>	<p>Riparian vegetation would be managed to maintain or enhance vegetative diversity, biomass, and percent cover at desired level determined during baseline monitoring to comply with Forest Plan direction.</p>	<p>Remove or eliminate source of impact (ie. close campsite roads, trails, etc.) if inventory assess extent of impact as unacceptable.</p>	<p>Conduct baseline riparian/wetland resource inventory and photo inventory. Continue to reassess at 5 year intervals. If funding is limited, just identify areas of resource damage. Visually monitor recreation and other development sites annually for resource damage. Based on level of funding, establish formal monitoring plots in high use areas.</p> <p>Responsibility: USFS botanist, fisheries biologist, and hydrologist.</p> <p>Cost: \$5,000 every 5 years.</p>
<p>BOTANICAL DIVERSITY</p>	<p>Ecological condition and trend as indicated by the area, amount and composition of species - focus on recreational sites and Old Maid Flats SIA.</p> <p>Stability of sensitive plant populations.</p> <p>Extent of noxious weeds</p> <p>Diversity and population size of mushrooms</p>	<p>Vegetation within the river corridor would be managed to promote existing natural ecological conditions and trends as determined by baseline inventories and monitoring plots.</p> <p>No reduction or loss of sensitive plant species or habitat.</p> <p>Prevention, reduction and eradication of noxious weeds.</p> <p>Mushroom populations within natural range of fluctuations.</p>	<p>Control, restrict or mitigate human caused activities as necessary. Implement short-term prescriptive activities to restore natural condition or biodiversity.</p>	<p>Conduct baseline vegetation inventory and photo inventory. continue to reassess at 5 year intervals. If funding is limited, concentrate efforts on areas of known resource damage.</p> <p>Visually monitor recreation and development sites annually for resource damage. If funding is available, establish formal monitoring plots in high use areas.</p> <p>Enter into a long-term monitoring study with PNW research station to evaluate matsutake mushroom populations.</p> <p>Responsibility: USFS botanists and ecologists.</p> <p>Cost: \$5,000 each effort start-up; \$1,000 - 2,500 afterwards.</p>
<p>HERITAGE RESOURCES</p>	<p>Integrity of heritage resource sites.</p>	<p>No irreparable damage of significant heritage resources by either human degradation or by natural processes.</p>	<p>Public information and education to build awareness of heritage resource values.</p> <p>Sites will be stabilized or its values are conserved through mitigation efforts.</p>	<p>Maintain heritage resource data base of river corridor.</p> <p>Monitor known sites annually to determine condition.</p> <p>Responsibility: USFS Archeologist</p> <p>Cost: \$2,000 annually</p>

<p>SCENIC RESOURCES</p>	<p>Projects, activities or modifications which alter landform, vegetation, water, or character within the viewshed as seen from the river and high use areas</p>	<p>Activities within river corridor and viewshed would be evaluated on how well they meet VQO's for river corridor and viewshed.</p>	<p>Management actions or developments (or proposed developments) not consistent with Wild and Scenic River classifications or scenic resource management objectives (including ROS standards) will be modified (i.e. screened) or proposals rejected.</p>	<p>Conduct a VRM inventory and study every five years to ensure projects and other human caused modifications are consistent with management standards. Include aerial photograph interpretation, key site inventory (photo points) and field (river view) assessments in analysis.</p> <p>Individual projects will be analyzed on a case-by-case basis to ensure protection of the viewshed and compliance to standards including county zoning/ development reviews for private land development; NEPA analysis of federal projects.</p> <p>Responsibility: USFS river planner and landscape architect.</p> <p>Cost: \$ 2,000 - 4,000 every 5 years. Project specific analysis would vary based on the extent of the project.</p>
<p>RECREATION</p>	<p>Key indicators and standards to be established with implementation of Limits of Acceptable Change (LAC) inventory, survey and analysis. (The following represents items most likely to be included).</p> <p>Quality of Experience as indicated by conditions of congestion or crowding, use levels, safety, reported incidents of conflict such as site competition, vandalism and trespass</p>	<p>Established by user/visitor expectation survey and landowner survey to establish "carrying capacity" or acceptable levels of use.</p> <p>(Physical site condition and environmental impacts and monitoring contained in recreation site day/camp use site and road/trail sections as well as under botany, ecology and wildlife sections)</p> <p>Numbers of encounters with other recreationists (groups) per day.</p> <p>Numbers of reported conflicts, trespass/vandalism reports or safety incidents recorded annually.</p> <p>Recreation visitor counts, trail user counts, vehicle counts (parked and road).</p> <p>Number of days campground and parking lot capacity(s) exceeded.</p> <p>Number and type of non-motorized recreation opportunities/activities</p>	<p>A combination of in-direct (information, education, signing, site design, etc.) and direct (enforcement patrols, site closures, seasonal restrictions, permits, etc.) management actions and controls would be utilized emphasizing in-direct methods first.</p> <p>If above methods are not effective, use may need to be limited through use of permits or other more direct methods of visitor control, especially within the wilderness. Specific method to limit use in wilderness would be determined in Mt. Hood Wilderness planning efforts to insure consistency of management direction throughout the wilderness, of which the wild segment of the river corridor is a part.</p>	<p>Conduct LAC survey and develop monitoring program, repeat every ten years.</p> <p>Responsibility: USFS River Planner</p> <p>Cost: \$20,000 for survey and monitoring program development</p>

<p>ROADS AND TRAILS</p>	<p>Road erosion and damage related to roadside vegetation and facilities</p> <p>Accidents on roads to indicate safety problems.</p> <p>Trail erosion and damage related to trailside vegetation and bare ground</p>	<p>Confine motorized use to designated roads. Maintain roads to established federal or state standards.</p> <p>Maintain trails to established federal standards. Prevent multiple trail or trail networking using indirect methods. Trail use and design will be in keeping with Recreation Opportunity Spectrum (ROS) experience level and visual management standards.</p> <p>Evaluate user made trails for damage to resources, especially for trails potentially being used by Off Highway Vehicles (OHV).</p>	<p>Increase road maintenance frequency. Reconstruct/relocate roads, improve bridges, parking lots, trails and related facilities (ie. signs, vehicle barriers, etc.) to resolve unlawful access, resource damage, and road safety problems. Closure of unauthorized roads and trails where resource damage is taking place.</p> <p>Develop, maintain and replace signing as needed.</p> <p>Increase trail maintenance frequency. Reconstruct/relocate trails to reduce trail networking and encourage appropriate use. Keep trail maps and information current.</p> <p>Actively close trails where unauthorized OHV use is taking place.</p>	<p>Monitor routine road maintenance needs annually. Utilized feedback from visitor contact. Monitor any accident reports on forest roads to identify safety problems.</p> <p>Monitor routine trail maintenance needs annually. Establish monitoring points along high use trails to measure trail depth, width and drainage. Remeasure points and map/inventory trails every five years.</p> <p>Responsibility: USFS river planner/outdoor recreation planner and transportation planner.</p> <p>Cost: \$2,000 annually for survey/monitoring. Cost for correction of problems varies by project.</p>
<p>DISPERSED CAMP AND DAY USE SITES</p>	<p>Soil stability</p> <p>Vegetative loss</p> <p>Tree Damage</p> <p>Fire rings</p> <p>Human Waste</p> <p>Litter Accumulation</p> <p>Facility Damage</p>	<p>Impacts to campgrounds and dispersed use areas will range between light and extreme to be based on subjective judgement and objective measurement regarding erosion, vegetative change, facility damage, and accumulation of litter as follows:</p> <p>Light: Previous ground vegetation intact allowing natural erosion to occur. Facility damage and litter is not evident. The site has experienced only minimal physical changes.</p> <p>Moderate: Vegetative growth is somewhat retarded allowing minor abnormal erosion to occur. Traces of litter can be found within and adjacent to the site. Minor vandalism, repairable by maintenance, is occurring on facilities such as tables, signs etc. Physical changes to the site could include: minor tree limbing or damage, movement of rocks or semi-stationary objects, establishment of fire rings, etc.</p>	<p>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 emphasizing in-direct methods first, for example:</p> <ol style="list-style-type: none"> 1. Increased user education efforts in "minimum impact" camping techniques (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. 	<p>Inventory and assess all existing and proposed sites within the river corridor.</p> <p>Remeasure and assess all sites once every three years, or when conditions indicate need.</p> <p>Utilize feedback from routine patrols and biological/wildlife monitoring programs,</p> <p>Responsibility: USFS river planner/outdoor recreation planner</p> <p>Cost: \$ 2,000 every 3 years</p>

CAMP AND
DAY USE
SITES
(continued)

Heavy: Use area vegetation is gone but adjacent vegetation still intact. Abnormal erosion within the site is correctable through maintenance. Major littering is evident within and adjacent to the site and can be corrected through maintenance. Major vandalism, though repairable, is occurring on facilities and physical features such as tables, rocks, trees, and other site characteristics. Physical changes to the site could include: moderate tree limbing/damage, beginning tree root exposure, trails radiating from the site, human caused changes to the layout of the use area (trenching, movement of earth or facilities), evidence of human waste etc). All impacts to camp and dispersed use areas could be resolved through routine maintenance.

Extreme: Use area vegetation is gone and adjacent vegetative growth is retarded allowing abnormal erosion to occur within and adjacent to the site. Maintenance can no longer correct soil and vegetative impacts without allowing for temporary closure of the site. The site experiences perpetual littering or dumping. Major vandalism can be corrected through maintenance of facilities but not for vandalism to physical features such as rocks, trees, and other features. Physical changes to the site could include: dead or cut trees, extensive tree root exposure, heavy erosion, compacted soil restricting reestablishment of indigenous vegetation within and adjacent to the site, changes in species composition, major trails and satellite areas radiate from site. Maintenance can no longer sustain long term use without temporary closure to allow natural rehabilitation to occur.

Appendix A

Water Resource Project Evaluation

Procedure To Evaluate Water Resources Projects

Introduction

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

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

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

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

"... any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction of developments which would affect the free-flowing 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 the Forest Service Handbook (FSH 1909.12, chapter 8). The balance of this paper describes a standardized analysis procedure that incorporates the following principles:

- Effects will be judged in the context of the legislation designating the affected wild and scenic river and the management objectives for the river as defined in the comprehensive river management plan. (In the case of study rivers, effects are judged in the context of relevant Forest Plan standards and guidelines and the potential affect of the activity on the river's eligibility.)
- 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.)
- Permissible water resources projects will, to the extent practicable, maintain or enhance the free flowing characteristics of the river.
- Water resources projects may be permitted even though they may have an effect on free flowing characteristic if:
 - 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;
 - associated impacts on free flowing characteristics of the river are minimized to the extent practicable; and,
 - the proponent and manager of the project is a federal, state, or local governmental entity.

Procedure

Background

In developing this procedure we recognize that:

- It is necessary to provide a temporal and spatial context for evaluating river related proposals. The wild and scenic river management planning process should result in a clear statement of long term management goals and objectives for free-flow, water quality, riparian areas and floodplains, and the outstandingly remarkable and other significant resource values designated by statute.
- Section 7 and promulgating rules (36 CFR 297 Forest Service) 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.

Step-by-Step Procedure

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

1) *Establish Need and Evaluate Consistency with Management Goals and Objectives*

The first step is to define the need for the proposed activity 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 judgment.

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.

- Project proponent(s)
- Purpose (clearly describe the need for the project)
- Location
- Duration of proposed activities
- Magnitude/extent of proposed activities
- 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.

- What is the position of the proposed activity relative to the stream bed and banks?
- Does the proposed activity result in changes in:
 - Active channel location?
 - Channel geometry (i.e. cross-sectional shape or width/depth characteristics)?
 - Channel slope (rate or nature of vertical drop)?
 - Channel form (e.g. straight, meandering, or braided)?

- 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.

- What is the position of the proposed activity relative to the riparian area and floodplain?
- Does the proposed activity result in changes in:
 - Vegetation composition, age structure, quantity, vigor, etc.?
 - Relevant soil properties such as compaction percent bare ground, etc.?
 - 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.

- What is the position of the proposed activity relative to the uplands?
- Does the proposed activity result in changes in:
 - Vegetation composition, age structure, quantity, vigor, etc.?
 - Relevant soil properties such as compaction, percent bare ground, etc.?
 - Relevant hydrologic properties such as drainage patterns, the character of surface and subsurface flows, etc.?
- Will changes in upland conditions influence archaeological, cultural, or other identified significant resource values.

6) *Evaluate and Describe How Changes in On-Site Conditions Can/Will Alter Existing Hydrologic or Biologic Processes*

Evaluate potential changes in river and biological processes by quantifying, qualifying and modeling as appropriate.

- Does the proposed activity affect:
 - Ability of the channel to change course, re-occupy former segments, or inundate its floodplain?
 - Streambank erosion potential, sediment routing and deposition, or debris loading?
 - The amount or timing of flow in the channel?

- Existing flow patterns?
- Surface and subsurface flows?
- Flood storage (detention storage)?
- Aggradation/degradation of the channel?
- Does the proposed activity affect biological processes such as:
 - Reproduction, vigor, growth and/or secession of streamside vegetation?
 - Nutrient cycling?
 - Fish spawning and/or rearing success?
 - Riparian dependent avian species needs?
 - Amphibian/mollusk needs?

7) *Estimate the Magnitude and Spatial Extent of Potential Off-Site Changes*

Address potential off-site, or indirect effects of the proposed activity, acknowledging any uncertainties (i.e., a risk analysis).

- Consider and document:
 - Changes that influence other parts of the river system.
 - The range of circumstances under which off-site changes might occur (e.g., as may be related to flow frequency).
 - The probability or likelihood that predicted changes will be realized.
- 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*

- Review steps 3 - 7 looking independently at the element of time.
- 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.

Section 7 Determination

Based on the analysis of steps 3-9 document:

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

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

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

- 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;
- the associated impacts on free flowing characteristics of the river are minimized to the extent practicable; and,
- 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) 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 is the responsible official (reference FSM 2354.04e). If there is no other federal agency "assistance" for a project on a 3a or 5a river, the appropriate line officer signs the decision document. Decision documents for water resources projects on a 5d river are signed by the appropriate line officer.

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 is not intended to make the final decision.

Summary

These procedures were developed to analyze projects that have the potential to affect the free-flowing condition and/or outstandingly remarkable values of designated and study wild and scenic 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 judgment within the requirements of the Act.

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

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

Appendix B

Proposed Corridor Boundary Description

Proposed Corridor Boundary Description

Listed below is the legal description of the proposed upper Sandy National Wild and Scenic River boundary, located within Sections 24, 25, 26, Township 2 South, Range 7 East; Sections 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 29, 30, Township 2 South, Range 8 East; and unsurveyed sections 23, 24, 25, 26, Township 2 South, Range 8 1/2 East; Willamette Meridian, Clackamas County, Oregon, within the Zigzag Ranger District of the Mt Hood National Forest. More particularly described as:

Beginning at the Southwest Section Corner of Section 26, T2S, R7E; thence easterly along the section line between sections 26 & 35, approximately 990 feet to the intersection with the Mt Hood Wilderness Boundary; thence northeasterly along the Mt Hood Wilderness Boundary to the intersection with the Range line between sections 25 & 30, T2S, R7 & 8E; thence North along the Range line to a point 200 feet south of and perpendicular to the thread of Lost Creek, thence northeasterly parallel to and 200 feet southeasterly of the thread of Lost Creek to a point 200 feet southwesterly of and perpendicular to the thread of Short Creek; thence southeasterly parallel to and 200 feet southwesterly of the thread of Short Creek, across Forest Service road #1825-380, to a point 100 feet southerly of and perpendicular to the centerline of FS road #1825-380; thence northerly and then easterly parallel to and 100 feet easterly and southerly of the centerline of FS road #1825-30 to a point on the toe of the slope Cape Horn, Lat 45-22-57.5 N, Long 121-51-23.3 W; thence northerly and then easterly along the toe of the slope of Cape Horn to a point 200 feet southerly of and perpendicular to the thread of Lost Creek, Lat 45-23-05.4 N, Long 121-50-57.3 W; thence southeasterly parallel to and 200 feet southwesterly of the thread of Lost Creek, crossing an unnamed drainage into Lost Creek, to a point 200 feet southerly of and perpendicular to the junction of the thread of Lost Creek and the unnamed drainage, Lat 45-22-44.4 N, Long 121-49-59.3 W; thence northeasterly parallel to and 200 feet southeasterly of the thread of the unnamed drainage, crossing FS road #1825-109, to a point on the toe of a west slope, Lat 45-22-49.4 N, Long 121-49-34.3 W; thence northeasterly, crossing the unnamed drainage, and following the toe of the slope to a point Lat 45-23-16.4 N, Long 121-48-14.3 W, where the designation of the Sandy Wild & Scenic River changes from recreational to wild; thence continuing along the toe of the slope to a point on the Mt Hood Wilderness Boundary, Lat 45-23-05.4 N, Long 121-47-56.8 W; thence southeasterly on a straight line approximately 6250 feet to a point on a ridge, Lat 45-22-26.4 N, Long 121-46-50.8 W; thence easterly on a straight line, crossing Rushing Water Creek, to a point in the thread of an unnamed drainage which flows into the Sandy River, Lat 45-22-26.4 N, Long 121-46-29.3 W; thence southerly ascending the thread of the unnamed drainage to a point that is 1/8 mile southerly of and perpendicular to the thread of the Sandy River, Lat 45-22-14.9 N, Long 121-45-54.8 W; thence easterly parallel to and 1/8 mile southerly of the thread of the Sandy River to a point 1/8 mile southerly of and perpendicular to the head waters of the Sandy River, Lat 45-22-26.4 N, Long 121-43-43.8 W; thence northwesterly on a straight line to a point 1/8 mile northerly of and perpendicular to the head waters of the Sandy River, Lat 45-22-38.4 N, Long 121-43-50.3 W; thence westerly parallel to and 1/8 mile northerly of the thread of the Sandy River to the intersection with an unnamed drainage which flows into the Sandy River, Lat 45-22-25.9 N, Long 121-45-41.3 W; thence northwesterly on a straight line to the crest of a ridge, Lat 45-22-32.4 N, Long 121-45-46.3 W; thence northwesterly descending along the ridge to a point 200 feet northerly of and perpendicular to the thread of an unnamed drainage, Lat 45-22-49.4 N, Long 121-46-14.8 W; thence westerly parallel to and 200 feet northerly of the thread of Ramona Creek to a point 200 feet northerly of and perpendicular to FS trail #797; thence northwesterly parallel to and 200 feet northerly of FS trail #797 to a point 200 feet northerly of and perpendicular to the thread of Ramona Creek; thence northwesterly parallel to and 200 feet northeasterly of Ramona Creek to a point on the Mt Hood Wilderness Boundary, Lat 45-23-19.9 N, Long 121-47-37.8 W; thence northerly along the Mt Hood Wilderness Boundary, crossing the Muddy Fork of the Salmon River, to a point in the thread of an unnamed drainage which flows into the Muddy Fork, Lat 45-23-45.9 N, Long 121-47-33.3 W, said point designating where the Sandy Wild & Scenic River changes from Wild to Recreational; thence westerly on a straight line to the junction of Bald Mtn Trail #784 and a point 200 feet north of and perpendicular to the thread of the Muddy Fork; thence southwesterly parallel to and 200 feet northerly of the thread of the Muddy Fork to a point on

the toe of the southern slopes of Last Chance Mountain, Lat 45-23-23.9 N, Long 121-50-20.8 W; thence northwesterly along the toe of the slope to a point on the easterly edge of a sharp curve on FS road #1828, Lat 45-23-30.4 N, Long 121-50-49.8 W; thence westerly, crossing FS road #1828 to a point 100 feet northerly of and perpendicular to the centerline of FS road #1828; thence westerly parallel to and 100 feet northerly of the centerline of FS road #1828 to a point on the toe of the slope, Lat 45-23-34.9 N, Long 121-51-22.3 W; thence northerly along the toe of the slope to a point crossing the Clear Fork of the Sandy River, Lat 45-23-53.4 N, Long 121-51-22.3 W; thence southerly along the toe of the slope to a point 100 feet northerly of and perpendicular to the centerline of FS road #1828, Lat 45-23-31.9 N, Long 121-51-34.8 W; thence southwesterly parallel to and 100 feet northwesterly of the centerline of FS road #1828, to a point 100 feet northwesterly of and perpendicular to the junction of FS roads #1828 and #1825; thence southwesterly parallel to and 100 feet northwesterly of the centerline of FS road #1825, to a point, Lat 45-22-59.4 N, Long 121-52-23.8 W, thence westerly on a straight line to a point in the centerline of FS road #18, Lat 45-22-59.4 N, Long 121-52-26.3 W, thence southwesterly along the centerline of FS road #18, to its intersection with the section line between sections 26 and 27, T2S, R7E., thence south on the section line between sections 26 and 27, T2 S, R7E, approximately 2640 feet to the point of beginning.

This is a preliminary boundary description subject to change through ground verification and other factors.

Appendix C

List of Preparers

List of Preparers

Interdisciplinary Team

John Davis, silviculturist for the team, has a B.S. in forestry from the University of Minnesota. He also has 2 years of graduate studies in silviculture from the University of Washington. He has 10 years of planning experience and has been on the Mt. Hood National Forest since 1983.

Tom Deroo, geologist for the team, has a B.S. in geology from the University of Washington. He has 14 years of experience as a geologist, all with the Forest Service. He has worked on the Mt. Hood National Forest since 1986.

Carol Hughes, wildlife biologist for the team, has a B.S. in Natural Resources with a major in Wildlife Biology from Ohio State University. She has 4 years of experience in planning and wildlife biology, with the last 3 years on the Mt. Hood National Forest.

Jeff Jaqua, cultural resource specialist for the team, has a B.A. in anthropology from the University of Montana and a B.S. in zoology from Montana State University. He has also pursued graduate studies in archeology at Portland State University and University of Idaho. He has worked for the Mt. Hood National Forest since 1978.

Gary Loeffler, landscape architect for the team, has a B.S. in biology from Oregon State University; a B.L.A. in Landscape Architecture from University of Oregon; and an M.R.P. in Regional Planning and Landscape Architecture from the University of Pennsylvania. His Forest Service work spans 22 years as a landscape architect on three forests, as well as providing assistance to several other forests throughout the Pacific Northwest.

Paul Norman, recreation specialist and team leader for the team, has a B.S. in Outdoor Recreation from Colorado State University. He has 14 years of planning experience on the Mt. Hood and Sierra National Forests. Prior to 1978, Paul was in private forestry consulting.

Diann Sheldon, fisheries biologist for the team, has a B.S. in Ecology and Evolutionary Biology from the University of Arizona. She has 5 1/2 years of experience in planning and fisheries biology, with the last 4 1/2 years being on the Mt. Hood National Forest.

Molly Sullivan, botanist for the team, has a B.A. in botany from the University of Hawaii and a M.S. in botany from the University of Rhode Island. She has 13 years experience in planning, botany and aquatic ecology.

Sharon Traxler, transportation planner for the team, has 13 years experience in road management/transportation planning on the Mt. Hood National Forest.

Debi Urich, fisheries biologist for the team, has a B.S. in Fisheries Science from Oregon State University. She has worked as a fisheries biologist since 1986 on the Mt. Hood National Forest.

The following people provided valuable technical assistance

Karen Austin, Wildlife
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