Upper Chattooga River Visitor Capacity Analysis
Data Collection Reports

The Forest Service is conducting a Visitor Capacity Analysis and is employing a modified "Limits of Acceptable Change" (LAC) planning framework for evaluating visitor use and potential impacts on the environment. Several types of information and analyses were needed as part of this analysis, as described in *Upper Chattooga River Visitor Capacity Analysis Implementation Plan for Data Collection Methods* (USFS, 2006). This document describes one element of those efforts, the ***Capacities on other Wild and Scenic Rivers: seven case studies*** - a review of capacity issues on seven W&S with similarities to issues on the Upper Chattooga. This report provides examples of how other planners have interpreted laws and mandates, conducted analyses, or arrived at capacity decisions on other rivers.

A summary and integration of key findings from these collective efforts is provided in *Assessing Capacity and Conflict on the Upper Chattooga River* (CRC, 2007). Information from these efforts will be incorporated into the LAC effort to assess visitor capacity decisions on the Upper Chattooga. At the conclusion of the LAC effort, the Forest Service plans to develop a proposed action and alternatives for review through a National Environmental Policy Act (NEPA) process prior to implementation.

This document is one of several describing methods and findings from the data collection efforts. It serves as one of several "supporting reports" to the *Capacity and Conflict Report*. The complete list of reports includes:

- ***Chattooga River History Project, Literature Review and Interview Summary*** *(Tetra Tech, 2006)* – a history of Chattooga recreation decision-making that documents the basis for the 1976 boating ban and similar issues in order to help frame issues in the current analysis.

- ***Capacities on other Wild and Scenic Rivers: seven case studies*** *(Diedrich, 2007)* - a review of capacity issues on seven W&S with similarities to issues on the Upper Chattooga. This report provides examples of how other planners have interpreted laws and mandates, conducted analyses, or arrived at capacity decisions on other rivers.

- ***Use Estimation Workshop Summary*** *(Berger and CRC, 2007)*– summary of workshop conducted with resource agency personnel to help consolidate and summarize use information by capitalizing on extensive agency knowledge as well as some existing user surveys and creel surveys.

- ***Limited Use Monitoring Summary*** *(Berger, 2007)* – summary of data collected through the use monitoring conducted by the public, Forest Service and contractor of vehicle counts within selected access locations along the Chattooga River Corridor.

- ***Literature Review Report*** *(Louis Berger, 2007)* – Literature review and summary of information from existing studies on the Chattooga or studies /planning from other similar settings; includes the following components:

  - *Recreation-Related Social Impacts and Standards* - information related to the relationships between use and impacts and the "evaluative side" of the social impacts issue, including which impacts are most important, tolerances for those impacts, and which management actions tend to be used and supported to address them.

  - *Recreation Related Trail/Site Impacts* - information about relationships between use and biophysical impacts, potential standards for those impacts, and the acceptability of management actions to address them.

  - *Recreation-Related Wildlife Impacts* - information about relationships between recreation use and wildlife impacts, potential standards for those impacts, and the acceptability of management actions to address them.

  - *Recreation Related Flow Preferences* - information about opportunities and flow preferences, particularly related to other rivers similar to the Chattooga.

- ***Proxy River Information*** *(USFS 2007)* – summary of management and flow related information for "similar-type" rivers to the Chattooga River as identified through public input.

- ***Biophysical Monitoring Information on the Chattooga River*** *(USFS 2007)* - information about current conditions in the corridor, including maps of existing trails, and a summary of other biophysical-related information that is relevant to Chattooga River capacity issues.

- ***Hydrology Issues on the Upper Chattooga River*** *(USFS 2007)* - This report summarizes recreation-relevant hydrology information for the upper river, including (1) rating curves and basin areas for staff gages at all bridges; (2) relationships between the Burrells Ford gage and the USGS Highway 76 gage; (3) summary hydrology for the period of record at the Highway 76 gage; and (4) extensions to the Burrells Ford gage.

- ***Expert Panel Field Assessment Report*** *(Louis Berger, 2007)* – report for the expert panel field assessment conducted to gather information about boating and angling opportunities on the upper Chattooga River, with particular attention to boater and angler flow preferences for these flow-dependent activities.

Introduction

The Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC) is developing several user capacity-related case studies for an in-progress technical report addressing this subject. The enclosed seven examples are provided in advance to the planning team for the Chattooga Wild and Scenic River (WSR) for consideration in their capacity analysis and public planning efforts.

This information has been gleaned from the comprehensive river management plan (CRMP), and related environmental analysis and decision under the NEPA for each river. The content was reviewed by those involved in the planning and/or management of each river, with the results section developed from interview and further review by principal(s).

The initial case studies were chosen to represent rivers with a diversity of capacity-related issues. This first iteration includes rivers managed by the Forest Service and in the west because of the IWSRCC principal author's familiarity with, or ease of securing, necessary information. However, these case studies, and knowledge of similar rivers in other agencies and other parts of the country, suggest the issues, analyses, and potential outcomes from user capacity-related decisions are generally similar. Other case studies, representing agency and geographic diversity, will be included in the final IWSRCC technical report.

Preliminary conclusions drawn from the current case studies include the following:

- Assessing recreation capacity requires establishing, through a public process, a detailed description of recreation as an outstandingly remarkable value (ORV) or as a public use in the WSR corridor – i.e. establish desired conditions. This description includes defining the types and attributes of recreation that contribute to determining recreation an ORV or as an important activity in the river corridor if not an ORV.

- The desired conditions for recreation and other ORVs provide the necessary framework for judging whether river values (ORVs, water quality and free-flowing condition) are protected and, to the extent practicable, enhanced.

- The quality of, and impacts from, recreation use are an issue on all the case study rivers. Recreation quality depends on both social (experiential) and biophysical conditions, as those conditions may be affected by the types and amounts of recreation use that occurs in the river corridor.

- User capacity issues are addressed through decisions about the type, level, and nature of recreation activities to be accommodated in the area. Management tools to address the impacts of recreation use may include: 1) facility infrastructure or other development to reduce the impacts or accommodate the volume of use; 2) education efforts to encourage appropriate recreation behaviors that minimize impacts; 3) regulations that affect the type of use or user behaviors that cause impacts; or, 4) use limits or restrictions that specify how much use it too much (or what types of uses are acceptable). These actions are tied to protecting recreation as an ORV and other river values.

Establishing User Capacities on WSRs
3/12/07

CASE STUDIES

North and South Forks of the Kern WSR

Designation Statistics

- P.L. 100-174, 11/24/87
- California
- North Fork Kern River – 78.5 miles from its headwaters located within Sequoia National Park to the Kern/Tulare County line
  - Segment 2 begins at the southern boundary of the Sequoia National Park (Segment 1 is within the Park; refer to discussion of amendatory act below) and flows to the Forks of the Kern at the Golden Trout Wilderness (GTW) boundary (20.5 miles classified as wild)
  - Segment 3 begins at the southern boundary of the GTW and flows to a point 5,600 feet upstream of Johnsondale Bridge (13.2 miles classified as wild)
  - Segment 4 begins 5,600 feet upstream of Johnsondale Bridge to the Tulare/Kern County line (17.8 miles classified as recreational)
- South Fork Kern River -- 72.5 from its headwaters within the GTW, Inyo National Forest, to the southern boundary of the Domeland Wilderness, Sequoia National Forest
  - [There is no segment 1.]
  - Segment 2 begins at the southern boundary of the Domeland Wilderness and extends upstream to northern boundary of the Domeland Wilderness (27 miles classified as wild)
  - Segment 3 begins at the northern boundary of the Domeland Wilderness and extends upstream to the boundary of the South Sierra Wilderness in section 31, T. 21 S., R. 36 E. (3 miles classified as recreational
  - Segment 4 begins at the boundary of the South Sierra Wilderness in section 31, T. 21 S., R. 36 E. and extends upstream to South Sierra Wilderness boundary in section 14, T. 20 S., R. 35 E. (14.3 miles classified as wild)
  - Segment 5 begins at the South Sierra Wilderness boundary in section 14, T. 20 S., R. 35 E. and extends upstream to the weir just south of the GTW (7 miles classified as scenic)
  - Segment 5A begins at the weir just south of the Golden Trout Wilderness and extends upstream to the GTW boundary (1.2 miles classified as wild)
  - Segment 6 begins at the GTW boundary and extends upstream to the river's headwaters (20.0 miles classified as wild)
- The amendatory act directed that the boundary, classification and development plans for the portion within Sequoia National Park be fulfilled by the National Park Service through appropriate revision of the Park's General Management Plan. The act further directed that "no developments or use of park lands shall be undertaken that is inconsistent with the designation of such river segment."

- ORVs:

North Fork Kern	
Segment	ORVs
2	Scenic, recreation, geology, fisheries, heritage and vegetation
3	Scenic and recreation
4	Scenic, recreation and wildlife

South Fork Kern	
Segment	ORVs
2	Scenic, recreation, geology and heritage
3	Heritage
4	Scenic, recreation and heritage
5	Scenic, recreation, geology, fisheries, heritage and vegetation
5A	Scenic, recreation, geology, fisheries, and vegetation
6	Scenic, recreation, geology, fisheries, and vegetation

Description of ORVs

North Fork

Segment 2:

Scenery: View down the U-shaped canyon, the postpile formations and the lakes, pools and waterfalls.

Recreation: Outstanding recreation experience including excellent hiking, horseback riding (pack trips), camping, fishing, and solitude.

Geology: The North Fork Kern River canyon may be the longest, linear glacially-sculpted valley in the world. It contains regionally unique features referred to as Kernbuts and Kerncols. These rounded to elongated (parallel to the axis of the canyon) granitic knobs (Kernbuts) and the depressions between them (Kerncols) were first identified and named in the Kern Canyon. The Kaweah Peaks, Pluton-Kern Canyon Fault is a unique feature of geologic study and observation in the unraveling of the geologic and tectonic history of the southern Sierra Nevada. Big and Little Kern Lakes and the large debris landslide that created them provide one of the few historical examples of a landslide damming a major river and forming a canyon-wide lake. This has created a unique opportunity to observe natural successional stages in the life span of a lake.

Fisheries: Deep pool habitat that supports a good population of wild trout and also vividly colored hybrid trout.

(South Fork) Segment 2, continued:
Heritage: Large multi-occupation areas characterized by several loci of bedrock mortars, dense lithic scatters, and middens.

Vegetation: Regionally uncommon wetland habitat at Kern Lakes and the alkaline seep at the Forks of the Kern. The wetland habitat contains several uncommon aquatic and marsh species; the alkaline seep also supports several uncommon plants.

Segment 3
Scenery: The segment is characterized by a V-shaped valley, which gently bends around or disappears behind canyon walls into a linear series of river views. The area is sharply contrasted by the spiked granite protrusions of the Needles formation, the basalt plateau formation above Needles Camp, and the sharp edges of occasional rock ledges that run down the faces. Creeks cascade down smooth white granite bedrock that contrasts with the rough, darker colors of the adjacent metamorphic formation. Segment contains large, clear pools framed by rock sides, several waterfalls, and series of cataracts.

Recreation: Outstanding recreation experience including whitewater boating, excellent hiking, camping, fishing and solitude.

Segment 4:
Scenery: The segment is characterized by its V-shaped canyon as viewed from river and highway; the contrast between rock-boulders; free-flowing water; variety of vegetation; and rolling, grassy hills.

Recreation: Many and varied on-river and in-corridor recreation activities.

Wildlife: The only known habitat for a rare salamander.

<u>South Fork</u>
Segment 2:
Scenery: Whitewater, waterfalls, large granite outcrops and domes that are interspersed with open areas.

Recreation: Outstanding recreation experience in a wilderness setting.

Geology: The Dome Land Wilderness section is primarily dominated by Mesozoic granitic rock with numerous domes. Three major Tertiary volcanic outcrops lie between Taylor and Manter Creeks. There are several small falls along the South Fork in the Dome Lands Wilderness, especially on Taylor and Manter Creeks. The river below Rockhouse Meadow flows through a rugged and steep granitic gorge where whitewater rapids are common.

Heritage: No additional description (reference to Sequoia FLMP).

(South Fork) Segment 3:
Heritage: Multiple sites.

Segment 4:
Scenery: Diversity of scenery as river flows alternately through open meadows and steep-sided canyons.

Recreation: Outstanding recreation experience in a wilderness setting.

Heritage: No additional description (reference to Sequoia FLMP).

Segment 5:
Scenery (also 5A): Outstanding panoramas viewed from Monache Meadows.

Recreation: Outstanding recreation experience.

Geology (also 5A): This is an interesting geologic area that contains an excellent example of a volcanic dome (Monache Mountain). Monache Meadows contains extensive alluvium with the majority of the west bank granitic in origin, and the east bank pre-Cenozoic granitic and metamorphic rocks.

Fisheries (also 5A): Habitat suitable to support the South Fork golden trout.

Heritage: Many cultural sites in/near Monache Meadows.

Vegetation (also 5A): Monache Meadows, a large mountain meadow.

Segment 5A (refer to above):
Recreation: Outstanding recreation experience in a near-wilderness setting.

Segment 6:
Scenery: River flows alternately between open meadows and steep-sided canyon with extensive vistas through the meadows.

Recreation: Outstanding recreation experience in a wilderness setting.

Geology: The soils from the Golden Trout Wilderness to the headwaters are granitic in origin except for a small outcrop of pyroclastic volcanic rocks near Ramshaw Meadows. Glacial deposits are associated with the meadow alluvium.

Fisheries: Habitat and presence of South Fork golden trout.

Vegetation: Populations of several uncommon species in Ramshaw Meadows.

Description of Recreation Setting (at time of CRMP development)
The North Fork and South Fork of the Kern WSR is located within a four-hour drive of more than one-third of the population of southern California. With its range of elevation, topography and vegetation, it offers a broad spectrum of recreation opportunities for all seasons of the year. Principal outdoor recreation activities include camping, motorized travel, water-related activities, hiking, horseback riding, photography and sightseeing.

The whitewater rafting season is runoff driven and associated with high flows in the spring and early summer, whereas fishing and other river-oriented recreation occurs during the lower flows of the late spring through fall. On the North Fork, the Forks Run is usually raftable for 8-10 weeks (from May through June), with the Upper Kern Run raftable for 12-14 weeks (from May through July). The limited boating season concentrates any potential conflicts between boaters and other users during the late spring and early summer. Private and commercial boating opportunities on the South Fork are marginal due to barriers (e.g. boulders, logs, beaver dams) and low water flows in the summer.

The CRMP describes recreation opportunities, facilities, trails and whitewater boating for each segment:

North Fork Kern

Segment 2: This segment provides excellent hiking, horseback riding (including pack trips), dispersed camping, and fishing in a wilderness setting. Group size is limited to 15 people and 25 stock animals. Developments include a stock bridge and a foot bridge, with ten trails partially or wholly in the river corridor. Some dispersed campsites show signs of overuse. Little whitewater boating occurs in this segment (the Wilderness Run) due to low water flows, obstacles, difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 3: Exceptional whitewater boating, dispersed camping, hiking, and fishing in an essentially primitive condition are provided in this segment. There are a few dispersed campsites used by boaters and five trails partially or wholly in the river corridor. Several dispersed campsites show signs of overuse.

This segment has been used for commercial whitewater boating since 1982. Known as the Forks Run, this segment is considered one of the most difficult commercially run whitewater rivers in the nation and perhaps the most outstanding runnable whitewater river in North America. Most of the major rapids are Class IV or V. Use is limited to 15 people a day, excluding guides. The principal put-in is within the GTW (in segment 2) with access by foot or pack stock. There are also two access points in this segment (3); otherwise, the river is accessible only by boat or limited foot trails.

Segment 4: Recreation activities include fishing, camping, picnicking, whitewater boating, hiking and driving for pleasure. There are six developed campgrounds and one picnic area (total capacity of 1500 people). In addition, there are many day-use and

dispersed camping areas throughout the segment, with five trails partially or wholly in the river corridor. Several dispersed campsites show signs of overuse.

A portion of the Upper Kern Run, which offers four noncontinuous rafting trips varying in challenge from Class II to V, is within and extends beyond this segment. Five commercial outfitters have operated since 1982, with an additional permit allowed as a result of the decision supporting the CRMP. Illegal commercial activity is on the increase. The four main runs have established launch sites and allow other combinations of trips based on access and water flow. A number of these runs need improved or developed access points. Boating has created some conflicts with shore-based users such as anglers. Conflicts include increased noise, competition for limited space on land and the river, and congested parking.

South Fork Kern

Segment 2: This segment provides backpacking, horseback riding, primitive camping, and fishing in a wilderness setting. The only improvements are five trails located partially or wholly in the river corridor, including a four-mile segment of the Pacific Crest Trail (PCT). The Long Valley Trail funnels users from a nearby campground resulting in heavy impacts from dispersed camping and to the fishery near the trail's end at the river. Little whitewater boating occurs in this segment due to low water flows, obstacles, difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 3: Recreation activities include camping, hiking and fishing. There is a 39-site campground adjacent to the east side of the river and a low-speed, paved access road. Three trails are located partially or wholly in the river corridor, including a portion of the PCT. Little whitewater boating occurs in this segment due to low water flows, obstacles , difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 4: This segment provides backpacking, fishing, horseback riding and camping in a wilderness setting. Five trails are located partially or wholly in the river corridor, including a portion of the PCT. There are two major trail bridges on the PCT. Little whitewater boating occurs in this segment due to low water flows, obstacles , difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 5: Recreation activities include camping, picnicking, four-wheel drive and motorbike use, fishing, hiking and hunting. This segment includes Monache Meadows, a popular area for off-highway vehicles (OHV). There are no developed recreation sites or facilities, although there is a popular dispersed camping area. Approximately, seven miles of motorized travel routes occur within the corridor, a part of the longer system of

four-wheel and motorbike routes in the Monache Meadows area. Travel routes ford the river in three locations.

Little whitewater boating occurs in this segment due to low water flows, obstacles, difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 5A: This segment provides backpacking, fishing, hunting and primitive camping, within an essentially primitive setting. There are no recreational improvements in this area. Only one lightly used trail provides access to the area above the weir. Little whitewater boating occurs in this segment due to low water flows, obstacles, difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment.

Segment 6: This segment provides backpacking, fishing, hunting, horseback riding and camping in a wilderness setting. Commercial outfitters provide wilderness trips and organized-event permits may be issued to equestrian groups. No developed recreation facilities occur in this segment and primitive camping occurs in several places adjacent to the river. An extensive trail system accesses the corridor.

Little whitewater boating occurs in this segment due to low water flows, obstacles, difficult access, and waters more favorable to boaters on other segments. Congestion from boating activities and user conflicts are essentially nonexistent and no permits are required to boat this segment except as required within the GTW.

Recreation-related Issues

One of the three significant issues that guided development of the CRMP was a determination of the mix/level of appropriate recreation uses and facilities to be provided in the river corridor while still protecting the river's ORVs. This issue was further refined as three sub-issues:

- What is the appropriate mix/level of boating use (commercial and private)?
  Concern was expressed that commercial boating may displace private boating opportunities, disrupt the peace and quiet of the river experience and cause additional impacts to resources. Others felt commercial boaters have less impact due to information/education provided by the guides.
- What is the appropriate mix/level of trail uses and facilities?
  There was concern that trails within the river corridor may or may not be appropriate, with advocates for changing trail standards to eliminate stock use and others desiring new trails, including motorized routes.
- What is the appropriate mix/level of developed and dispersed recreation uses and facilities other than boating and trails (i.e., camping, picnicking, fishing, hunting, rock climbing, sightseeing and recreational mineral gathering)?
  Some desired more developed campgrounds to meet growing recreation demand, while others advocated for elimination of camping to protect natural resources.

Stakeholder Involvement

The public was involved traditionally through development of the CRMP and its related NEPA document (EIS). A public field trip was held on Segment 4 of the North Fork to discussion a variety of alternative management strategies.

Recreation-related Decisions

The following section excerpts management direction from the CRMP in the form of "opportunity class descriptions" (which provide the range of resource, social and managerial conditions) and "management actions" (guidance for all or specific opportunity classes).

Opportunity Class Descriptions

Wild

Resource Setting: Area is to remain essentially primitive in character. Visitor impacts are minor and typically limited to disturbance of soil and vegetation. Such disturbance ranges from visually subtle and recovering on an annual basis, to more noticeable and permanent along trails and in camping areas.

Social Setting: Good opportunities for solitude and isolation. Occasional encounters with others during the primary season (May through October). Abundant opportunities for self-reliance, challenge and risk.

Managerial Setting: Maintain natural conditions and primitive and semi-primitive recreation opportunities. Emphasis on off-site management methods to maintain, achieve or enhance desired conditions. Trails maintained for resource protection and user safety, rather than convenience.

Wild 1

Resource Setting: Area is to remain essentially primitive in character. Visitor impacts are minor and typically limited to disturbance of soil and vegetation. Disturbance may be visibly noticeable and permanent along trails and from camps.

Social Setting: Some opportunities for solitude and isolation. Encounters with others during the primary season (May through October). Some off-trail opportunities for self-reliance, challenge and risk.

Managerial Setting: Maintain natural conditions and primitive recreation opportunities. Emphasis on off-site management methods to maintain, achieve or enhance desired conditions. Trails maintained for resource protection and user safety, rather than convenience.

Scenic

Resource Setting: Area is semi-primitive in character with evidence of human-caused modification. Visitor impacts are moderate and consist of both temporary and permanent disturbance of soil and vegetation in camp areas and along trails. Modifications to the environment are visually obvious.

Scenic (continued)

Social Setting: Some opportunities for solitude and isolation. Encounters with others will occur frequently during the primary season (May through October). Opportunities to utilize outdoor skills and challenges are primarily centered on the river and motorized activities.

Managerial Setting: Maintain semi-primitive motorized and river-related recreation opportunities. Management presence is primarily on-site. Roads and trails maintained primarily for resource protection and user safety, rather than comfort and convenience.

Recreation

Resource Setting: Most modified of four classes. Visitor and other user impacts are long-lasting disturbance of soil and vegetation throughout the area. Modifications are visually obvious.

Social Setting: Area provides a rural river atmosphere. Encounters with others are continuous during the high-use season (April through November) and frequent during the winter months. Opportunities exist to experience challenges and utilize a wide variety of river-related skills in an easily accessible environment.

Managerial Setting: Management emphasis is to provide a variety of recreation opportunities. Management presence is both on and off-site. Roads and trails maintained primarily for resource protection, user safety, and convenience.

<u>Management Actions</u>

Common to All Classes

- Motorized boating prohibited.
- Continue to promote outdoor-ethics programs.
- Design new trail construction to reduce user conflicts. Reroute existing trails and construction of new trails to protect private property and resource values.
- Close all waters within the corridor to recreational dredging.
- Enforce restrictions on camping stay limits.

Wild and Wild1 Classes

North Fork Private Boating:

- Allowed on all segments outside Sequoia National Park seven days/week.
- Maximum of 15 launch permits (people) each day on Wilderness and Forks Runs. Note: Prior to this decision, use was unlimited. The District manages this regulated use via a forest closure order and through a reservation system. Float permits are required as is a fire pan.
- Maximum group size of 15 people on Wilderness and Forks Runs. Note: One party with 15 people is the entire quota for a given day.

Wild and Wild1 Classes (continued)
North Fork Commercial Boating:

- Maintain 50/50 split between private and commercial use.
- Boating allowed below in Forks run (below GTW) seven days/week.
- Use limited to 15 people per day.
- Maximum group size limited to 15 people, excluding guides.
- Investigate potential for commercial services on Wilderness Run.

South Fork Private Boating:

- Allowed on all segments outside wilderness seven days/week.
- Maximum group size of 15 people within wilderness and 18 outside.
- Note: There are no limits on the number of launches or parties as on-river use is extremely low

South Fork Commercial Boating:

- No commercial use.
- Investigate potential for commercial services on selected segments.

Trails:

- Within wilderness, party size limited to 15 people and 25 head of stock.
- No mechanized use within wild outside of wilderness. Note: This decision protects the opportunity class and reduces likelihood of illegal OHV use in wilderness.
- Specifies trail bridges to be maintained.
- New trailheads not allowed in river corridor, with construction in areas adjacent only as necessary to distribute use.
- [Plan includes maintenance level for each system trail.]

Recreation Use/Facilities:

- Camping and campfires restricted within 100 feet of river, system trails and meadows.
- Investigate location of portable toilets at several locations.
- New commercial outfitters may be permitted except stock packers in GTW.
- Provide for wilderness patrols, particularly during high use season.
- Monitor for overuse.

Scenic Class
Private Boating:

- Allowed seven days/week.
- Quotas established only if necessary to assure quality of experience or protect values.
- Maximum group size limited to 18 people.

Scenic Class (continued)
Commercial Boating:

- No commercial use.
- Investigate potential for commercial services.

Trails:

- OHV use on designated roads and trails. Over snow-use as guided by map.
- Continue to use fords at river crossings unless bridges needed for safety/resource protection.
- New trailheads allowed in river corridor as necessary to distribute use.
- [Plan includes direction for signage and maintenance level for each system trail.]

Recreation Use/Facilities:

- Developed facilities may be provided when necessary to protect resources and/or for health/safety.
- New commercial outfitters may be permitted.
- Provide for patrols, particularly during high-use periods -- beginning of fishing and end of hunting seasons.
- Monitor for overuse and limit number of users/type of activities as necessary.

Recreational Class
North Fork Private Boating:

- Allowed on Upper Kern run seven days/week.
- Quotas established only if necessary to assure quality of experience or protect values.
- Maximum group size limited to 18 people.
- No boat launching before 9 a.m. or after sunset (e.g. moonlight trips).
- Quite zones (e.g. no water fights, boat takeouts) established through private land and other areas as needed.

North Fork Commercial Boating:

- Maintain 50/50 split between private and commercial use.
- Allowed on Upper Kern run seven days/week.
- Use limited to a maximum of 180 clients-at-one-time on the river.
- Maximum group size limited to 30 people, excluding guides.
- Investigate potential for commercial services on Wilderness Run.
- No boat launching before 9 a.m. or after sunset (e.g. moonlight trips).
- Quite zones (e.g. no water fights, boat takeouts) established through private land and other areas as needed.
- Designate launch sites in annual operating plan.

North Fork Boating Facilities:

- Plan provides specific direction for improvement, expansion and construction of new boating facilities.

South Fork Private Boating:

- Allowed seven days/week.
- Quotas established only if necessary to assure quality of experience or protect values.
- Maximum group size limited to 18 people.

Trails:

- Emphasize trails and associated facilities for river access, hiking and bicycle use.
- New trailheads allowed in river corridor to meet demand so long as values protected.
- [Plan includes direction for signage, bridges and maintenance level for each system trail.]

Recreation Use/Facilities:

- Encourage fishing and other shore-based activities or opportunities by providing enhanced access (with specific areas identified for handicapped accessible facilities).
- Enforce campsite number limits at identified sites.
- Prohibit dispersed camping adjacent to developed facilities to reduce conflicts.
- Eliminate dispersed camping and campfires within 25 feet of river's edge, system trails and meadows. Note: This decision identified as having significant potential to reduce environmental impacts and user conflicts.
- Construct group camps at identified sites. Note: This action to compensate for closure of dispersed camping as described above.
- Maintain vegetation in public use areas in healthy and vigorous condition.
- New commercial outfitters may be permitted, provided river values protected.

Implementation Priorities

The CRMP provides a detailed list of management actions for recreation and other resource categories.

Monitoring

The monitoring section of the CRMP describes the:

- Value to be Protected or Enhanced
- Indicator
- Standard
- Variability Signaling Further Action
- Monitoring Procedure (Personnel and Frequency)

Relative to recreation, monitoring direction is provided for private and commercial boating, trail use and facilities, and recreation use and facilities.

An example:

Value to be Protected or Enhanced	**Indicator**	**Standard**	**Variability Signaling Further Action**	**Monitoring Procedure and Frequency**
Riparian area/associated water quality	Dispersed camping areas consistent with opportunity class	Wild and Wild1 – Dispersed camping sites are temporary. Impacts are minor and subtle with sites at least 50 feet apart. Scenic – Dispersed camping sites are temporary. Impacts may be evident with sites at least 50 feet apart. Recreational – Dispersed camping sites are generally temporary although may have facilities such as fire rings. Campsites may be adjacent.	Modify site or increase user information and education	Initial inventory with survey repeated every 5 years.

Visitor Capacity

Visitor capacity has been addressed through establishment of recreation opportunity classes, including the detailed description of desired resource, social and managerial settings. Using each of these opportunity classes as a framework, management actions were specified relative to private and commercial whitewater boating, trails, and recreation use and facilities.

Results – What has happened as a result of recreation direction in the CRMP?
Resource conditions have generally improved, particularly in the recreation segment of the North Fork due to the 25-foot camping/campfire closure. To accommodate the considerable use facilitated by a parallel road and in-corridor trail in this segment, portable toilets and sanitation facilities are provided in the summer. Through relicensing of a nearby hydropower project (Kern River #3), three additional group sites were constructed to offset the 25-foot camping/campfire closure. Although resource conditions have improved, trash and sanitation remain a problem and several future actions may be considered: expand the 25-foot closure, perhaps to 100 feet; designate dispersed campsites; and/or allow camping in developed sites only.

Establishing a numeric limit for the number of people who may launch in the Wilderness and Forks Run has significantly contributed to protecting the wilderness experience and biophysical resources. There has been no interest in providing commercial use on other segments nor has there been a need to establish a quota for private boating in any other area. The "quiet zone" through private land has reduced complaints from landowners to zero and, although not officially expanded to other areas, educational material developed by the Forest Service and commercial outfitters has successfully highlighted the need to respect private property and the desired experience of other recreationists. User conflicts (boat/fish/camping) have also decreased. Through dissemination of information, and proactive work on the part of the outfitters, users know what to expect during different times of the year and how to appropriately react when encountering one another (e.g. floaters and fly fishermen).

A number of access points have been improved since completion of this CRMP. The greatest improvement has been to the access site at Johnsdale Bridge, at the upper end of the North Fork Kern recreation segment. Highway access, sanitation facilities and the trail have been improved to protect resources and relieve congestion. Six other access sites have been improved, including one as a part of hydropower relicensing.

In 1998, the District hired one river ranger and now employs two river rangers during the summer season through funds from the fee demonstration program. Having a Forest Service presence on the river has significantly improved management of dispersed sites accessed by floaters and reduced user conflict. Yearly, the river rangers organize two cleanup events, supported by commercial outfitters and volunteers.

The District also utilizes a number of partnerships and volunteers to manage this river. The commercial outfitters are an important partner, contributing to "respect the river" emphases and river cleanup events. The Friends of the River (statewide conservation organization) has also provided sanitation facilities (dumpsters) during the summer season. A private boater organization, the Kern Valley River Council, helps with safety information and also participates in river cleanups. The river ranger program is augmented by volunteers who may share in a single activity or throughout the season.

Establishing User Capacities on WSRs
10/30/06

CASE STUDIES

Metolius WSR

Designation Statistics

- P.L. 100-557, 10/28/88
- Oregon
- 28.6 miles from near the Metolius Headwaters to lake Billy Chinook
- Upper 11.5 miles is recreational classification and administered by the USDA Forest Service
- Lower 17.1 miles is scenic classification and administered by the USDA Forest Service through a joint management agreement with the Secretary of the Interior and the Confederated Tribes of the Warm Springs Reservation of Oregon
- The amendatory act directed the lower river (scenic segment) and its corridor "be managed to provide a primitive recreational experience as defined in the Recreation Opportunity Spectrum User's Guide." Note: For most rivers, managers are charged to determine the desired recreation experience within the classification, consistent with protecting and enhancing the ORVs.
- ORVs: scenery, recreation, geology, fish, wildlife, history, prehistory, traditional cultural use, hydrology, ecology

Description of ORVs

Scenery: The extent and context of the foreground landscape within a ponderosa pine forest is unique within the region and State. The diversity of views over the length of the river is unique when considered in context of its relatively short length as are the lack of significant modifications of the view over its entire length. The rustic character of the existing buildings blends with elements found in the natural landscape and is subordinate to the surrounding landscape.

Recreation: Visitors are able to participate in a full spectrum of recreation opportunities. The rich and diverse mix of dispersed and developed opportunities concentrated on the upper 8-10 miles of the river combined with the change in character to a dispersed primitive setting on the lower portion of the river is unique in the region. Fly fishing is well known both in-State and nationwide.

Geology: The unique geology of the Metolius Basin creates the springs from which the river orginates and shapes the river's course after it flows from the ground. The river is used in academic courses and geologic literature as an example of the interplay of faulting, volcanism and ground-water hydrology.

Fisheries: The river's spring-fed, cold water and very stable flow levels provide for a productive fishery. Historical and current fish populations are noted for their numbers

and in the variety of species represented. Bull trout, a species threatened in other rivers within the State, is present and thriving in the Metolius River.

Wildlife: The Metolius River corridor supports complex habitat diversity resulting from ponderosa pine and mixed-conifer old growth, riparian meadow, riverine and aquatic habitats. The corridor provides an important east-west link between winter and summer ranges for mule deer and elk and a contiguous habitat link for other animals. It also provides habitat for a number of federally listed species, including northern spotted owl and bald eagle.

History: Unique within the region are the distinct historical themes of early exploration by trappers and engineers, homesteading, early recreation use, Civilian Conservation Corps use and early Forest Service administration. There are several sites eligible for the National Register of Historic Places.

Prehistory: Sites within the river corridor evidence occupation and use pre-dating the eruption of Mt. Mazama and other geologic episodes and use by more than one cultural group.

Traditional Cultural Use: Traditional uses are well established through Treaty and Tribal Code. These uses continue in the present day.

Hydrology: The Metolius is the largest spring-fed river in the region, has the steepest gradient and experiences a unique decline in downstream water temperature. The consistent, sustained flows and its channel stability (due to spring source and volcanic bed) are also unique in comparison to other rivers in the region. Water quality is extremely high in the entire river.

Ecology: The Metolius Basin forms a transition zone between the higher elevation Cascades to the west, the lower elevation Columbia Basin to the northeast and the High Lava Plains to the southeast. This transition contributes to the complexity of plant communities including: disjunct populations of species west of the Cascades, the epicenter of rare endemic wildflower population, and a variety of riparian habitats including unique vegetated river islands.

Description of Recreation Setting (at time of CRMP development)
The Metolius River in central Oregon has long been a destination for regional residents and increasingly attracts visitors from throughout the country. Its popularity stems from spectacular scenery, abundant fishing opportunities and year-round rafting, kayaking and whitewater canoeing.

There are 12 developed campgrounds. Campgrounds along the upper river (recreation segment) provide a developed recreation experience within a predominately natural appearing setting; the three campgrounds in the lower river (scenic segment) provide fewer facilities and a more primitive setting and experience. Dispersed camping is most common in the scenic segment. Note: The Confederated Tribes of the Warm Springs

Reservation side of the scenic segment is managed by the Tribes as a primitive area and visiting without permission is trespassing.

Fly fishing is popular, particularly on the recreation segment. Most of the river is designated fly fishing only and open year-round. The river also provides opportunities to view fish.

The recreation segment receives some floating use in a variety of craft, including innertubes, small rafts and kayaks. Most of this segment is fast moving and without significant rapids, affording Class I areas for waterplay and some Class III waters for kayakers and other whitewater enthusiasts. Much of the recreation segment is shallow, replete with instream wood, narrow and heavily used by anglers. The scenic segment is boatable year-round due to the relatively constant flow levels. Its characteristics are: a relatively long (17 mile) stretch that is typically run as a day trip, a remote setting, nearly undeveloped shoreline, and challenging Class II-III whitewater.

This river is one of only a few having high-quality fishing and floating opportunities on which the Forest Service does not permit fish or floating outfitter-guides.

There are opportunities for hiking on public lands throughout the corridor, with a trail paralleling much of the river. Mountain biking is popular, with many roads and trails available. The river corridor also includes 108 recreation residences on National Forest System lands.

Recreation-related Issues
Two of the 11 significant issues that guided development of the CRMP are directly related to recreation:

- What types of recreational activities and experiences should be managed for in the river corridor, and how can these activities and experiences be provided without degrading the natural resources on which they depend?
- How should the lower river be managed to provide a primitive recreation experience? Note: The amendatory act directed the lower river (scenic segment) and its corridor "be managed to provide a primitive recreational experience as defined in the Recreation Opportunity Spectrum User's Guide."

Stakeholder Involvement
The public was involved traditionally through development of the CRMP and its related NEPA document (EIS). A state, federal and Tribal government working group was formed to provide direction. In addition, a public working group was formed to provide focused review of the alternatives.

Recreation-related Decisions
The following section excerpts management objectives and direction from the CRMP. In addition to this annotated and specific-to-recreation direction, the CRMP includes broad goals for each segment and similar detail for outstandingly remarkable values and other resources.

Developed Campgrounds
Manage to provide a high-quality recreation experience and natural setting. Minor reductions in camping capacity and changes to site management are appropriate to protect resources. Social encounters, regulations, and fees are to be expected in all campgrounds.

- To manage for the natural setting, no more than 25% of the area within 100' of the river is managed in a developed condition (campsite, pathway, road, trail, etc).
- Improve visual appearance and protect vegetation by consolidating and redirecting traffic patterns, defining or relocating campsites, planting and repairing sources of erosion.
- Manage the lowermost campgrounds in the recreation segment to provide a transition to the primitive recreation experience desired in the scenic segment (e.g. tent camping only).
- Rehabilitate, rest, relocate or close (in order of preference) campsites with unacceptable resource impacts. Unacceptable sites are identified by devegetation beyond the confines of the designated site, lack of soil stability (soils are raveling), foot traffic impacts that cannot be limited by trail maintenance strategies, or evident siltation into the streambed.
- When 20% or more reduction in campground capacity results from resting or closure of sites, address the impacts on campsite availability by (and in order of preference): a reservation system, or a new campground outside the corridor.

Day-Use
Day-use facilities are found throughout the recreation segment. Day-users do not impede the use of overnight campsites.

- Day-use facilities are found throughout the recreation segment and are easily located by visitors through information and signage.

Dispersed Camping
Dispersed camping is incidental in the recreation segment and integral in the scenic segment. The quantity and location of dispersed camping sites are regulated to protect river resources and the scenic segment's primitive recreation experience.

- Allow dispersed camping in designated sites only, with no more than 10 in recreation segment and 20 in the scenic segment.
- Select designated sites from already disturbed areas only.
- Where they result in unacceptable impacts to riparian vegetation, upland vegetation or water quality, rehabilitate, rest, relocate or close. Unacceptable impacts are identified by devegetation beyond the designated site, loss of soil stability, or evident point source erosion or siltation.

Scenic River Segment Primitive Recreation Experience

The primitive recreation experience is based on limited contact and interaction amongst visitors, with a feeling of remoteness and solitude. The ends of this segment provide for transition into the more developed recreation segment and Lake Billy Chinook.

- Public motorized access is closed on the two roads within the scenic segment.
- Social setting objectives are: Encounters with other parties are not more than seven per day 80% of the summer season. Group size is limited to not more than 12 people/12 head of stock. Camps are separated so that no more than one is visible.
- Establish a registration system to determine use patterns and the need for establishing future thresholds of use to protect resources and maintain the desired recreation setting.

Boating

Boating will be managed to accomplish these primary objectives, to: emphasize safety, preserve riparian and instream resources and habitat, protect the primitive recreation experience in the lower river, avoid trespass on tribal and private lands, respect tribal values regarding the river, manage use consistent with the public trust doctrine, and minimize administration and enforcement.

- Motorized boating is not permitted.
- Emphasize safety, instream wood and resource protection, and respect for Tribal lands, values and rights in education and information materials.
- Use as necessary a boater registration in a portion of the recreation segment to determine the need for direction to maintain the desired recreation experience.

Trails

The river trail lies lightly on the riverside to provide a high-quality hiking experience that is protective of the river's riparian values and appearance. Bicycle and horse use may occur on roads, closed roads, or other trails designated for their use. Trails are managed to avoid user conflicts, especially those that result in safety hazards.

- The CRMP provides specific decisions relative existing trails and uses, maintenance and new construction.

Implementation Priorities

The CRMP provides a detailed list of priorities from immediate to ongoing. For example, an immediate action was to implement user registration for the scenic segment of the river. Very high priority actions included evaluating and monitoring trail and fishing access to identify areas for restoration, and developing vegetation and landscape designs for several campgrounds.

Monitoring
The monitoring section of the CRMP describes the:

- Value to be Protected or Enhanced
- Key Indicator
- Management Standard
- Management Actions Triggered if Standard is Not Met
- Sampling Procedure and Frequency

Relative to recreation, monitoring direction is provided for developed campgrounds and day use areas, dispersed campsites, lower river primitive recreation experience, trails, and boating.

An example:

Value to be Protected or Enhanced	**Key Indicator**	**Management Standard**	**Management Actions Triggered if Standard is Not Met**	**Sampling Procedure and Frequency**
Riparian area/associated water quality	Impacts to riparian vegetation and function Visible siltation	Dispersed recreation sites are exceeding designated area by 50% New sites and/or fire rings are being pioneered Loss of soil stability or erosion that will result in sediment entering a waterbody Tree wounding or root damage that will result in loss of the tree	Rehabilitate, relocate or close dispersed sites Remove new fire rings Rehabilitate soil or vegetation impacts Use barriers to control traffic and site size	Dispersed site condition surveys as necessary to determine the effectiveness of site controls and rehabiltation

Visitor Capacity
Visitor capacity has been addressed by establishing desired resource conditions and recreation experience (management standards), and management actions to be triggered if a standard is not met. This standards-based approach relied on specific and detailed recreation-related decisions about visitor access, facility infrastructure and the type of recreation activities accommodated in the river.

The Forest Service conducted a visitor survey as part of development of this plan. As is often the case, users generally wanted the Forest Service to "leave [the river] the way it is." They also defined the most important factor influencing the quality of their trip to be the river's natural setting. Almost one-half of the respondents have been visiting the river for more than ten years where they are most frequently engaged in fishing, hiking, sightseeing and viewing wildlife.

Results – What has happened as a result of recreation direction in the CRMP?
Resource conditions have improved in the upper (recreational segment) and lower (scenic segment) river as a result of implementing many of the management actions identified in the CRMP. On the entire river, Forest staff completed the "very high priority" action of survey and evaluation of trail and fishing access conditions. On the upper river this information was used to relocate and harden trail segments, and to provide single access points to fishing areas (e.g. steps). All dispersed camping areas are now closed on the upper river.

On the lower river, the two principal access roads were closed, dispersed sites designated consistent with direction in the CRMP, and other areas closed to overnight use. The road closures have made the greatest contribution to managing the lower river to provide a primitive recreation experience, consistent with the river's designating language, and to protecting river resources. These actions have also helped addressed cultural concerns (e.g. trespass on Tribal lands, inappropriate user behavior) of the Confederated Tribes of the Warm Springs, joint managers of the lower river.

Another factor in improved conditions of the riparian area, particularly on the upper river, is the presence of field rangers. These Forest Service employees spend about 50 percent of their time in the Metolius Basin, making public contact and providing a feedback loop to river program managers. Their presence, even with increasing recreation use from an extended fishing season, has significantly reduced visitor conflicts and complaints. They have also greatly increased compliance with direction developed in the CRMP, resulting in improved conditions in the riparian and other areas of the river corridor.

The CRMP also provided direction for managing the 108 recreation residences to protect key riparian components, the historic character of the structures, and the dominance of the river in the landscape character of the area. Changing the tract objectives to emphasize these values has improved riparian conditions and the natural appearance of this section of the river corridor. Almost all residences are now on county approved septic systems, better protecting the river's existing high water quality.

The Friends of the Metolius, a nonprofit organization dedicated to protecting the legacy and natural resources of the Metolius Basin, contributes significantly to implementing the CRMP. They have produced an interpretive compact disk – *Metolius: A Living River in Your Hands* – to help share the history, values and stewardship of the river through art and science. They also conduct interpretive walks, participate in the weed eradication program, and help fund the field ranger program.

In addition to recreation-related management actions, Forest staff have also completed considerable fish habitat work and noxious weed eradication. River managers anticipate a review of the CRMP in the near future based on their continued monitoring of resource conditions.

Establishing User Capacities on WSRs
9/22/06

CASE STUDIES

North Umpqua WSR

Designation Statistics

- P.L. 100-557, 10/28/88
- Oregon
- 33.8 miles from Soda Springs Powerhouse to the river's confluence with Rock Creek
- Entire river classified as recreational
- Upper 25.4 miles administered by the USDA Forest Service
- Lower 8.4 miles administered by the USDI Bureau of Land Management (BLM)
- ORVs: scenery, recreation, fisheries, cultural, and water quality and quantity

Description of ORVs

Scenery: The River is recognized as one of the most scenic and accessible in western Oregon. The distinctive canyon landscape is characterized by a combination of clear jade rushing water and vertical rock cliffs and spires within a mosaic of mountain meadows and Douglas fir/western hemlock forests. The North Umpqua Highway has various scenery related designations, including National Scenic Byway.

Recreation: State Highway 138 parallels the river and provides ready access to the many special interest areas in the river corridor and serves as primary route to Diamond Lake Recreation Area and Crater Lake National Park. The corridor is readily accessible to broad segments of the population and provides a variety or river-related recreational opportunities including sightseeing, nature study, developed and dispersed camping, day use activities, whitewater boating, horseback riding and hiking. The combination of large summer runs of steelhead, fly-angling only restrictions and majestic scenery brings anglers from all over the world.

Fisheries: The River serves as a travel corridor and provides spawning and rearing habitat for a diversity of resident and anadromous fish species including summer and winter steelhead, fall and spring Chinook, coho and searun cutthroat. It is distinguished from other western Oregon rivers by the large and consistent numbers of native (nonhatchery) fish. Its summer steelhead fishery is considered to be one of the most significant on the West Coast.

Cultural: The corridor contains many prehistoric sites evidencing a long period of occupation and complex sites. These sites provide a rare opportunity to study the effects of cataclysmic environmental change on human populations through the eruption of Mt Mazama, about 6800 years ago. Archaeological sites on river terraces preserve this record of aboriginal survivors. The corridor also contains a number of important historic resources.

Water Quality and Quantity: The River remains visually clear during the summer season and between high-flow stages as a result of low level of contaminants and pollutants, cool water temperatures and stable minimum instream flows. It is one of the few Pacific Northwest rivers with high summer water yields.

Description of Recreation Setting (at time of CRMP development)
The North Umpqua WSR is located in southwestern Oregon, near the town of Roseburg. Major recreation activities include sightseeing, nature study, developed and dispersed camping, day-use activities, whitewater boating, fishing, and hiking.

The river corridor is paralleled by State Highway 138, also designated a National Scenic Byway (Rogue Umpqua Scenic Byway), and as a Discovery Loop Tour by the Southwest Oregon Visitor Association. This corridor route serves as the primary access to Diamond Lake Recreation Area and Crater Lake National Park. Visitors from all over the world travel through the area to enjoy these major destination attractions.

There are eight developed campgrounds and numerous areas for dispersed recreation activities in the river corridor. The volcanic soil deposits allow deep saturation and slow release of water, insuring dependable summer flows for whitewater boating. River conditions provide class II to IV rapids and two different, one-day float trips lasting five to seven hours. Use by kayakers is greatest, followed by rafters and limited use by canoeists.

A great percentage of recreational use has historically been fishing. A major attraction of the river is its summer run steelhead. Nearly the entire 33-mile wild and scenic river segment is fly angling only. The presence of anadromous fish, fly angling only segments, majestic scenery, and overnight accommodation attracts anglers from all over the world.

To manage potential conflict between fishermen, campers and whitewater boaters, voluntary guidelines have been in place since 1978. During the July to October period when potential overlap between fishing and rafting is moderate to heavy, boaters are asked to avoid floating specified segments from 6 p.m. to 10 a.m., and to avoid boating one segment in its entirety from July 15 to October 31. This voluntary closure is to provide fly-fishing opportunities to anglers who come from all over the world to try to catch elusive summer steelhead. Information about the voluntary closure is shared in a number of ways, including a *Wild and Scenic Rivers Users Guide*.

Recreation-related Issues

- Commercially guided and noncommercial rafting use has increased significantly since the mid-70s, particularly on weekends and holidays
- Whitewater boating is increasing in winter and spring months, on weekends and holidays, with a substantial increase in June through August.
- As a result of increased use, conflicts are also increasing between:
  - Boaters at principal put in and take out
  - Boaters and anglers particularly in upper segment during trout fishing season and the segment with voluntary closure during steelhead runs
  - Boaters and campers at several developed campgrounds

These concerns translated into two of the five major issues that guided development of the CRMP:

- Should the number of commercial outfitters and the number of clients that they serve be limited? Should the number of private boaters, and fishing guides, likewise be limited?
- How serious are the social conflicts that are occurring between different recreation user groups in the corridor, and what steps should be taken to minimize these conflicts while still responding to public user demands?

Stakeholder Involvement

In the late 1980s, a group of key user groups from the fishing and boating community were asked to help identify issues and possible solutions. In addition, this user conflict was the focus of two professional papers completed by agency staff. These papers provide the framework for the *Wild and Scenic Rivers Users Guide.* Information gleaned from the discussion group and professional papers set the stage for continued public involvement through development of the CRMP and related decisions under NEPA.

Recreation-related Decisions

The following section excerpts management objectives and direction from the CRMP. In addition to this annotated and specific-to-recreation direction, the CRMP includes broad goals for each segment and similar detail for outstandingly remarkable values and other resources.

<u>Recreational Opportunity Diversity</u>

Four river management segments were established with associated management objectives.

- Soda Springs to Gravel Bin – Managed to provide for diversity of recreational use, while preventing crowding and conflicts at access points.
- Gravel Bin to Bogus Creek – Managed for fly fishing, with seasonal rafting closures (refer to *Description of Recreation Setting* for details).
- Bogus Creek to Susan Creek – Managed to provide diverse recreational opportunities.
- Susan Creek to Rock Creek – Managed to provide recreation opportunities while minimizing potential conflicts on private lands.

Use Levels

- Limit all boating groups to a maximum part size of 20 persons or 5 boats.
- Allow a 15 percent increase in boating use above 1990 levels. Once reached, initiate a planning process to determine whether such use protects and enhances the recreation experience and other ORVs. If not, conduct a "limits of acceptable change" process to establish resource and social standards, triggers and management actions.
- Limit commercial whitewater guide permits to 15 from May through September.

User Conflicts

- Makes floating guidelines (refer to *Description of Recreation Setting* for details) mandatory for commercial outfitters and voluntary for private boaters.

Interpretation/Education

- Includes a detailed list of interpretive/education opportunities to enhance visitor experience and protect resource values. (Note: This list includes development of a self-guided map or brochure. Recently the Forest Service and BLM completed a *Wild and Scenic Rivers Users Guide*. This Guide describes the river's ORVs, history and includes a section on floating courtesy, in addition to providing detailed maps of each river segment.)

Implementation Priorities

The CRMP includes a detailed list of recreation projects to address: health and sanitation; safety; user conflict resolution; visitor interpretation; user service and convenience; protection and/or enhancement of ORVs; infrastructure improvement and/or maintenance; and conversion to barrier-free access. The extensive list reflects the objectives defined for each segment and includes improvement to existing sites and proposed new projects.

Monitoring

The monitoring section of the CRMP describes the:

- Activity
- Objective of Monitoring
- Report Frequency
- Threshold of Variability
- Priority

Relative to recreation, monitoring direction is provided to measure user conflict, perceptions of crowding, congestion at rafting put in/take out, total boating use and developed campground use.

As an example:

Activity	**Objective of Monitoring**	**Report Frequency**	**Threshold of Variability**	**Priority for Monitoring**
Recreation Experience – Perception of Crowding	Provide a quality recreation experience consistent with desired conditions and protecting and enhancing ORVs	Every 5 years	25% or more of respondents express concerns re congestion and crowding	High

Visitor Capacity
Visitor capacity has been addressed by establishing desired resource conditions and recreation experience. The CRMP allows for a 15 percent increase in boating use (above 1990 levels). Once this level is reached it directs the initiation of a planning process to determine whether such use continues to protect and enhance the recreation experience and other ORVs. The 1990 boating levels were based on actual commercial use, and on-river observations and professional judgment by district personnel for private boaters.

Results – What has happened as a result of recreation direction in the CRMP?
The Forest Service and BLM manage the North Umpqua WSR through a *Service First* partnership. The *Service First* authorization allows for the two agencies to most efficiently use funds and personnel, and thereby improve customer service, increase operational efficiency, and enhance land stewardship. This partnership creates an excellent structure for implementing the CRMP; however, its successful implementation is due to commitment of agency leadership, managers and on-river rangers.

Key to managing recreation use and protecting resource values is the sharing of information with river users, and maintaining an agency presence in the corridor. In addition to the *Wild and Scenic Rivers Users Guide*, information about floating guidelines and other resource-related management is shared by commercial outfitters, through commercial outlets and in signage. The Forest Service and BLM maintain presence in the river corridor at developed recreation sites, and through a full-time and one part-time river ranger. As a result of information dissemination and agency presence, user conflict and resource issues have significantly decreased.

User conflicts and resource impacts have also decreased through implementation of the site-specific project recommendations included in the CRMP. Many of the project

proposals tie specifically to resolving user conflict and protecting and enhancing the outstandingly remarkable values, in addition to achieving other objectives (refer to *Implementation Priorities section).*

The Forest Service and BLM conduct yearly monitoring and produce an annual report. Through this monitoring, actual commercial and private boating is monitored, as well as fishing and other recreation use. The annual monitoring report includes discussion of congestion and crowding at parking areas and raft launch sites, summarizes user comments, and describes the status of the outstandingly remarkable values. Funding continues to limit the ability to monitor the entire suite of monitoring elements identified in the CRMP.

Recreation use remains within CRMP levels. User conflict has been reduced from a significant concern in the 1980s to the present situation in which users comply with the floating guidelines and there are seldom conflicts. Streamside impacts from dispersed use affect less than five percent of the river corridor and are concentrated at put in/take out and launch stops, which are, to the extent necessary, hardened for such use.

Establishing User Capacities on WSRs
9/21/06

CASE STUDIES

Pecos WSR

Designation Statistics

- P.L. 101-306, 6/6/90
- 20.5 miles from its headwaters in the Pecos Wilderness to the town site of Terrero
- Upper 13.5 miles is wild classification
- Lower 7 miles is scenic classification
- ORVs: scenery, recreation, and cultural/history

Description of ORVs

Scenery: The Pecos River is characterized by distinctive landscapes of pine and spruce forests, patches of aspen, large boulder outcrops, and clear water cascading through rugged canyons. Seasonal color is provided by spring wildflowers and fall foliage. The headwaters provides panoramic views with the river flowing through shallow rapids, churning eddies and multiple cascades. The lower river meanders through the canyon creating a unique contrast with the arid plains to the east and the south.

Recreation: The corridor has long been a destination for visitors from within the region and from around the country. The river is one the State's most popular trout fishing streams. Providing a natural setting for multi-generational family gatherings, the recreational segment of the river offers many popular recreation activities including hiking, camping, backpacking, horseback riding, hunting, fishing, water play, photography and sightseeing. The wild segment also provides opportunity for some of these activities in a remote (wilderness) setting.

Cultural/Historic Sites: Historically, the Pecos River is very rich, including Spanish exploration in the 1600s, and European and Hispanic settlement in the late 18th and early 19th centuries. Historic users left acequias, sawmills, cabins, cemeteries, and campground structures built by the CCC. The area also has evidence of abundant prehistoric uses involving hunting, fishing, gathering of herbs and plants, and some farming.

Description of Recreation Setting (at time of CRMP development)

The Pecos River has been a popular recreation setting for many decades, with use increasing as it provides a cool, forested environment and waterway in the arid Southwest. In addition to high-quality fishing and beautiful scenery for sightseeing, some of the most popular recreation activities include: hiking, camping, and backpacking.

The wild segment is entirely within the Pecos Wilderness. The recreational segment is paralleled by a State highway. The river corridor is within a 1.5-hour drive of Albuquerque and is less than an hour from Sante Fe. Visitors come from the three proximate counties and from Texas, California and other areas.

Recreational use in the wild segment is within its environmental capacity. This situation results from the area's remoteness, rugged terrain, limited access along much of the river, existing prohibitions on camping in several areas, and limits on group size and outfitter-guide permits. Generally, users are satisfied with the current recreation experience. Use within the recreation segment, however, currently exceeds its environmental capacity in some very accessible areas, while remaining below this capacity in less accessible areas. There are indications of overuse where people frequently drive, park, camp and walk.

At the time of this planning process, more than decade after the river's designation, there was limited public information regarding the designation, nor information encouraging visitor responsibility for resource protection. Signs within the corridor principally address restricted uses.

There are four developed recreation sites in the recreation segment: two campground and two day use areas. The Forest Service manages one of the campgrounds. During busy summer weekends, site capacity at this facility may be exceeded. The Forest Service also manages a day-use fishing area and trailhead. The other campground, located on lands owned and managed by the New Mexico Game and Fish (NMG&F), lie within the river's floodplain and adjacent to the river. Campsites are not designated so, on busy weekends, the area is entirely filled. They also manage a day-use area popular for group picnics and fishing. In addition, there are other (Forest Service) developed recreation sites in the upper Pecos canyon, outside the river corridor.

Dispersed camping is restricted in the wild segment to prevent overuse of the few flat, open areas. In the recreation segment, dispersed camping is popular. In some areas, this use is resulting in over-crowding, and localized resource damage from off-road driving, user-created trails and uncontrolled parking. Driving off of designated roads and trails, which is allowed throughout the recreational segment, is increasing on National Forest System and State lands. This use is resulting in soil compaction, loss of vegetation and subsequent erosion.

Some reaches of the river support small raft, kayak or canoe use during high flows. This use is limited due to natural barriers, limited launch sites and a patchwork ownership. Minor amounts of swimming, wading and water play take place in the recreation segment, limited by lack of a sandy shoreline.

Recreation-related Issues

Two of the three key issues that guided development of the CRMP are directly related to recreation.

<u>Recreational Opportunities</u>

- The proposed limitations on camping, parking, off-road driving and other activities would reduce recreational opportunities along the river. People may be dissatisfied and possibly displaced to other locations. Displacing people from their favorite riverside places may cause over-use in upland areas within the river corridor or along river or streams outside the corridor.

Recreational Impacts

- The proposed limitations on recreational and other uses still allow some camping, fishing, motorized uses, and other recreational activities. These activities may result in localized problems with improper disposal of trash and human waste, soil compaction and loss of ground vegetation, or disturbance to wildlife habitat, rare plants, or archaeologic sites.

Stakeholder Involvement

Public involvement occurred through development of the CRMP and related decisions under NEPA. Forest staff contacted government agencies and interested citizens through mailings, an open house, personal contact, and news releases in local newspapers.

Recreation-related Decisions

The following section excerpts management direction from the CRMP. In addition to this annotated and specific-to-recreation direction, the CRMP includes similar detail for other resources and desired interagency cooperation.

Recreation

Wild Segment

- Manage as Primitive (Recreation Opportunity Spectrum-ROS).

Recreation Segment

- Prohibit all off-road vehicle use, and recommend NMG&F implement the same prohibition on their lands in the corridor.
- Limit camping to developed and designated dispersed sites.
- Limit parking to designated areas, and designate parking areas that allow public access to the river while protecting natural resources.
- Ensure that toilets and trash facilities are available and maintained to agency standards at all high-use sites.
- Manage as Roaded Natural (ROS).

Recreation and Wild Segments

- Use of nonmotorized rafts, boats, or other conveyances to float down the river is permitted. No additional facilities (put-ins, parking areas) will be constructed to facilitate boating.
- Utilize partnerships to help maintain trails, dispersed areas and rehabilitate damaged areas.

Trails

- In the recreation segment, provide trails and bridges as needed to direct use, reduce resource impacts and increase user satisfaction (incorporate accessibility guidelines).
- In the wild segment, provide for a safe river crossing, consistent with protecting water quality, scenic values and other agency direction.
- Relocate, eliminate or rehabilitate user-created trails that are causing adverse impacts to soil, water, fisheries, wildlife, or other resources. Adopt and maintain other user-created trails where compatible with river management objectives.

Interpretation and Information

- Provide information at strategic locations within the river corridor to inform the public about the wild and scenic river designation, other management direction, and leave-no-trace techniques.

Interagency Coordination

- Develop cooperative management and/or cost-sharing agreements with NMG&F to provide consistent management of resources and facilities in the recreation segment regardless of jurisdiction.
- Work with NMG&F to redesign dispersed camping in the riparian areas or redirect use to upland sites or outside the corridor. Revegetate closed sites.

Implementation Priorities

The CRMP includes a list of actions likely to be proposed to address identified problems. This information is finely detailed including specific location, description of the problem, and management standards and guidelines.

Implementation Priorities (cont.)

For example:

Location	**Problem**	**Management Standards and Guidelines**	**Possible Actions, Like to be Proposed**
Scenery, Recreation, Ecology, Fisheries and Wildlife Values			
Dispersed campsites located in specific section of the recreation segment	Heavily used dispersed sites dominated by trampled vegetation, compacted soil, user-created trails, trash and human waste Some user-created trails have damaged stream banks, and increased erosion and sedimentation impacts	Limit camping to developed and designated dispersed sites Limit parking to designated areas, and designate parking areas that allow public access to the river while protecting natural resources Ensure that toilets and trash facilities are available and maintained to agency standards at all high-use sites In the recreation segment, provide trails and bridges as needed to direct use, reduce resource impacts and increase user satisfaction (incorporate accessibility guidelines) Relocate, eliminate or rehabilitate user-created trails creating adverse impacts to wildlife or other resources	Convert Mora Campground to day-use site Construct a campground in the Links Tract outside the corridor Prohibit dispersed camping in the Box Canyon reach Construct sanitation facilities at the confluence of Pecos and Mora Rivers Remove toilets at Cowles Pond and replace near Winsor trailhead Install a toilet in Terrero upland area Eliminate specific user-created trails with resource damage Post notices that dispersed camping is prohibited in the Cowles Reach

		Adopt and maintain other user-created trails where compatible with river management objectives.	

Monitoring

The monitoring section of the CRMP describes the:

- Location
- Measurement
- Method
- Intent
- Frequency

An example:

Location (Goal)	**Measurement**	**Method**	**Intent**	**Frequency**
Protect resources within dispersed recreation areas; focus on heavily used dispersed recreation sites at confluence of Mora River with Pecos and in uplands from Terrero to Willow Creek	Number of cars parking outside designated areas	Collect and record field data	Monitor compliance with closed areas Post additional signs if problems with compliance become chronic	Re-inventory every 3-5 years to measure change and trend
Protect steam bank and riparian conditions in areas of user-created trails	Instream, stream bank and riparian conditions using proper functioning condition survey protocol	Collect data through stream surveys and compile	Monitor effects of user-created trails Close additional trails if adverse effects noted	Re-inventory every 3-5 years to measure change and trend

Visitor Capacity
Visitor capacity has been addressed by detailed recreation-related decisions about visitor access, facility infrastructure and the type of recreation activities accommodated in the river corridor.

Results – What has happened as a result of recreation direction in the CRMP?

Establishing User Capacities for WSRs
9/22/06

CASE STUDIES

Snake WSR

Designation Statistics

- P.L. 94-199, 12/31/75
- Oregon
- 67.5 miles from Hells Canyon Dam to an eastward extension of the north boundary line of section 1, township 5 north, range 47 east, administered by the USDA Forest Service
- Upper 31.5 miles is wild classification
- Lower 36 miles is scenic classification
- Note: The Forest Service manages the 4.2-mile segment within the Wallowa-Whitman National Forest boundary and below the lower terminus of the designated river to the Oregon/Washington State line with the same direction as for the designated river.
- The amendatory act (Hells Canyon National Recreation Area Act) required the Secretary to promulgate rules and regulations for the "control of the use and number of motorized and nonmotorized river craft: Provided, that the use of such craft is hereby recognized as a valid use of the Snake River within the recreation area."
- ORVs: scenery, recreation, geology, fisheries, wildlife, cultural resources, vegetation/botany and ecology

Description of ORVs

Scenery: The Snake WSR, flowing through a portion of the HCRNA, is recognized nationally for its scenic qualities. The river corridor includes small sandy beaches, grass- and pine-covered benches with rugged mountains rising behind them, spectacular rock formations, and the sight and sounds of the river itself. Great contrasts of landform, vegetation, color, climate, and sound are evident in the corridor.

Recreation: The Snake WSR offers a blend of motorized and nonmotorized boating in a setting that is unique in North America. The scenic beauty of the canyon and challenge and risk associated with whitewater boating attract float boat and power boat recreationists to the river. A wide range of other recreation activities, including fishing, hunting, hiking and backpacking, are available in this unique backcountry river setting.

Geology: The geology of the canyon provides research potential and portrays the complex geologic history of the canyon and western North America.

Fisheries: The Snake WSR supports several stocks of anadromous fish, including fall and spring/summer Chinook salmon, sockeye salmon, summer steelhead, trout (redband and bull), and Pacific lamprey, as well as several other resident species of native fish. The river also

provides habitat for a large, isolated white sturgeon population. Fall and spring/summer Chinook, sockeye salmon, summer steelhead and bull trout are listed as Threatened under the Endangered Species Act (ESA). The Hells Canyon reach of the Snake River is considered critical habitat for fall Chinook salmon. These diverse fish stocks are important internationally, nationally and regionally for their commercial, historic values, and contribution to river ecology. The Snake River is known nationally and regionally for its abundant, unique and diverse sport fishery. (This section is updated to reflect current status of species and habitat.)

Wildlife: The Snake WSR includes a number of regionally and nationally significant wildlife species. The river corridor includes significant migration, wintering, and year-round habitat for these wildlife species.

Cultural: One of the richest accumulations of riverine archeological resources in western North America is enjoyed by visitors to the Snake WSR and the river provides unlimited research potential for the historic and prehistoric cultural resources of the canyon.

Vegetation/Botany: Few locations in the Pacific Northwest, or western North America, equal the Snake River canyon in the concentration and number of rare or endemic plant species. The river canyon includes populations of MacFarlane's four-o'clock (ESA threatened species), other species that are candidates for listing, and species on the Forest Service sensitive plants list.

Ecology: The north-trending Snake River canyon is a deep fissure between the mountainous uplifts of the Seven Devils in Idaho and Wallowas in Oregon, creating specialized plant communities as a result of unique microclimates. A number of Research Natural Areas have been designated in recognition of the importance of the river corridor environment. The canyon's special environment fosters unusual and specific relationships in the flora and fauna of the area.

Description of Recreation Setting (at time of CRMP development)
The Snake River, which forms the boundary of the states of Idaho and Oregon, provides for a variety of recreational activities in a setting that is unique in North America. Unlike most rivers in such a backcountry setting, the river is accessible by different types of motorized and nonmotorized watercraft and offers a variety of whitewater challenges, with visitors often using motorized and nonmotorized craft on the same trip. The corridor is also popular for fishing; hunting; viewing scenery, wildlife and cultural sites; backpacking; and horsepacking.

Access to the corridor by motor vehicles occurs at major portals: Hells Canyon Dam, Pittsburg Landing, and Heller Bar, with minor use from Dug Bar. These four locations also provide the same access points for boating as when the river was designated in 1975. The wild segment is accessed on the Idaho side immediately downstream of Hells Canyon Dam and at Pittsburg Landing. Access from the Oregon side, in the scenic segment of the middle river, is maintained at Dug Bar. Washington State access is provided at the BLM-administered Heller Bar launch. Substantial improvements have been made to each site to accommodate increasing use by both float and power boaters. These improvements have included: sanitation services, concrete boat ramps, hardened

road surfaces and public agency contact kiosks or stations. Other access to the river corridor is provided at backcountry airstrips and via a network of trails.

The Snake River provides habitat for a diverse and productive mix of warm and cold water fish species. The river offers year-round private and outfitted fishing opportunities. The outfitter industry specializes in providing opportunities in the fall steelhead fishing season. Also in the fall, big game and upland game bird hunting takes place on the benches above the river and uplands.

When the river was designated, and continuing today, private and commercial float and power boat use are the most pursued recreation activities. Class I to V rapids offers a variety of challenges for novice to experienced boaters, based on their skill level and type of craft (power boats, rafts, kayaks, canoes and dories). The quality of the whitewater power boating in the canyon surpasses all other similar experiences in the Pacific Northwest.

There are opportunities for hiking, backpacking and horsepacking in a remote river canyon. The Snake River Trail, from Pittsburg Landing to Granite Creek, is a national recreation trail.

Recreation-related Issues
In 1994, the Forest Service completed the *Wild and Scenic Snake River Recreation Management Plan (Plan).* Direction resulting from this plan, the 1996 *Wild and Scenic Snake River Outfitter Environmental Assessment* (Outfitter EA), and additional direction developed through revision of the Hells Canyon National Recreation Area Comprehensive Management Plan constitute the river's CRMP. This case study focuses on the recreation direction developed in 1994 Plan and decisions from the Outfitter EA.

Significant issues that guided development of the Plan;

- Recreation use allocation should be consistent with the protection and enhancement of threatened and endangered salmon fisheries and habitat in the river corridor.
- Regulation of recreation use could affect the socio-economic condition of current and future river users, recreation-related businesses, and related community and regional infrastructure.
- The establishment of appropriate and equitable levels of boating and aircraft use should meet the intended recreation experience within the river corridor.
- Party size restrictions, solid human waste carryout, and campsite stay limits should minimize onshore impacts from recreational users.

Stakeholder Involvement
As a result of a 1989 visitor use survey, a public task force was created and managed by the University of Idaho to conduct a Limits of Acceptable Change (LAC) planning process. This group utilized survey information to determine standards and management actions related to river education, maintaining the recreational experience, and perpetuating the natural and cultural resources. Their recommendations were used to

define the proposed action in the Forest Service planning effort, with additional alternatives developed through the NEPA process.

The development of the Plan included an intensive public scoping process, including nearly 300 pages of response to public comments.

Recreation-related Decisions
The following section excerpts management goals and direction from the Plan. In addition to this annotated and specific-to-recreation direction, the Plan (and Hells Canyon National Recreation Area Comprehensive Management Plan) includes additional direction to protect the river's outstandingly remarkable values and other resources.

Boating
The Plan establishes:

- A primary (control) season (Friday before Memorial Day to September 10).
- The number of commercial outfitters.
- The maximum number of daily float and power boat launches for private and commercial use during the primary season for both the scenic and wild sections of the river.
- A nonmotorized period on a portion of the wild river (from Wild Sheep Rapids to Kirkwood Ranch) on Monday through Wednesday every other week during the primary season, except holiday weekends (typically 18 days with a maximum of 21 days).
- Maximum party size for all float boaters.
- Number of float craft per party.
- Maximum private and commercial power boat size.
- Stay lengths at campsites in the primary and secondary seasons.
- No-wake zone at administrative and developed recreation sites.
- Valid and non-valid river craft.
- Year-round self-issue permit requirement.
- A reservation requirement for private float and power boat launches.

Personal motorized watercraft are prohibited on the entire river.

Launch reservations are required in the wild river for all users during the primary season. In the scenic river, launch reservations are required for all river users on Friday to Sunday during the primary season and will be required for the remainder of the week when monitoring indicates the daily cap is exceeded more than 50 percent of the season.

Backpackers and Horsepackers

- Party size is limited for backpackers and horsepackers within the entire river corridor, year-round. Self-issuing permits are required at major access points.

Maintaining Desired Experience (based on River Recreation Opportunity Spectrum)
Direction to remove:

- Navigation markers and picnic tables in wild river segment.
- Nonconforming structures at administrative sites.

Dispersed Recreation

- Prohibit camping outside designated dispersed sites.
- Require a human waste carryout program on the river.
- Require horsepackers that camp at designated high-use sites to pack out human waste.
- Prohibit cutting and/or burning of live or dead vegetation and woody material within one-quarter mile of ordinary high water mark.
- Require fire pans.
- Close river corridor to chain saw use.
- Provide an active education program on river etiquette.

Developed Recreation (at access portals)

- Maintain sanitation facilities, consistent with site development plans.

Coordination with Salmon River Management Plan (BLM)

- Develop a coordinated management approach with BLM to ensure compatibility of boat and party size for Salmon River users entering the Snake (scenic segment)

The Plan also includes mitigation measures to avoid or minimize the effect of recreation on other resources. These measures include direction for fuel transport and storage, education about protection of salmon, and criteria for creating additional no-wake zones for spawning areas.

Implementation Priorities
No implementation priorities were provided. However, some of the direction in the plan relative to managing recreation use was phased in.

Monitoring
The monitoring section of the CRMP describes the:

- Goal
- Purpose
- Threshold of Variability
- Who and How
- Monitoring Frequency

Monitoring direction is provided for meeting the Hells Canyon National Recreation Area Act, Wild and Scenic Rivers Act, recreation setting, dispersed campsites, fisheries habitat and other resources.

An example:

Goal	Purpose	Threshold of Variability	Who and How	Monitoring Frequency
Protect resources within dispersed camping areas	Determine if direction, user education and low-impact camping methods are reducing physical and biological impacts	No increase in onshore impacts over 1994 survey data combined with a decreasing trend in recreation-related impacts	Develop a baseline campsite inventory using established methods to measure vegetation, camp area size, erosion and social trails, fire rings, tree damage Compare to natural erosion outside of campsites for a baseline	Re-inventory every three years; prepare progress report

Visitor Capacity
Visitor capacity has been addressed by establishing desired conditions, defining an upper bound on the number of boat launches for all users (private and commercial float and power boats) during the control season, and establishing a myriad of decisions (standards and guidelines) to address the four key issues.

To provide a basis for revising the river recreation management direction of the Hells Canyon National Recreation Area Comprehensive Management Plan, the Forest Service initiated a visitor survey through a contract with the University of Idaho. The purpose of this survey was several-fold: to describe the people who use the Snake River for recreation, to describe how they use the river, and to identify their management preferences and perceptions of the river. Forest Service visitor use reports indicated a 147 percent increase in use during the primary from 1979-1991, with more than one-third of those surveyed describing the river as crowded.

Results – What has happened as a result of recreation direction in the CRMP?
The Plan was the subject of numerous administrative appeals. The Regional Forester upheld the framework provided in the Plan for managing recreation use, including the decision to provide a nonmotorized period in the wild river. However, due to deficiencies in the analysis record, the responsible official was directed to further consider the effects on: river outfitters (special-use permittees) and private land inholders.

The decisions for the Outfitter EA were incorporated into the Plan in 1999. Additional analysis was conducted related to private land inholders.

The decision was ultimately challenged in a number of separate lawsuits by groups primarily representing motorized (Hells Canyon Alliance; HCA) and nonmotorized (Hells Canyon Preservation Council et al.; HCPC) users. While there were various aspects to each party's complaints, the principal concern of the HCA was the alleged inadequacy of the USFS's analysis to support the nonmotorized period in the wild river segment. The HCPC was concerned about overall recreation use levels—specifically that such use should approximate 1975 use levels (i.e., the date of the river's designation) and that the wild river segment be closed to motorized rivercraft. The principal issues before the Court were the regulations established for motorized users (nonmotorized use had been regulated through previous decisions) and adequacy of the USFS analysis.

The pending cases were consolidated in the U.S. District Court for the District of Oregon by the same judge who handled HCPC's 1996-1997 lawsuits. The Court found in favor of the USFS, concluding, "the voluminous record supports the contention that it collected sufficient data and adequately supported its plan." This decision was challenged by both the HCA and the HCPC.

The 2000 opinion of the U.S. Court of Appeals for the 9th Circuit upheld the District Court decision and thus supported the USFS. Specifically, the Court recognized:

- Motorized craft as a valid use of the Snake WSR based on the HCNRA Act;
- The direction in the HCNRA Act to promulgate regulations necessary to control the use and numbers of motorized and nonmotorized craft;
- No requirement in the HCNRA or WSRs Acts directing a "particular numeric level or ratio of motorized and nonmotorized uses;" and
- The nondegradation policy of Section 10(a).

Based on a review of the record, the Court concluded the "USFS took a 'hard look' at the environmental impacts of motorized water craft on the various values of the Snake River. The Agency devoted 145 pages of the final EIS to exploring the possible environmental consequences of seven alternatives on each of the Snakes ORVs."

Due to administrative appeal, the Plan was not fully implemented until 1998. Since its implementation, river users have expressed a variety of views on the management of the river.

Successes	Areas Identified for Improvement
• Volunteer staffing of Historic Ranches • Staffing at Pittsburg Landing and Hells Canyon Creek Visitor Center • Customer service from Clarkston staff for power boat reservations. • Condition of developed facilities	• Unequal and unfair implementation of the nonmotorized period • Removal of picnic tables and toilets at dispersed camps in the wild section • Removal of navigation markers in wild section • Courtesy between power boats and rafters

With increasing pressure from the motorized community to reopen the Plan and reanalyze the main decisions, particularly the nonmotorized period, the Forest conducted a formal monitoring study.

In 2003-2004, the Forest contracted with the University of Idaho to survey private and commercial float and power boaters for a full river season. Their direction was to "evaluate how well river management objectives for recreation settings are being met, to monitor how management actions and policies implemented in 1998 may have affected experiences and social conditions, and to identify any differences in expectations, perceptions, or other factors among the four user groups."[1] Questions were asked about: experience seeking and attainment, social and environmental conditions encountered, perception of change, and opinions about management.

Over 2700 boaters were contacted with high public cooperation. Response to the mail survey was 65 percent. All four boater types were well represented in the sample. The study concluded (in part, and greatly summarized):

- Visitors perceive that ORVs and management goals are being achieved.
  - *All four boater types agree most ORVs and recreation management goals in Hells Canyon are being achieved.*
  - *The only disagreement concerned equitable treatment between userst.*
- Boaters' expectations of social and environmental conditions encountered on the river are largely being met.
  - *Encounter levels were as expected or fewer.*
  - *People saw fewer groups camped within sight than expected.*
  - *Natural wild character, cultural and historic sites, challenging whitewater, wildlife and fishing exceeded expectations slightly.*
- Few conditions detracted from boaters' experiences

[1] Monitoring Boaters' Experiences on the Snake River in Hells Canyon, Final Report (2005); Amberg, Hall, and Krumpe; University of Idaho.

    - *Most social conditions were either not noticed or had only minimal effects.*
    - *A few environmental conditions detracted from boaters' experience (seeing litter, human waste, and weeds).*
- Boaters had mixed opinions about the effects of some current management actions and policies
    - *Prohibiting jet skis and pack out waste policies added to experiences.*
    - *All facility removals and the nonmotorized window detracted from experiences for some boaters but added for others.*

The study can be found on the Wallowa-Whitman National Forest website at: http://www.fs.fed.us/hellscanyon/about_us/management/monitoring/snake_river/

The Snake River is part of the "four rivers lottery program." The Snake River administrative office makes every effort to connect users to their desired launch. It is the only of the four units to work with a waiting list upon completion of the lottery. The administrative office also prepares detailed visitor use reports and conducts other monitoring on a periodic basis.

Establishing User Capacities on WSRs
10/30/06

CASE STUDIES

Upper Rogue WSR

Designation Statistics

- P.L. 100-557, 10/28/88
- Oregon
- 40.3 miles from one-half mile below its origin in Crater Lake National Park to the southern boundary of the Rogue River National Forest, near Prospect, Oregon, administered by the USDA Forest Service
- Upper 0.5 miles is scenic classification
- Middle 5.9 miles is wild classification
- Lower 33.9 miles is scenic classification
- ORVs: scenery, geology (geohydrology), history, and water quality and quantity

Description of ORVs

Scenery: The Upper Rogue is noteworthy for its geologic attractions and vibrant fall colors. The river flows through dramatically incised pumice canyon, over picturesque waterfalls, is turned on its side to rush through narrow cracks in the lava flows, and, at one point, disappears below ground as it flows through a lava tube. Plant species diversity is rich, with an extensive coniferous forest including old growth Douglas-fir and sugar pine adjacent to the river, providing a backdrop for the spectacular spring and fall color provided by dogwood and vine maple that cover the banks of the river.

Geology/Geohydrology: The geologic history of the Upper Rogue and its diverse combination of features make it one of the world's unique geologic areas. These features include: a major example of an incised pumice canyon with pinnacle formation, active debris landslides and sapping/piping zones that reveal the process of its formation; reaches of stabilized river containing winding meander stream paths and flat, meadow/swamp terrain; concentrated groundwater discharged as springs; lava gorges; and the last remaining example a natural river diversion into and out of a lava tube.

History: The primary structures of the Union Creek Historic District are located within the river corridor. This District, listed on the National Register of Historic Places, is regionally significant, containing a complex of early twentieth century "rustic style" structures. These include a privately built resort, and a Forest Service administrative site, and campgrounds built by the Civilian Conservation Corps during the Great Depression. The river corridor has also provided trans-Cascade Mountain travel along the old Crater Lake Wagon Road.

Water Quality/Quantity: Water quality in the upper river is pristine and water clarity is exceptionally clear. Flow within the river remains relatively constant throughout the year with much less variability than adjacent rivers. This is due to the buffering effect caused

by the infiltration of precipitation into the pumice sheet and young lava flows. These materials slowly and uniformly discharge runoff into the river system.

Description of Recreation Setting (at time of CRMP development)
The Upper Rogue River in southwest Oregon provide a wide variety of recreational opportunities including dispersed and developed camping, sightseeing, interpretive sites, trail use, winter activities and fishing and hunting. The river corridor is paralleled along its lower stretch by State Highway 62, the principal travel route from southern Oregon to Crater Lake National Park, and, along its uppermost stretch by State Highway 230, the principal travel route from Medford, Oregon to Diamond Lake Recreation Area.

There are five developed campgrounds, two interpretive sites, two picnic areas and a winter snowpark in the corridor. The river corridor also contains 29 known dispersed sites, including two areas with some development (e.g. toilets, fire rings) to eliminate resource damage. These sites are utilized for day and overnight use. There are numerous opportunities for hiking on trails within the corridor, including the Upper Rogue River National Recreation Trail, which runs parallel to the river for its entire length. Some of these trails allow horse, mountain bike and over-snow activities.

Dispersed recreation activities include mushroom picking, photography, Nordic skiing, hunting and fishing. The Oregon Department of Fish and Wildlife offers a large stocking program of catchable-sized rainbow trout weekly during the summer.

Use of the Upper Rogue River for whitewater boating has been minimal. Some private boating does occur in three different sections of the river offering stretches of Class I-II (Foster Creek to Big Bend); Class III-V (Natural Bridge to River Bridge Campground); and Class II-III (River Bridge Campground to the Pacific Power and Light diversion impoundment) water. There are no developed boating access sites to facilitate use of these sections. No known boating use has occurred on the upper river due to low flows and the abundance of instream woody material. Another six-mile segment includes two unpassable features (Rogue Gorge and Natural Bridge – where the river flows through a lava tube). No commercial boating permits have ever been issued for the Upper Rogue although commercial rafters and fishing guides use the Rogue River below Lost Creek Reservoir (below the Upper Rogue).

Recreation-related Issues
The key issues that guided development of the CRMP and are directly related to recreation include:

<u>Whitewater Boating</u>

- Should commercial boating use be allowed?
- Should private boating use be allowed and regulated?

<u>Instream Woody Material</u>

- Should instream woody material be removed? This issue is focused on effects of removal of tree/log jams and other woody material to accommodate boating.

Specifically, this planning question relates to the effect of removal on scenic character, bank stability and habitat for fish and wildlife species.

Boating Access

- Should boating access be developed, and, if so, to what level of facilities?
- How should boating safety be addressed?

Recreation Facilities

- What level of recreation facility development should be allowed in the corridor?
- Should other recreation projects be allowed in the corridor?

Dispersed Recreation

- How many dispersed campsites should be allowed along the river?

Trails

- Should new trails be constructed in the corridor?
- What trail uses should be allowed on the trails in the river corridor?

Stakeholder Involvement

Forest staff conducted an extensive public involvement program in preparation of the CRMP and to support its decision under NEPA. Activities included mailings, press releases and public meetings. The results of these scoping efforts were summarized in several newsletters, each inviting additional comments.

Recreation-related Decisions

The following section excerpts management objectives and direction from the CRMP. In addition to this annotated and specific-to-recreation direction, the CRMP includes broad goals for each segment and similar detail for outstandingly remarkable values and other resources.

Wild River

Provide for "on foot" dispersed activities with opportunity for visitor to experience solitude and tranquility.

- Manage for Preservation visual quality objective.
- Prohibit any type of recreation facility development.
- Allow deteriorated recreation use areas to rehabilitate through natural processes and/or regulatory actions. (Note: Decision closes all existing dispersed campsites.)
- No new trail construction.
- Manage and control public use as necessary to protect wild river resource values.
- Prohibit motorized/mechanized use.
- Prohibit boating.

Scenic River

Provide for a wide range of recreation activities with opportunity for visitor to experience solitude and foot travel in some areas. In other areas the visitor will experience recreation activities with others. Developed site capacity may be increased.

- Manage for Retention visual quality objective.
- Provide recreation developments from minimum to high degree of site modification.
- Construct facilities to protect capital investment and for public health and safety.
- Provide for a variety of trail opportunities, including nonmotorized and motorized, summer and winter use.
- Manage and control public use as necessary to protect scenic river resource values.
- Rehabilitate deteriorated recreation use areas.
- Provide for motorized vehicle access at points along the river.
- Limit off-road vehicle use to permitted roads or trails.
- Allow private boating in designated sections.
- Prohibit commercial boating activities.
- Limit recreation residences to present level.

For the scenic river segments, the following additional recreation direction is provided:

Private Boating

- Allow private boating in two segments, totaling 15.7 miles. Close other sections of the river. (Note: This decision is based on minimal boating use, continued emphasis on upland recreation activities and, most importantly, to maintain a natural or near-natural riverine system (e.g. allow for instream wood accumulation without creating a boating safety issue).
- Implement a voluntary self-registration, permit system and monitor use. Consider regulation when monitoring suggests the need to do so.
- Leave instream wood in place, unless determined to be an extreme boating hazard. Each identified site will be evaluated by the agency resource specialists and a determination whether to remove or dislodge.
- Boating access may be developed or improved. (Note: CRMP lists specific sites and what general development may include.)
- Boating safety addressed through information and education materials.

Recreation Facilities

- Facilities may be increased based on demand.
- When recreation use is resulting in resource damage, sites may be improved and/or new regulations implemented to resolve. If problems persist, the site will be closed.

Dispersed Campsites

- All sites receiving resource damage and located on the immediate shoreline of the river will be analyzed for rehabilitation or closure. (Note: CRMP specified what constitutes resource damage and the decision identifies approximately 35 percent of the campsites in the corridor will be analyzed for rehabilitation/closure.)

- Campsites on or near the Upper Rogue River Trail will have road access obliterated and be maintained for nonmotorized (walk-in) use. Remaining campsites within the river corridor maintained for motorized camping opportunities.
- Any campsites not on immediate shoreline of the river and receiving resource damage will first be mitigated by seeding, planting and placing natural barricades. If resource damage persists, sites will be closed.

Trails

- New trails may be constructed.
- Trail user designation will be designed to minimize user conflict and potential resource damage.

Implementation Priorities
The CRMP provides a detailed list of priorities including additional dispersed site and road closure surveys, related site rehabilitation, and actions related to managing whitewater boating use.

Monitoring
The monitoring section of the CRMP describes the:

- Value to be Protected or Enhanced
- Action or Effect Monitored
- Threshold of Concern
- Management Action
- Data Source and Sampling Frequency

Relative to recreation, monitoring direction is provided for developed sites, dispersed campsites, trails and whitewater boating.

An example:

Value to be Protected or Enhanced	**Action or Effect Monitored**	**Threshold of Concern**	**Management Action**	**Data Source and Sampling Frequency**
Riparian area vegetation and soil	Campsites proximity to river's edge/wet areas	Less than 50 feet from river's edge/wet areas and/or resource damage Vegetation loss (soil erosion) exceeding 900 square feet	Campsite setback required Area restoration Closure and rehabilitation of entire campsite	Dispersed site condition survey and established photo points Annually

Visitor Capacity
Visitor capacity has been addressed by establishing desired resource conditions and recreation experience, and providing standards and guidelines for management. This standards-based approach relied on specific and detailed recreation-related decisions about visitor access, facility infrastructure and the type of recreation activities accommodated in the river.

Results – What has happened as a result of recreation direction in the CRMP?
To protect important riparian resources, water quality and scenery, District staff completed the non-system road and dispersed site surveys as directed in the CRMP. Survey results provided the basis for analysis and a decision notice under the NEPA, tiered to programmatic direction in the CRMP. In the late 1990s, the District implemented the actions in the EA, obliterating user-created roads and trails, and closing/rehabilitating dispersed sites. As a result, resource conditions in the river corridor have improved since designation.

Consistent with the decisions regarding whitewater boating, a Forest closure order was issued in June 1994. This order closed the entire river to commercially operated float boating and also portions of the river to private float boating. Private boating on the open sections of the river remains low based on limited monitoring information, with most use from kayakers during spring flows. Given the continued minor boating use, there has been no need for the access improvements associated with existing developed sites as outlined in the CRMP.

The capacity for developed facilities remains the same as at completion of the CRMP. A number of campgrounds and day-use sites have been improved (e.g. sanitation facilities). [Check "River Bridge" – in corridor? If so, group camps added to accommodate OHVs.] Vegetation management plans have not been completed, although there have been some treatments to address root rot.

The District relies on volunteers to provide a presence in its campgrounds and agreements with local law enforcement agencies for enforcement of some regulations. Public comments about river administration have been favorable since designation.

Establishing User Capacities on WSRs
1/30/07

CASE STUDIES

Wilson WSR

Designation Statistics

- P.L. 106-261, 8/18/00
- North Carolina
- 23.3 miles from near headwaters below Calloway Peak to its confluence with the Johns River
- Upper 2.9 miles is scenic classification
- Middle 4.6 miles is wild classification
- Lower 15.8 miles is recreational classification
- ORVs: scenery, recreation, geology, fish and wildlife, botany, history and cultural values

Description of ORVs

Scenery: The section through Wilson Creek Gorge and the headwaters is distinctive with moderate to steep gradient and rapid/pool flow characteristics with many cascades and small waterfalls. The gorge is steep and narrow with extensive exposed bedrock. The streambed is rocky with numerous large boulders. The Grandfather Mountain section of the river corridor is steep with huge rock outcrops.

Recreation: Visitors are able to participate in a wide range of recreation activities, including fishing, hiking, primitive camping, hunting and viewing scenery. The 15.4-mile section from below Mortimer Campground to Johns River is a canoe/kayak run with a range of Class I-V rapids. The gorge segment includes a difficult section of Class III-V rapids.

Geology: Wilson Creek exposes formations of the Grandfather Mountain Window, a significant geologic structural feature. Rocks exposed in this "window" are among the oldest exposed in the Appalachian Mountains. Rock exposure is extensive in the headwaters and in the lower river segment through Wilson Creek Gorge.

Fish and Wildlife: Wilson Creek has been classified as an Outstanding Resource Water (ORW) by the North Carolina Department of Water Quality, which indicates the system is unique and special waters of exceptional state or national significance. The Creek is further classified as suitable for natural trout propagation and the maintenance of stocked trout populations.

Botany: Twenty-six natural communities are present along Wilson Creek due to the great elevation span of the river corridor and its occurrence in both the Blue Ridge and Piedmont physiographic regions. The streamside communities in the upper portions of the river are in excellent condition. The section between Calloway Peak and US

Highway 221 is part of North Carolina's Grandfather Mountain Natural Heritage Area. The varied-mineral composition of the rock outcrops and the high elevation climate of this segment have created a complex mosaic that includes 20 rare plant species.

History and Cultural Values: Many of the historical values of the corridor are centered near the Mortimer-Edgemont area. Mortimer had a population of approximately 800 at the turn of the century and was the center of county activity with motels, summer homes and industry. The Mortimer Recreation Area was the site f the Camp Grandfather Mountain Civilian Conservation Corps (CCC) Camp from 1933 to 1942. The CCC camp is eligible for listing on the National Register of Historic Places. The historic settlement and logging of the area, generally concentrated above the gorge, was closely tied to the river. The Carolina and Northwestern Railroad spur line provided access to these communities. Much of the development was destroyed by flooding in the 1940s and never rebuilt. Upper Wilson Creek (above the gorge) was part of a major prehistoric thoroughfare connecting the Upper Piedmont and high mountains.

Description of Recreation Setting (at time of CRMP development)
Wilson Creek, in North Carolina, begins in the Blue Ridge Mountains and the lower two miles flow into the upper Piedmont. Elevation ranges from 5,920 feet at Calloway Peak on Grandfather Mountain to 1,020 feet at its confluence with the Johns River – the greatest relief of any river located along the Blue Ridge front.

Primary recreation activities in the upper river corridor (above Edgemont and in the scenic, wild and upper portion of the recreation segments) include fishing, hiking, backpacking, and hunting. Private ownership along the river from Edgemont downstream to the gorge generally precludes public recreation use. Much of this private land is developed with permanent and seasonal residences. Mortimer, a Forest Service campground and picnic area located in the upper third of the recreation segment, provides the only developed public recreation in the river corridor.

The Wilson Creek Gorge in the recreation segment receives the heaviest recreation use. This 2.3-mile segment is popular for fishing, swimming, picnicking, sunbathing, and whitewater boating. In response to crowded summer conditions and a long history of law enforcement problems, the gorge is managed under a Forest Supervisor's Order that restricts parking to designated areas and prohibits alcoholic beverages, campfires and camping.

The section through the gorge is the most popular for whitewater paddling with a series of rapids (Class III-V) that wind through boulder gardens and drop over ledges into small pools. Boating use is generally light to moderate due to natural stream-flow fluctuations, the skill level required to paddle the gorge, and its short length. The heavy use by other recreationists tends to discourage some boaters. The lack of public launch areas also discourages use. Upper sections of Wilson Creek offer opportunities for high-skill creek boating when the water level is adequate. Other sections of Wilson Creek provide opportunities for Class I-III whitewater. There are no designated launch sites for

paddlers and only two sites in the gorge section where there are steps from the parking area towards the river.

There are nine commercial recreation permits issued within the river corridor. These include: two rafting/inflatable kayak permits, three fly-fishing permits, two trekking/hiking permits, and two camping/hiking permits. Most commercial guided boating trips occur beginning in April or later as the water warms and sufficient volume is available.

Existing parking areas are used to capacity on many weekends in the spring through fall. Parking congestion may also occur on weekdays during the summer. Parking along the road outside of existing parking spaces tends to slow traffic and add to congestion. This space limitation and intermittent crowding has lead to vegetation trampling, and soil erosion and compaction in some locations.

A trail along the crest of Grandfather Mountain crosses Galloway Peak at the upper boundary of the river corridor. The Tanawha Trail, that parallels the Blue Ridge Parkway, also crosses the headwaters of Wilson Creek. A trail beginning at Forest Road 192 parallels the river downstream for about 9 miles through the wild and into the recreation segments. It provides some access to the river's edge.
The upper (scenic) river corridor is accessed by 1.1-mile portion of the Blue Ridge Parkway and two other Forest Service road crossings. The 4.6-mile wild segment is accessible only by hiker trail except for a Forest Service road and trail access to an old abandoned farm on private property midway in the wild segment.

The majority of the 15.8-mile recreational segment is accessible by road. Approximately 12.5 miles of this section of the river is privately owned, with the shoreline a mixture of agricultural and undeveloped forestland. National Forest System lands begins above the gorge segment and includes six developed parking areas, numerous pull-offs and a boater's put-in/take-out area. Access to the river's edge is from a number of steep, user-created trails.

Recreation-related Issues
The major issues that guided development of the CRMP are directly related to recreation:

- Determining the types and distribution of trails and facilities within the corridor, and diversity of recreational opportunities.
- Determining the types of commercial activities to be permitted in the corridor and conditions for new special-use permits.

Stakeholder Involvement
The public was involved traditionally through development of the CRMP and its related NEPA document (EA). A public meeting was held with an invitation for verbal and written comments, and an open house was hosted for landowners in the river corridor.

Recreation-related Decisions
The following section excerpts management goals and direction from the CRMP. In addition to this annotated and specific-to-recreation direction, the CRMP includes broad goals for each segment and similar detail for outstandingly remarkable values and other resources.

Goals
Wild segment: Recreation managed to provide most primitive, natural and remote setting as possible. Access limited to roads outside the corridor

Scenic segment: Recreation managed to provide a natural-appearing setting with limited improvements. Riverbanks remain largely undeveloped with road access in some places.

Recreational: River: Recreation managed to provide river-oriented recreation in natural-appearing and culturally influenced settings. Improvements such as trailheads and river access points will be available at some locations. River may be readily accessible by roads and trails.

All segments: Provide a variety of nonmotorized opportunities with activities dispersed as much as possible to alleviate crowding or use conflicts. Access points such as trailheads and parking lots located to aid in dispersal of recreation use. No motorized watercraft. Use of watercraft other than canoes, kayaks, inflatable kayaks and rafts will be evaluated on a case-by-case basis.

Developed Recreation Management
General Direction

- Expand or renovate existing facilities before considering development of new facilities.
- Develop new facilities only if use levels indicate additional developed site capacity is needed and facilities are compatible with management area objectives.
- Design new development to minimize disturbance to wildlife and move use away from sensitive riparian areas to extent possible while still providing access to the river at designated locations.
- Provide barrier free facilities.

Dispersed Recreation Management

- Emphasize river oriented, nonmotorized recreation opportunities, favoring hiking, fishing, boating, viewing wildlife and scenery, and nature observation. (One or more specific Recreation Opportunity Spectrum classes were provided for each segment.)
- No motorized watercraft allowed.
- No off-highway vehicle use except as allowed on system roads.
- Primitive camping allowed in designated sites only.
- Note: The Forest closure order remains in effect in the gorge segment, restricting parking to designated areas, and prohibiting alcoholic beverages, campfires and camping.

Trails Management

- The CRMP provides specific decisions relative existing trails and uses, maintenance and new construction.
- No off-road or off-trail travel by bicycle, horse or llamas.

Special Uses

- Issue permits for new special uses only when compatible with special values of the area.
- Allow no more than two commercial, noninstructional boating outfitter permits within the recreational segment.
    - Allow no more than 120 commercial boaters per day (including guides), in groups of 6-15; groups of 5 or less (not including guides) are not included in 120 boater's limit.
    - No commercial, noninstructional boating outfitter permits issued in wild and scenic segments.
- Limit group size of commercial guided angling, instructional boating and other water-based activities to 5 or less (not including guides).
- Limit group size of land-based permits to no more than 15 (not including guides).
- Stipulate conditions in every permit for dispersal of use throughout the day and season to avoid overcrowding. Specify commercial boating launch intervals in outfitter permits.
- Limit camping by commercially outfitted groups, or other groups under permit, to designated areas.

Implementation Priorities

The CRMP includes guidelines for priority of actions:

- Public safety
- Requirements of WSRA, including Section 7
- Improvements or actions to meet direction in CRMP
- Improvements or actions within the watershed to enhance in-corridor values and meeting direction in CRMP

A list of on-going, short-term and longer term priority actions are provided. Specific to recreation:

Ongoing Actions

- Maintain inventory of potential parking expansion/improvement sites (across ownerships)
- Consider designation of campsites in some areas
- Develop and maintain fishing access inventory and list of needed improvements

Short-Term Actions

- Work to provide public access via private property at several locations
- Consider designation as Scenic Byway or auto tour
- Clarify or designate trail use

Long-Term Actions

- Enhance Harpers Creek Falls Overlook
- Improve put-in/take-out opportunities to meet goals of CRMP
- Improve and expand parking to meet goals of CRMP
- Provide a variety of interpretive opportunities
- Developing fishing access improvements to meet goals of CRMP
- Develop trail system in watershed

Monitoring

The monitoring section of the CRMP describes the:

- Value to be Protected or Enhanced
- Key Indicator
- Standard(s) to Meet
- Action(s) if Not Met
- Sample Method(s)

Relative to recreation, monitoring direction is provided for quality of experience, site integrity and capacity.

An example:

Value to be Protected or Enhanced	**Key Indicator**	**Management Standard**	**Management Actions Triggered if Standard is Not Met**	**Sampling Procedure and Frequency**
Recreation (Riparian area/associated water quality)	Quality of experience, including site integrity and capacity	Meet ROS setting parameters Prioritize rehabilitation of sites with over 200 square feet of exposed soil in recreation segment and 100 square feet of exposed soil in scenic and wild segments Use may be noticeable but not dominant	Indirect actions first – educate, inform, sign Increase enforcement Rehabilitate, and/or close impacted sites Establish use restrictions	Periodic user satisfaction sampling at least every 10 years Conduct site condition surveys as needed to establish trends of impact and effectiveness of rehabilitation

Visitor Capacity

Visitor capacity has been addressed by establishing desired resource conditions and recreation experience (management direction), continuing regulations in the gorge segment (limits on parking, camping, campfires and alcohol), and making decisions about commercial use in the corridor. Conclusions in an analysis of the effects of recreation use on physical, social and ecological conditions in the corridor include:

- Vegetative and soil disturbance is minimal due to the rocky nature of river's banks
- Hiking and biking generally takes place away from the river's edge
- The high-skill level needed to paddle the gorge section and the seasonal water fluctuations act to self-regulate private boaters

To provide for a diversity of opportunities and minimize crowding and user conflicts, the CRMP restricts group size for all commercial outfitters. It also establishes the number of permits to be issued for some types of commercial use and an upper bound on commercial boaters/day.

Results – What has happened as a result of recreation direction in the CRMP?
Resource conditions have improved in the river corridor since its designation as a result of a very successful partnership with the county, and improved access sites to disperse use and protect biophysical resources. In 2003, the County secured grant money and constructed a visitor center. The Forest Service helped secure grants, develop display materials and now helps staff this facility. The visitor center, which shares information about the history of the area, the importance of river stewardship, and recreational opportunities in the watershed, is part of a broader cooperative recreation plan developed by the county. This plan, which is wholly compatible with Wilson Creek CRMP, is focused on private and county lands within the river corridor.

The Forest Service has improved a number of access points to disperse use. Sanitation facilities have been added at some of these sites as well as better access to the river's edge. The county has also secured and improved some access sites on private land, including a formerly private campground, which is now available to the public. Through relicensing of a nearby hydropower project, they are developing a parking area on the lower river. This facility will serve as a take-out for boaters of the gorge section and a put-in for boaters of the calmer waters below. It also will provide trail and water access to the State greenway system.

The nonprofit Friends of Wilson Creek serves as a liaison with the private landowners and helps promote river stewardship. They, in cooperation with the county, also participate in a number of river corridor activities, such as recent efforts to remove noxious weeds and river cleanups.