Mulberry River

Wild and Scenic River Management Plan

USDA Forest Service
Ozark-St. Francis National Forests

October 1996
COMPREHENSIVE MANAGEMENT PLAN
MULBERRY WILD AND SCENIC RIVER

OZARK-ST.FRANCIS NATIONAL FOREST
U.S. FOREST SERVICE, SOUTHERN REGION
U.S. DEPARTMENT OF AGRICULTURE
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MULBERRY WILD AND SCENIC RIVER
COMPREHENSIVE MANAGEMENT PLAN

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COMPREHENSIVE MANAGEMENT PLAN FOR THE MULBERRY RIVER

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COMPREHENSIVE MANAGEMENT PLAN FOR THE MULBERRY RIVER
OZARK ST. FRANCIS NATIONAL FORESTS, ARKANSAS
U.S. DEPARTMENT OF AGRICULTURE

I. PURPOSE OF THE PLAN

A. INTRODUCTION

The Comprehensive Management Plan for the Mulberry Wild and Scenic River provides direction for managing the national forest lands within the boundaries of the designated corridor. The purpose of the comprehensive management plan is to protect the outstandingly remarkable values of the river as well as its free-flowing condition. This plan was prepared by the Forest Service, for the portion of the Mulberry River for 56 miles, from the headwaters to the Forest boundary. Site specific analysis must be done for any specific projects that implement the plan.

This plan is intended to fulfill the requirements of the Wild and Scenic River Act which requires that comprehensive management plans be developed for designated streams (see Appendix I, Legislative History). The Ozark-St. Francis National Forests’ Land and Resources Management Plan (FLRMP) will be amended to implement this plan.

The Wild and Scenic Rivers have been under special consideration since the development of the Forest Land and Resources Management Plan was signed in 1986. Actions within the existing corridors and throughout the watersheds, where the Forest Service has jurisdiction, are regulated to protect water resources, flood plains, riparian values, etc. These management plans focus on the national forest lands within the corridors, and those actions which may be taken to provide additional enhancement of the river values. The protections offered to the watershed areas outside the corridors are not being eliminated, reduced, or altered.

B. PLAN FORMAT

The River management plan is broken into two parts, private lands and National Forest lands. The National Forest lands portion is further divided into six sections (see table of contents). The five sections following the purpose of the plan section are broken down by the Forest Service Directive System. This numerical format is used simply for ease of locating various sections of the plan. By taking one resource designation, one can follow the same designation in other sections by following the number.

C. PRIVATE LANDS

Private land ownership is legitimate within Wild and Scenic River corridor boundaries. Within the corridor boundaries, ranching, farming and forest management uses which were in existence when the river was designated within "Scenic" and "Recreational" classifications are consistent with river goals. Land uses on private lands adjacent to, but not included in the river corridor are not affected by the river designation.
The U.S. Forest Service does not manage private land within the Wild and Scenic River corridors, and has no authority to zone private lands. The Act does, however, include provisions to encourage the protection of river values on private lands through cooperation with State, local governments, and landowners. The Forest Service’s authority to affect private lands is dependent upon exercising acquisition authorities, or through willing-seller, willing-buyer transactions. Except for these authorities, for which just compensation is required, the agency cannot regulate the use of private property under this Act. We do, however, encourage landowners within the corridor or adjacent to the high water mark to manage their lands to protect and enhance river values.

The Act directs the Forest Service to protect and enhance the values for which the river was designated, its free flowing nature, and water quality, consistent with the public use and enjoyment of these values. This is limited on private lands to serving in an advisory role, providing technical assistance and cooperating with States or their political subdivisions, landowners, other Federal agencies or individuals to plan, protect and manage river resources. The Forest Service has responsibility to evaluate project proposals that affect the River’s free-flowing characteristics in which a federal agency is the proponent or provides assistance through loan, grant, license, or permit.

The Wild and Scenic River corridor includes private land in two situations:

1) Private lands under floatable stream beds - included here are privately owned stream beds under the floatable portions of Mulberry River. For river segments generally termed as floatable, the extent of public use of the bed and banks below the ordinary high water mark is defined by State law.

2) All other private lands - Included here are: A) private lands that are above the mean highwater line, whose owners requested to be included in the corridor, and B) non-floatable privately owned stream beds under Mulberry River. In both cases landowners control public access to their property. Streams and stream beds generally considered non-floatable remain private waters with public access subject to operation of state trespass and posting law. The designation of a river as a part of the National System has no bearing upon the determination of which portions may be considered floatable.

Neither this plan nor the Act affects the ability of a landowner to control public access on their lands. This remains true within the corridor boundaries, irrespective of whether such private lands are located under or adjoining the stream beds (floatable or not). This plan does not imply any right of public use on, or access to, private lands within the corridor beyond that which is now established through the operation of State law. Nothing in the Wild and Scenic Rivers Act or this Plan shall affect state and local jurisdiction to carry out state game and fish laws.

This plan is intended to protect and enhance identified river values through partnership with other federal, state, and local agencies, private landowners and other public interests. This plan’s goals are to: 1) make efforts to inform the public of the location of private lands and that such lands are not open to public use without permission of the landowner, and 2) encourage the public to respect private landowner rights.
D. NATIONAL FOREST LANDS

OUTSTANDingly REMARKABLE VALUES

Two outstandingly remarkable values were identified for the Mulberry River in the "Wild and Scenic River Study Report and Final Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest", September, 1991. Those values are Recreation and Fisheries.

"Recreational - Canoeing, camping, swimming, and fishing are the primary forms of recreation. The Mulberry is an extremely popular canoeing river with Class I to II rapids...the state legislature has designated the Mulberry as a state scenic river. This river has several major public access points along its length which contribute to recreation use.

"Fish and Wildlife - This river has been recognized by Arkansas Game and Fish Commission as one of the premier smallmouth and spotted bass fisheries in Arkansas. Fisheries values are outstanding."

"The Arkansas Smallmouth Bass Management Plan, May, 1995" recognizes the Mulberry River as a "Quality Stream" for smallmouth bass fisheries. The Arkansas Game and Fish Commission does not consider spotted bass as highly managed species for sport fish. It is a transition species that can tolerate more turbidity than smallmouth bass. Spotted bass is more common and will compete with smallmouth bass when there is warmer more turbid water conditions. For these reasons, the Ozark-St. Francis National Forest will feature smallmouth bass as the outstandingly remarkable fisheries value for the Mulberry River.

MANAGEMENT GOAL

The overall goal of Wild and Scenic River management is to provide recreation opportunities within the capability of the resources, the protection of the free-flowing condition of the river and the preservation and enhancement of values for which the river was designated.

MANAGEMENT OBJECTIVES

1. Protect and/or enhance the Outstandingly Remarkable Values identified as Recreation and Fisheries.

2. Establish measurable indicators and standards for biophysical and social conditions, monitor effectively the condition of those indicators, and implement management policies and programs to prevent degradation of riparian resources and visitor experiences.

3. Provide for plant and animal community diversity and maintain healthy functioning ecosystems as the foundation to sustaining long-term productivity. Maintain habitat for both aquatic and terrestrial species inhabiting the Mulberry River corridor.

4. Recognize and respond to the socio-economic effects of management strategies. Recognize the varied needs of the public to be partners and to participate in managing the river corridors through example, awareness, interaction, and communication.
5. Emphasize user education and information. Establish new regulations only when other methods (e.g. personal contacts, information and education) are not effective, and ensure that any regulations established are enforceable.

6. Develop and maintain a working relationship among landowners adjacent to the river, local and state governments, private and commercial users, interested resource groups, and the Forest Service to help achieve the above goals in the Mulberry River corridor.

7. Privately developed recreation opportunities are encouraged. Expansion of Federal recreation areas is discouraged without the participation of private partners.
II. EXISTING CONDITIONS

A. LOCATION AND ACCESS

The Mulberry River is located in Newton, Johnson, and Franklin counties, Arkansas (see Appendix II. Vicinity Map). The Mulberry River flows 62.3 miles from its headwaters, 2.5 miles south of Fallsville, to its confluence with the Arkansas River. The Mulberry River drains a total of 367 square miles (235,000 acres) inside the forest boundary (including both public and private lands).

Forest Development Roads 1003 and 1501 (State Highway 215) provide access to the river in many locations as it follows the river corridor for approximately 29 miles. Forest Development Road 1003 stretches from about three miles below the river’s head to Arkansas Highway 23 at Turner’s Bend. The most commonly used access points along this section are Arkansas Highway 103 (Bridge) near Oark, Wolf Pen Recreation Area, the confluence of the Little Mulberry and the Mulberry River, High Bank Canoe Access, Byrd’s Campground (private) at Beech Grove, the low water bridge at Forest Development Road 1504/County Road 219, Redding Recreation Area, and Turner Bend Campground (private) at Highway 23.

Numerous structures on private land along this section of the river include houses, barns, mobile homes, and poultry houses.

Below Turner’s Bend, at Arkansas Highway 23, Forest Development Road 1501 parallels the river to Campbell Cemetery Canoe Access. There are three major access points and several less used points in this section. The major points are at Wayfarers of the Ozarks Canoe Rental (private), Baptist Vista Church Camp (private), Milton Ford, and Campbell Cemetery Canoe Access. All are located on spur roads off Forest Development Road 1501.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Classification</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Mulberry</td>
<td>Recreational</td>
<td>36.6 miles</td>
</tr>
<tr>
<td>From origin in T13N, R23W, Section 32 to Big Eddy Hollow in T11N, R23W, Section 13).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Mulberry</td>
<td>Scenic</td>
<td>19.4 miles</td>
</tr>
<tr>
<td>from Big Eddy Hollow to the Ozark National Forest boundary.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Segment Classifications for the Mulberry River.

B. CORRIDOR BOUNDARIES AND CLASSIFICATION

The river corridor was established (Proposed Boundaries for the Mulberry Wild and Scenic River, 1993) using a metes and bounds system of survey across National Forest land tying to known monumented corners, but excludes most of the private land beyond the mean high-water line of the river. There are 3,908 acres within the boundary, of which 614 acres are private land and 3,294 acres National Forest land. These acreage figures should be considered approximate. The total acreage figure was determined using a computer program which connects the described monumented corners into a polygon, and then determines the area within the polygon.

Existing Condition Page 5 Mulberry Wild and Scenic River
A planimeter was then used to delineate the acres of national forest land. This number was subtracted from the total acreage figure and resulted in the number of acres of private land within the corridor. The mean high-water line (in Arkansas the limits of riparian ownership) along navigable streams, as determined by Arkansas case law, is defined as:

"Ordinary high-water line, or mean high-water line. The line delimiting the bed from the banks of a stream is found by ascertaining where the presence and action of water are so usual and long continued in ordinary years as to mark upon the soil of the bed a character distinct from that of the banks in respect to vegetation and the nature of the soil." (Handbook for Arkansas Land Surveyors, 1981 edition, page 56, Plate 5).

This boundary includes some land seen from the river and some areas beyond the visual foreground. It averages 70 acres of public and private land per river mile. This meets the 320 acres per mile limitation established in the Act.

Of the 3,294 acres of National Forest land within the corridor, 2,412 acres of that has been classified as "suitable" National Forest timber land and 882 acres were classified as "unsuitable" timber land. In Amendment 7, all the National Forest lands within the corridor were reclassified as "unsuitable" timber land. The Standards and Guidelines section of this plan will discuss activities, such as timber harvesting and prescribed burning on public lands and how they may be permitted for wildlife, recreational, and scenery management objectives.

This corridor includes all developed National Forest recreation sites associated with the river including: Wolf Pen, High Bank, Redding, and Campbell Cemetery canoe launch sites, and the dispersed access points of Little Mulberry and Big Eddy. It also includes public lands at Hurricane Creek, Spirits Creek, and the Mayo and Woolsey tracts. This corridor excludes the recreation sites on private land such as: Byrd's Campground, Turner Bend Campground, and Wayfarer's Canoe Launch. Other public, non-Forest Service access points include the low water bridge at Franklin County Road 84 and at Milton Ford where Franklin County Road 451 crosses the Mulberry.

The Wild and Scenic Rivers Act as amended in 1992 states:

"SEC. 2. (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or states through which they flow..."

"(b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and related adjacent land area that possess one or more of the values referred to in Section 1, subsection (b) of this Act."

"The Mulberry River, Arkansas.--The 56.0 mile segment from its origin in section 32, township 13 north, range 23 west, to the Ozark National Forest boundary, to be administered by the Secretary of Agriculture in the following classes:

(A) The 36.6 mile segment from its origin in section 32, township 11 north, range 27 west, to Big Eddy Hollow in section 3, township 11 north, range 27 west, as a recreational river.

(B) The 19.4 mile segment from Big Eddy Hollow in section 3, township 11 north, range 27 west, to the Ozark National Forest boundary, as a scenic river."
C. SOCIAL AND ECONOMIC CONDITIONS OF THE AREA

This river is located in a rural part of northwest Arkansas. The income levels are primarily moderate to low, and local residents derive much of their income from light industry in Clarksville, Ozark, and other nearby towns. Other vocations include ranching, farming (crops and poultry), and logging.

The Ozark, Ouachita, and part of the Mark Twain national forests are within a 150 mile radius of the Mulberry River. Other federally designated parks and recreation areas, outside the national forest system, include Hot Springs National Park, the Buffalo National River, Fort Smith National Historic Park, Pea Ridge National Battlefield, and a number of U.S. Army Corps of Engineers parks and recreation areas. There are numerous parks operated by the states of Arkansas, Oklahoma, and Missouri.

More than two million people live within 150 mile radius of the River. Major population centers include Little Rock, North Little Rock, Fayetteville, Springdale, Pine Bluff and Fort Smith, Arkansas; Tulsa, and Muskogee, Oklahoma; and Springfield, Joplin, Branson, and Cassville, Missouri. Branson, Missouri, Hot Springs, Arkansas, and the Buffalo National River, in Arkansas, are the biggest tourist attractions in the region.

D. PROGRAM AREAS

1600 INFORMATION SERVICES

SIGNS

Informational. Bulletin boards are located at Redding Access, Campbell Cemetery Access, and Wolf Pen Access. Bulletin boards generally have a river map, general forest area map, information regarding river courtesy, and warnings about using proper safety equipment, high water, and that alcohol and boating do not mix. There is an improved access point at High Bank, but there is no bulletin board at this location. Other unimproved access points, such as Little Mulberry, Big Eddy, and Spirits Creek, do not have bulletin boards.

There are no Wild and Scenic River (WSR) signs, showing the WSR logo, posted anywhere along the river corridor. Recreation area portal signs exist at Wolf Pen, High Bank, Redding, and Campbell Cemetery. Only one, the sign at High Bank, says "Canoe Access" on the main road.

Regulatory. Regulatory signs are limited to speed limit and stop signs within the developed recreation areas, and posters listing the general National Forest Regulations and the Forest Supervisor’s Orders. The Forest Supervisor’s Orders are specific to each recreation area. There are no Forest Supervisor’s Orders that are specific to the Wild and Scenic River Corridor.
BROCHURES

One brochure has been printed. It is a two sided card that describes the Mulberry Wild and Scenic River and gives a safety and courtesy message (see Appendix III, Mulberry River Brochure). The other side of the card has a map of the river area. The map shows Forest Service Access points, other access points (such as the outfitters along the river), and points of interest, and the main roads that access the river. This card is available to the public at the Boston Mountain and Pleasant Hill Ranger District Offices, and at Turner Bend Store, and Byrd’s Canoe Rental. It is mailed to people who ask for information about the river.

RIVER MAP

The Ozark National Forest has not printed a river map for public use. One has been designed and privately printed and is available to the public through the Ozark Interpretive Association, Ranger District Offices, and at private outlets. The map has the following features: printed on waterproof paper, shows access points, land ownership, roads, and names the features of the river (such as the shoals, drops, and rapids). The map also provides interpretive information about the water flow, area attractions, river levels, legal issues, emergency telephone numbers, canoe tips, information about camping and outfitters, and a description of the river segments.

PERSONAL CONTACT

The Ozark National Forest, Turner Bend Store, and Byrd’s Canoe Rental have been working together to have a volunteer river ranger on the river during the main canoeing season. The volunteer uses his own canoeing equipment, the Forest Service supplies a volunteer cap, shirt, and decals for the canoe. The outfitters supply shuttle service and augment any expenses with a small cash payment. The river ranger provides needed contact with the public. He floats busy sections of the river and contacts as many people as possible, giving advice on getting through rapids, encourages people to pick up their litter, lets them know when they are on private land, and is available to provide first-aid. He also helps maintain the river. He picks up litter and cuts out dangerous trees when they fall across the main channel. He does not remove all hazards; he only cuts out that portion of the trees which are necessary to allow safe passage. The volunteer has also appeared in several television stories that highlight the river and presents programs to school children.

2100 ENVIRONMENTAL MANAGEMENT

HUMAN WASTE

Sewage treatment facilities on National Forest land include a septic system at Redding recreation area and a sewage treatment plant at Cass Job Corps Center. The Redding Recreation Area system is within the river corridor and includes flush toilets, a septic tank, lift station and drain field. This system has been inspected and approved by the State of Arkansas and the Franklin County Sanitarian. Cass Job Corps Center operates its own sewage treatment and water plants. Fresh water is pulled from the Mulberry River through an under gravel filter for treatment before drinking. Treated waste water is discharged into Fane Creek, a tributary to the Mulberry River, but outside the Wild and Scenic River corridor. The Ozark National Forest has a waste water discharge permit from the State of Arkansas. Both the sewage and water treatment plants comply with all State of Arkansas regulations and requirements.
The recreation areas at Wolf Pen and Campbell Cemetery have holding tanks for the untreated sewage. Periodically, the sewage is removed from the holding tanks and taken to a State approved sewage disposal area.

Human waste is deposited along the river from canoeists and at dispersed camps from campers. This is most common during hunting season and floating season.

SOLID WASTE

Solid wastes, such as litter, trash and garbage collected in cans at the developed recreation areas are removed to the appropriate county landfills. Recycling bins for aluminum cans are available at Redding Campground.

There is no central landfill, compessor station or collection area within the Mulberry River valley. Typically, landowners either subscribe to a private trash disposal company, or haul their trash to the county-run sanitary landfills or collection sites. Some residents recycle, compost, bury, and/or burn their trash and garbage. There is still some illegal dumping of trash on lands adjacent to the river. During storms, some of this trash is washed into the river.

There is one organized litter clean-up day each year for the Mulberry River. Turner Bend, Byrd’s Canoe Rental, Wayfarer’s of the Ozarks and the Ozark National Forest have worked together for many years in doing an annual river clean-up. The outfitters supply free canoes and shuttles to people who volunteer to pick up trash along the river. The Forest Service supplies trash bags, and disposes of the collected trash. Because of the early canoeing season on this river, the river clean-up day occurs two months before the National River Clean-up day.

Outfitters, volunteers, and Forest Service employees continue to pick up litter throughout the year. The volunteer river ranger usually collects litter along the river on a weekly basis.

PESTICIDES

Pesticide use is currently allowed in the corridor on public lands. Actual application of pesticides has been infrequent and has followed the guidelines established in the Forest Land and Resources Management Plan, Amendments 4 and 5. There are standards regarding the type, frequency, methods of application, monitoring, and safety. Project areas are monitored for off-site movement of herbicides to assure water quality protection. Procedures for monitoring and reporting results are in the "Herbicide Monitoring Plan for Water Quality, 1993. Ozark-St.Francis National Forests."

2200 RANGE MANAGEMENT

According to the Wild and Scenic River Study Report and EIS for Ozark Rivers, there were 45 cattle under Forest Service special use permit on established pastures consuming 357 AUMs (animal unit months) of forage per year (7.9 months per 1000 lb. animal) in the river corridor. According to the report, there were no woodland grazing permits. As of 1996, there are no longer any Forest Service grazing permits within the river corridor.
There are three National Forest improved pastures within the river corridor. These pastures have been acquired by the Forest Service since 1986. Until Amendment 7 to the Forest Land and Resources Management Plan, the Forest Service provided only custodial management. No fertilizers have been applied since acquisition by the Forest Service. The hay is sold to interested parties.

There is a small game management area along the north bank of the Mulberry River, west of Highway 23. This area has been developed to provide small game habitat. The area is regularly planted with corn, wheat, clover, soybeans and milo. It is also fertilized with non-poultry fertilizer.

**2300 RECREATION MANAGEMENT**

Recreational use of the river is one of the two outstandingly remarkable values for which the Mulberry was designated as a wild and scenic river. The highlighted recreation activities are canoeing, camping, fishing and swimming.

**INTRODUCTION**

According to the "Wild and Scenic Study Report and Final EIS for Ozark Rivers", which recommended the Mulberry for designation: "This river is rated outstanding for recreational values. It is easy to access from a number of state highways and Forest Service roads, and is growing in popularity among floaters and fishermen. Most recreation use comes from canoeing."

The *Arkansas Floaters Kit* states that "the first major put-in point is at the Arkansas 103 crossing about two miles southwest of the Oark community." The final take-out point is given at Highway 215, more specifically known as Mill Creek. However, the first access point shown on their map is at Wolf Pen Recreation Area. Outfitter-guides, who are permitted to operate canoe livery services at National Forest access points, rarely use the Highway 103 access point. Brocaures for each outfitter show their most up-stream shuttle point as being at Wolf Pen Recreation Area. Maps supplied by the outfitters reveal that Turner Bend Store counts the river miles from Wolf Pen and ends at Mill Creek, for a distance of 39 miles. Byrd’s Canoe Rental, begins counting river miles at Highway 103 and ends at Interstate 40 (45 miles). This is despite the fact that their shuttle schedule only operates from Wolf Pen to Mill Creek.

In personal communication with the outfitters and with the volunteer river ranger, they described the two miles between Highway 103 and Wolf Pen as having thick stands of willow and lots of fallen timber. Also, when water levels drop, this is one of the first segments to experience low flows. They do not consider this two mile segment a quality floating section.

For the purposes of managing the Mulberry River for canoeing, the Forest Service begins counting river miles at Wolf Pen Recreation Area and ends when the river leaves the Forest Boundary at mile 37.5. Currently, the volunteer river ranger is authorized to patrol this 37.5 mile section of the river. The Forest Service does not suggest nor encourage recreationists to float above Highway 103 or below Mill Creek.
RECREATION OPPORTUNITY SPECTRUM (ROS)

**Introduction.** The Recreation Opportunity Spectrum provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum or spectrum divided into six classes: Primitive, Semi-primitive non-motorized, Semi-primitive motorized, Roaded Natural, Rural, and Urban.

**Current ROS Designations.** From the headwaters of the Mulberry to Cass Job Corps Center, the Recreational Opportunity Spectrum is classified as Roaded Natural except for one 800 foot length which is currently classed as semi-primitive motorized. This section is located southwest of the community of Oark. From Cass Job Corps Center to Baptist Vista Church Camp is classified as Rural. It is classified again as Roaded Natural from Baptist Vista to Big Eddy, and from Big Eddy to the Forest Boundary it is classed as Semi-Primitive Motorized. These designations are compatible with the river classifications made in the Wild and Scenic Rivers Act.

**CURRENT RECREATIONAL USE**

Recreational use of the river has steadily grown over the past ten years. Recreational use, as related to the river corridor, includes the following activities: canoeing, kayaking, swimming, camping, fishing, hunting, hiking, off-highway vehicle driving (ATV, 4-wheelers, etc.), bird watching, and scenic driving. Most water-related use occurs between canoe launch points: Little Mulberry, Wolf Pen, High Bank, Redding, Big Eddy, and Campbell Cemetery on National Forest lands; and Byrd’s, Turner Bend, and Wayfarer’s on private land.

**Canoeing.** March-June are the most popular canoeing months. There is some use from October through February depending on the river level and weather conditions. Based on U.S. Geologic Survey flow records, during an average year the Mulberry River is floatable 98 days (27% of the year). Most of the canoeing use occurs from Highway 103 bridge down to Campbell Cemetery. Swimming occurs in conjunction with canoeing and in the perennial pools during the summertime. Fishing occurs at all times of the year, although late summer is the preferred season for smallmouth bass fishing. Other recreational activities are governed by hunting seasons, weather, and road conditions.

Recreation use, due to improved transportation facilities, is expected to increase in the Mulberry River Corridor.

**Fishing.** Fishing along the river is typically a dispersed activity, although fishing during the summer months is limited to the deeper pools. The river supports populations of sportfish such as smallmouth bass, spotted bass, largemouth bass, shadow bass, longear sunfish, green sunfish, and channel catfish. The Arkansas Game and Fish Commission rates the Mulberry River among the major smallmouth bass streams in Arkansas.

**Camping.** Camping occurs at public and private campgrounds and at dispersed (unimproved) campsites throughout the vicinity. The Ozark National Forest operates the following recreation areas for camping:

Redding Recreation Area: There are 25 campsites. Campers have access to treated and tested drinking water, communal rest rooms and bathhouse. Each unit has a fire grill, lantern post, picnic table, and hardened sites for parking and camping.
There is a use fee for each campsite. This campground is adjacent to an access point for the Mulberry River and has the trailhead for the Redding loop of the Ozark Highlands Trail.

Wolf Pen Recreation Area: There are six free use campsites offering no hook-ups. Campers have access to chemical toilets. During the summer of 1996, the hand operated water pump was closed by the Arkansas Department of Health. Drinking water will not be available in this recreation area until a chlorination system can be installed. Trash cans, lantern posts and fire grills are supplied. There are no hook-ups.

Dispersed Campsites: During the summer of 1995, thirteen dispersed campsites were found on National Forest land within 100 feet of the river. These sites were photographed and documented using the "Back Country Monitoring Form". Personal communication with the volunteer river ranger indicates that these sites are rarely used by canoeists. The dispersed camps are almost exclusively used by hunters, anglers, and others who use them to be near the river. They are not "float camps".

There are three private campgrounds adjacent to the river corridor. They are located at Turner Bend Store and Campground (approximately 20 sites), Byrd's Canoe Rental and Campground (approximately 50 sites), and Wayfarer's of the Ozarks (approximately 15 sites).

**Swimming.** There are no developed swimming areas along the Mulberry River on national forest lands. Swimming occurs in the river in conjunction with other recreational activities, such as picnicking, canoeing, camping, and fishing. People have been observed swimming at many of the permanent deep pools along the river. The more frequently used areas on national forest lands are at Wolf Pen Picnic Area, Redding Campground, and Campbell Cemetery. Given the occasional and dispersed use by swimmers, no areas have been designated for swimming. The water is not tested for bacteria in relation to swimming use.

**OTHER ACTIVITIES.** The last category of recreational uses along the river includes hiking, hunting, off-highway vehicle driving (OHVs, ATVs, etc.) viewing nature, and horseback riding. The demand for these dispersed recreational opportunities is rising.

**TRAILS**

The Ozark Highlands Trail crosses the river corridor approximately one mile west of Ozone Recreation Area. The Redding Loop of the Ozark Highlands Trail leads from Redding Recreation area, within the corridor, to 6,000 feet east, where it exits the corridor. The Ozark Highlands Trail and its ancillary loops are only open to foot traffic. There are no designated multi-use trails, horse trails, or OHV trails within the Mulberry River Corridor. Horses and OHVs are allowed to use open Forest Development Roads.

**HUNTING**

Most of the Mulberry River is within the White Rock Game Management Area. Hunting opportunities include deer, turkey, squirrel, and bear. Trapping is also allowed within the River Corridor following state regulations.
OHV RIDING

There are no designated OHV trails within the river corridor on National Forest lands. OHV riders are permitted to ride on open Forest Service roads. OHVs are prohibited from Redding and Wolf Pen recreation areas except for entry and exit. OHVs are prohibited from the Ozark Highlands Trail as well. OHV riders often use unauthorized travelways including pipeline and powerline rights-of-ways, closed roads, and creek and river beds.

VIEWING NATURE

Viewing nature typically occurs while recreationists are involved in other activities, such as, hunting, hiking, canoeing, fishing, driving, and camping. Redding Recreation area is noted as an excellent location for bird watchers to view neo-tropical migratory birds. In particular, the cerulean warbler is frequently spotted around the campground.

West of Highway 23, but outside of the river corridor boundary, is the Turner Bend Small Game Management and Viewing area. Approximately 143 acres are managed to encourage the presence of small non-game species such as rabbit, squirrel, bobwhite quail, red-tail hawk, yellow-breasted chat, northern cardinal and finches.

HORSEBACK RIDING

There are no designated horse trails or horse camps within the river corridor on National Forest lands. Horseback riders are permitted to ride on open Forest Service roads and through the general forest areas. Horses are specifically prohibited from Redding and Wolf Pen recreation areas as well as from the Ozark Highlands Trail.

RECREATIONAL RELATIONSHIP TO NEARBY STREAMS. The upper reaches of the Mulberry River, Buffalo River and Big Piney Creek are all located near the community of Fallsville, Arkansas. All three streams are very popular for recreational use.

Other river-based recreation opportunities occur within a 150 mile radius of the Mulberry River: the Buffalo National River, Big Piney Creek, and Cossatot River. The Arkansas Floaters Kit recognizes 17 different floatable rivers in Arkansas (see Appendix IV for a description of the amenities of each river). The 17 rivers include: Big Piney Creek, Buffalo River, Caddo River, Cadron Creek, Crooked Creek, Cossatot, Eleven Point River, Illinois Bayou, Kings River, Little Missouri River, Little Red River, Mulberry River, Ouachita River, Saline River, Spring River, Strawberry River, and White River.

CARRYING CAPACITY

Desires of Users. The Arkansas Department of Parks and Tourism surveyed the desires of 32 Mulberry River canoeists and canoeing groups in 1984. The survey showed that 22% of the floaters felt that the number of people they saw on the day of the float reduced or greatly reduced the enjoyment of their float trip, while 78% of the floaters felt that the number of people they saw had no effect, increased or greatly increased their enjoyment.
In 1996, Arkansas Tech University, Department of Parks, Recreation and Hospitality Administration, completed a user survey of 325 boaters (131 responded to the survey) who used the Mulberry River in 1995. "Over 90 percent of boater respondents indicated that they did not feel crowded on the day of their Mulberry River trip either while on the river, at the put-in location or the take-out site" (Herrick, 1996:iii).

Other recreational activities participated in by boaters responding to this survey included: sightseeing, swimming/sunbathing, camping, picnicking, and hiking. In response to the question, "How would you rate the overall quality of your trip?", 95.5% rated it from "good" to "perfect". Eight and one-half percent (8.5%) said "perfect", 35.4% = "excellent", 43.1% = "very good", and 8.5 = "good".

In one section of the survey, boaters were asked their opinion on twenty possible situations and "to what extent did you find each of the following to be a problem during your river trip?" The situations included: litter, obstructions in the water, availability of campsites, vandalism, water quality, livestock near the water, off-road vehicles, availability of law enforcement, etc. Those surveyed could rank the situations from 1 (not a problem) to 5 (very serious problem). The mean score on all situations was below 2 (slight problem). The four situations seen as causing the greatest (although still "slight" problem) are: too few garbage cans, litter in the river, availability of toilet facilities along the river between put-in and take-out points, and litter on the banks.

In addition to the boater survey, Arkansas Tech also sent surveys to the three companies who operate outfitter-guide services on the Mulberry River under a special-use permit with the Forest Service. Only one outfitter responded to the survey. This outfitter rated all of the developed access points on National Forest land between "adequate" and "very good". Two of the access points (Wolf Pen and Little Mulberry) were seen as crowded enough to be a "slight" problem. No access points were seen as a seriously or unacceptably crowded. Eighteen potential problem situations were rated by the outfitter. Vandalism and livestock in or near the water were rated as serious problems. Moderate problems were inconsiderate people, availability of law enforcement, people drinking alcoholic beverages, off-road vehicles in the river area, vandalism and the amount of litter along the river.

The desires of campers, anglers, swimmers and hunters using the Mulberry and its corridor have not yet been sampled.

While a census has not been done on the river, anecdotal information indicates that even on the busiest days of the year, less than 20 other boats are seen during a typical five hour float. The most congestion is usually witnessed at the access points. Special areas, such as Sacroiliac and Big Al's Twist, attract canoeists because of their difficulty.

**Intensity of Use.** Recreation use data for the Mulberry River (FY 86) show canoeing as the most popular recreational activity with 11,440 recreation visitor days (RVD's). Swimming is the second most popular with 6,800 RVD's, camping third with 6,135 RVD's and fishing fourth with 5,000 RVD's. Hunting and hiking are other recreational activities which occur within the river corridor. One RVD (recreation visitor day) equals 12 hours spent on a particular activity. For example, one person canoeing for 12 hours or two people canoeing for 6 hours apiece would count as one recreation visitor day.
**Distribution of Visitor Use.** Visitor use can be described in terms of privately owned boats vs rental boats, by day of the week, or by month/season of the year. Less than half of the canoeists who float the Mulberry bring their own canoes. The rest of the users rent canoes from one of three permitted outfitters on the river. The Forest Service has not established any use limits on the river. Outfitters are permitted to rent as many canoes as the market will allow. No time limits, put-in or take-out schedules have been implemented. Use is regulated by: water level, the number of canoes available to be rented (approximately 225 rental canoes), and by the number of parking places available at access points. Use occurs during almost every month throughout the year, however, most floating occurs from March through May. More experienced floaters will also canoe during the winter. People float the river every day of the week, with Saturday, Friday, and Sunday being the three busiest days, respectively.

**2360 HERITAGE RESOURCES**

While not all of the Mulberry River corridor has been examined for heritage resource sites, there have been at least 18 surveys near the river. So far, more than seventy-eight prehistoric and historic sites have been documented within 1/4 mile of the river. The sites occur on public and private lands and include cabins, barns, houses, rock walls and fencelines, prehistoric lithic sites, cemeteries, etc.

**2380 SCENERY MANAGEMENT**

**VISUAL QUALITY OBJECTIVES**

The Act requires that the corridor sufficiently protect the outstandingly remarkable values which caused the stream to be included in the wild and scenic river system. Visual quality was not sufficiently outstanding to be considered one of the "outstandingly remarkable values" on the Mulberry River. In general, scenery, esthetics, and historic, archaeologic and scientific features are to be protected in all Wild and Scenic River corridors.

Visibility from the Mulberry River varies from a few feet in the narrow steep banked sections, to several miles where there are vistas of the surrounding hills and mountains. The Mulberry River usually flows in narrow channels but occasionally widens to wide, slow pools. Areas seen from the river are diverse and include pastures, farms, domestic livestock, wildlife, roads and highways, bridges, powerlines, dwellings, barns, forested areas, steep slopes and bluffs.

The Ozark National Forest has determined areas of foreground, middleground, and background as seen from the river on public lands. The maps are on file at the Ranger District offices. Foreground areas occur close to the edge of the river, especially noticeable where there are steep banks and bluffs, and extend up to 1/2 mile from the river edge. The foreground area within the river corridor is classified as a retention zone.

Visual quality on the sections of private land along the river range from pastoral to natural. There are no regulations or laws that limit the activities that take place on private land regarding visual quality.
2400 VEGETATION MANAGEMENT

Vegetation within the river corridor consists primarily of Oak-Hickory and Oak-Hickory-Pine ecosystems. These forested areas are interspersed with pastures and some croplands. In 1996, a terrestrial vegetation survey was done for public lands within the corridor. Thirty-one sampling sites were selected to collect baseline ecological information about the river corridor. The resulting lists of overstory, understory, and herbaceous plant layers is on file at the Pleasant Hill Ranger Station.

Overstory species of the oak-hickory and the mixed oak-hickory-pine ecosystems are mainly various species of red oak and white oak, various species of cucumber magnolia, hickory, and blackgum. Shortleaf pine is the predominant pine species in the mixed oak-hickory-pine ecosystems. Less common overstory species include sweetgum, ash, elm, black walnut, black cherry, river birch, and locust.

Understories in both these ecosystems contain a wide variety of species. Some of the more common species include dogwood, red maple, serviceberry, redbud, sassafras, persimmon, buckeye, vacciniums, viburnums, spicebush, and leatherwood. Sycamore, willow, alder, and witch-hazel are common along river banks.

Riparian zones along the rivers have a slightly different overstory composition than occurs on drier sites. Overstories in riparian zones contain red and white oaks, hickories, sweetgum, white ash, black walnut, black cherry, sassafras, sycamore, mulberry, and basswood. Understories contain red maple, sugar maple, dogwood, serviceberry, American hornbeam, eastern hornbeam, spicebush, leatherwood, a variety of ferns, buttonbush, willow, alder, witch-hazel, and cane.

Many of the pine ecosystems located in the corridor occupy old abandoned fields. Shortleaf pine dominates the pine ecosystem overstory although some loblolly pine may exist in scattered plantations throughout the area. Various hardwood species, especially blackgum, sweetgum, oak and hickory may comprise an insignificant portion of the overstory. Common understory species include viburnums, vacciniums, greenbriars, blackberries, raspberries, buck brush and red maple.

Important native grass species are plume, purpletop, poverty grass, little bluestem, big bluestem, broomsedge, Indian grass and panicums, such as switch grass and wooly panicum. Domestic grasses consist of several varieties of bermuda, dallisgrass, fescue, orchardgrass, wheat and oats.

Non-native grass species, such as fescue, are found in fields (Mayo and Woolsey Tracts) which have been recently acquired by the Forest Service. These fields have historically been used as pasture lands and hay fields. The Forest Land Management Plan Amendment 7 incorporated those portions of these tracts which fall within the Wild and Scenic River Corridor into Management Area #9. The Forest performed custodial care until the plan was amended to include these acres. The fields have been hayed but not fertilized, burned, or planted.

2500 WATERSHED AND SOIL MANAGEMENT

WATER QUALITY

The Mulberry River is designated as extraordinary resource water, and natural and scenic waterway by the state of Arkansas. Water quality on the river is good.
The Arkansas Department of Pollution Control and Ecology has determined the beneficial uses for which the water quality of the rivers should be maintained and protected. For the Mulberry River, these uses are fisheries, primary contact recreation, and public, industrial and agricultural water supply.

Extraordinary resource waters are described as "a combination of the chemical, physical, and biological characteristics of a waterbody and its watershed which is characterized by scenic beauty, aesthetics, scientific values, broad scope recreation potential and intangible social values".

The Arkansas Department of Pollution Control and Ecology has established a surface water quality monitoring program, and monthly samples are collected to monitor a broad range of potential pollutants to the stream. The Mulberry sampling station is located above the Interstate 40 bridge below the terminus of the scenic river classification. Baseline sampling using a field method developed by the Ohio Department of Natural Resources (Kopeck: no date) was used at over 20 sites along the Mulberry River. This method gauges water quality by the presence and frequency of selected macro-invertebrates. One testing site rated "good" and all of the other sites rated "excellent" during tests run during the 1995 field season.

State Highway 215 (Forest Development Road 1003) parallels the river from within two miles of the uppermost extent of the corridor to Highway 23. The road is currently unpaved from Highway 23 to a point three miles west of State Route 103. In several places, the road lies within a few horizontal feet of the stream channel. Sediment from the road and ditches is being deposited into the stream in some locations. Arkansas State Department of Highways and Transportation is paving State Highway 215 (FDR 1003) from Highway 103 to Highway 23. It is anticipated that there will be a long-term reduction of sediment into the Mulberry River and its tributaries as a result of the paving project.

Cass Job Corps intakes about thirteen and one-half million gallons of surface water for its operation on a yearly basis. The facility also discharges approximately eight million gallons of treated effluent annually.

Chemical and natural fertilizers can be used on public land within the corridor. However, there has been little or no use of fertilizers for the past few years.

SOILS

The river corridor contains a variety of soils. The mountaintop/ridge soils are mostly sandy loams 20" to 40" deep and are generally well drained. Sideslopes and benches range from sandy loams to heavy clays up to 60" or deeper. All these soils can contain small stones to very large weather-resistant boulders. The alluvial soils are sandy loams to loams ranging in depth from a few inches to several feet. Most of these alluvial areas are underlaid with stones and gravel.

Many of the mountaintop, ridge, and bench soils and almost all of the alluvial soils have been farmed in the past. Some of the better soils in private ownership adjacent to the river corridor are still used for pasture or other purposes.
STREAMFLOW

The Mulberry River is free-flowing with no man-made dams or other flow regulation structures on it. One attempt had been made to dam the river on private land, near the headwaters area. That dam failed and only remnants of the impoundment structure exists. Table 2. Mulberry River Monthly Mean, Daily Discharge 1938-1994 gives the mean monthly flow rates for the Mulberry River and shows that the river has highly variable flows. The highest flows generally occur from February to May and lowest flows from July to October. At times, flow has been near zero.

2600 WILDLIFE AND FISHERIES RESOURCES

The Mulberry River is the largest and most dispersed water source available to all forms of wildlife on the Pleasant Hill Ranger District. The Forest Service, in cooperation with the Arkansas Game and Fish Commission, manages fish and wildlife habitat on National Forest System lands within the river corridor. Populations of fish and wildlife species in the corridors are at a sustaining level.

The corridor is open to hunting, trapping, and fishing; as regulated by State law. With deer, turkey, squirrel, rabbit and bear are the most popular species for hunting and smallmouth bass, largemouth bass, catfish and sunfish are the most popular species for fishing.

Non-game species also inhabit the river corridor area. Colonies of beaver affect the water quality by creating water channel changes and flow diversions. These beavers also degrade the water for human use because of possible pathogens or harmful organisms associated with their feces. River otter have some impact on the fish populations and mussels.

The river is a major habitat source of fur-bearing animals that are trapped and hunted annually. These include beaver, fox and raccoon.

The river supplies a large area with wood duck habitat.

Other fish found in the Mulberry River are drum, long nose gar, german carp, black red horse, buffalo and an occasional hybrid striped bass. Most of these fish detract from the rivers' ability to produce higher volumes of preferred species.

SMALLMOUTH BASS FISHERIES

The Smallmouth Bass (Micropterus dolomieu Lacepede) fishery is one of the two outstandingly remarkable values for which the Mulberry was designated as a Wild and Scenic River.

The "Wild and Scenic River Study Report and Final Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest" states:

"The Mulberry River is recognized by the Arkansas Game and Fish Commission as one of the premier smallmouth and spotted bass fisheries in Arkansas. Fisheries values are outstanding" (3-5).
In 1995, the Mulberry River was given "Quality Stream" status by the Arkansas Game and Fish Commission (AGFC) based on the occurrence of at least 200 smallmouth bass per river mile. The Mulberry River is one of only nine streams in Arkansas to be selected for outstanding smallmouth bass fisheries. The AGFC has not recognized any streams in the state for their spotted bass fisheries.

**2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES**

There have been several biological evaluations done along the Mulberry River for different projects. Several plants on the State of Arkansas list of threatened, endangered and sensitive species have been found in the corridor. These are: monkey flower, kentucky lady slipper, ozark spiderwort, ozark chinquapin, and bristle fern. The listed animals that have been found within the corridor are: cerulean warbler, queen snake, and longnose darter. A survey of the mussels of the Mulberry was completed in February, 1996, by Dr. Joseph N. Stoeckel and Mr. Lindsey Lewis of Arkansas Tech University. There were no listed mussels found.

**2700 SPECIAL USES**

**OUTFITTERS/CONCESSIONAIRES**

Three commercial outfitters have permits to provide canoe rental and shuttle services to National Forest access points along the Mulberry River. These outfitters have held permits since 1986. In the past ten years, there have been no additional applications for outfitting permits. In 1995, Turner Bend had approximately 85 canoes available for rent, Byrd’s and Wayfarer’s (operated in a joint fashion by relatives holding separate permits), had approximately 130 canoes for rent. On the average, the outfitters have four to ten days per year when all available watercraft are rented.

**UTILITY AND GAS PIPELINE CORRIDORS**

There are two gas transmission pipelines that cross the river below Arkansas Highway 23. They are located just below Turner’s Bend and just above Hurricane Creek. There are also at least 15 power/telephone crossings along the river from the headwaters to the Forest boundary.

**2800 MINERALS AND GEOLOGY**

**LEASEABLE MINERALS**

The Mulberry River is adjacent to the most productive natural gas area on the Forest. The Batson, Rock Creek, and Hurricane Creek-Paradise fields all encompass the Mulberry River corridor. There are currently producing gas wells located on private and National Forest System lands within or near the river corridor. Arkansas regulations state that an entire section (640 acres) becomes part of the drilling unit when there is one actively producing well located on that section of land. Federal lands within that drilling unit are "held by production" and are subject to the terms of the oil and gas lease as of the date it was issued. Private lands are subject to the terms of the private leases.
MINERAL MATERIALS

Mineral materials permits for removal of surface stone are common on Forest lands. This surface stone is commonly used for construction and building purposes. Current Forest policy prohibits gathering of stone in any stream channel on National Forest lands. There have been no rock permits issued within the river corridor boundary.

Historically, there have been rock crushing sites and gravel pits located near streams or rivers which are used to provide local sources of gravel for road maintenance and/or construction of Forest Service and county roads. Current direction restricts the use of local creek gravel sources to locations where gravel removal would improve or stabilize the stream channel or stream bank. There are no active gravel pits on National Forest land within the river corridor. Arkansas Department of Pollution Control and Ecology’s current regulations state that no gravel may be removed from extraordinary resource waters. The Mulberry River is affected by these regulations on private as well as public lands.

PHYSIOGRAPHY AND GEOLOGY

The Ozark Plateau, covering parts of Arkansas, Missouri and Oklahoma, is an uplifted area of very old sedimentary rock layers. The Mulberry river watershed is located on the southern side of this plateau in a heavily dissected section called the Boston Mountains. The underlying rock layers of this region are generally level bedded sandstones and shales and have a slight tilt to the south region-wide. The Boston Mountains developed through the long-term weathering of the resistant sandstone and less resistant shale layers forming a stair-stepped landform called "Bluff-Bench" topography. There is no karst (limestone) topography known to exist in this watershed.

The landforms around and in the river corridor vary from nearly level/rolling mountain and ridge tops to steep side slopes/bluffs with level/sloping benches, to flat alluvial areas adjacent to the river. Elevation of the area varies from about 2300 feet on the mountaintops to about 450 feet where the river exits the National Forest.

Several east-west/southwest geological faults exist across the area, especially along and to the south of the river corridor. The river channel generally follows these faults and the rock formations under much of the river are tilted and broken. When the rock layers tilt upstream, "natural dams" form pools a few hundred to several thousand feet long. Sharp changes in river elevation exist at the exits of these pools and in areas where the rock layers tilt downstream. These geological formations give the river the good whitewater conditions desired by canoeists. The broken rock formations and bluffs immediately adjacent to the river and general "Bluff-Bench" topography of the area add to the river experience.

5100 FIRE MANAGEMENT

WILDFIRE

Wildfires within the corridor are treated the same as those that occur within the general forest area. The Forest Land and Resources Management Plan states:

"Provide cost efficient fire management to protect life, property and meet land and resource management objectives (FSM 5100).
"Treat wildfires according to "Values at Risk" under the "cost plus net resource value change" concept (FSM 4103-5105).

"Base fire expenditures on resource values and potential resource loss by fire intensity. Control wildfires depending on their threat to life, property, threatened or endangered species, air, water, soil productivity or private lands. Use planned and unplanned ignitions to accomplish resource management objectives when they burn within prescribed conditions. Apply watershed and soil protection measures as part of the suppression activities" (FLRMP 4-19 - 4-20).

PREScribed Burning

Currently, prescribed burning is used where it appropriately maintains or improves scenic or recreational values or where it is used for improvement of wildlife habitat. Little prescribed burning has been done within the river corridor. The turn-arounds at High Bank and Wolf Pen are burned approximately every other year. This is done for the purpose of safety to increase visibility within the turn-arounds.

5300 Law Enforcement

Jurisdiction and Authority

Forest Service law enforcement officers operate under authority granted in USC 551A and have jurisdiction to enforce Federal laws and regulations and Forest Supervisor's Orders on National Forest lands. They also have the authority to enforce State laws covering livestock, wildlife and fire within the National Forest boundary. County Sheriffs and the Arkansas State Police have jurisdiction on the private lands within the National Forest boundary. The Arkansas Game and Fish Commission enforces State game and fish regulations on both public and private lands.

Typically, Forest Service Law Enforcement Officers enforce regulations along National Forest roads within the corridor, within developed recreation sites, and along the river when it passes through National Forest land. The County Sheriff's Office is the lead agency to enforce State laws within the corridor on private land. The Game and Fish Commission is the lead agency in enforcement of game laws.

Cooperative Agreements

The Ozark National Forest has cooperative agreements with the Johnson County Sheriff and with the Franklin County Sheriff to patrol National Forest recreation areas under certain conditions. There has always been an informal mutual assistance agreement between the Sheriff's offices, State Police, Arkansas Game and Fish Commission, and the Forest Service. Officers respond to each others calls for back-up and assistance whenever possible.

Forest Supervisor's Orders

Currently, there are no Forest Supervisor's Orders specifically designed for the Wild and Scenic River corridors. Order Number 00-08-108, dated September 3, 1996 prohibits or regulates the use of fireworks, metal detectors, operating motor vehicles on closed roads, off of Forest Development Roads, on hiking trails and within wilderness areas. It also limits the number of days people may
camp outside of developed recreation areas, prohibits being publicly nude, possessing cannabis, and fishing in violation of posted signs. See Order 00-08-108 for specific wording.

5400 LAND OWNERSHIP

LAND OWNERSHIP PATTERNS

Just under 50% of the shoreline along the Mulberry River is private property. In general, the upper three miles of the river is National Forest land, and the next ten miles is private land. Over 300 individuals own private land along the river.

Communities. There are several communities within the Mulberry River Valley. Approximately four miles downstream from the headwaters boundary is the community of Catalpa and two miles further downstream is the town of Oak. The next sizable communities are at Cass (Cass Job Corps Center) and Turner’s Bend. Both communities are located along Highway 23. Two miles downstream from Turner’s Bend is a small community near Baptist Vista Church Camp.

Cass Job Corps Center, is the only "community" located on National Forest land within the Mulberry River valley. However, it is not located within the Wild and Scenic River corridor. Cass Job Corps is a residential vocational training and education center for young men. Approximately 200-250 students and staff live on or near the Center.

6700 HEALTH AND SAFETY

White water canoeing is recognized as one of the most hazardous outdoor recreation activities which occur on National Forest lands. The following risks are present within the Mulberry River corridor. Hypothermia, high water, flash floods, “willow jungles”, tricky and treacherous rapids. Diving, alcohol consumption and unskilled boaters have caused injuries and some deaths on the Mulberry River.

Other accidents have occurred from use of 4-wheelers (ATVs, OHVs, etc.), flash floods have entrapped campers and hikers. There have also been confrontations between recreationists and local landowners. While no injuries have been reported, threats have been made and law enforcement officials have been called to settle disputes.

Developed recreation areas such as Redding, Wolf Pen, and Campbell Cemetery are maintained at a higher or more stringent safety standard than the general forest area. These areas are inspected for hazardous trees, slip/trip/fall hazards, as well as for other situations which could be hazardous to the public. Those developed sites within the flash flood zone of the river have conspicuous signs warning the public of this danger. Drinking water is tested monthly for total coliform and fecal coliform bacteria. Hazards are corrected in a timely manner.
7700 TRANSPORTATION

EXISTING ROADS

The river corridor is traversed by a number and variety of roads. State Highways 103 and 23 and Franklin County Road 84 have bridge crossings on the Mulberry River. Beginning near the uppermost point of the Mulberry River, Johnson County Road 70, 32, and 36 generally follow the river. State Highway 103 begins at the community of Oark and follows the river until it heads south, crossing the river at the Junction with State Highway 215. State Highway 215 continues past the Wolf Pen Recreation area until the pavement ends, at which time it becomes Franklin County Road 83. Franklin County 83 parallels the river until its junction with State Highway 23. West from State Highway 23, the "Jethro Road" (Franklin County Road 111) weaves in and out of the corridor.

There are a variety of lesser used Forest Development roads which provide access to the river, dispersed camps, other National Forest lands, as well as to private land. There is one historic, little used woods road (94312F) which begins at the junction of Forest Development Road 1418 and follows the upper portion of the Mulberry River for 2.85 miles and crosses the creek approximately a dozen times. This road is listed as "open" on our Transportation Inventory System, however, it has not been used by full size vehicles for more than five years. It may occasionally be used by OHV’s. Some roads that access private land are under special-use permit with the Forest Service.

In all, there are four bridge crossings and 14 low water crossings for motor vehicles. Six of these crossings are on National Forest land, two cross from private land to Forest Service land, and six are completely on private lands.

OFF HIGHWAY VEHICLES

Off-Highway Vehicles (OHV’s), ATV’s, and four-wheelers, are permitted to use open Forest Development Roads within the river corridor. All motorized vehicles are prohibited from being driven on closed Forest Development Roads, on the Ozark Highlands Trail, and within developed recreation sites except for entry and exit. The Forest Land and Resources Management Plan (page 4-14) "Exclude[s] vehicles from streams except at designated crossings". This policy would include passenger cars, four-wheel drive trucks, motorcycles, as well as OHV’s. State law excludes OHV’s from county roads and State Highways.
III. DESIRED FUTURE CONDITIONS

A. INTRODUCTION

The Desired Future Condition provides general long-term management goals for the Mulberry River and describes a vision of the future river corridor. This section, for ease of review, is divided into resource categories. However, the future condition of each of these resources or uses is closely integrated with the others.

B. PROGRAM AREAS

1600 INFORMATION SERVICES

Information that is disseminated to the public encourages protection of river values and land use ethics.

The Forest Service provides, upon request, information to adjacent landowners regarding streambank stabilization, vegetative strips, riparian vegetation, and other information which protects and enhances the river corridor.

The Forest Service advises and cooperates with other federal agencies, the State of Arkansas and its political subdivisions, landowners, private organizations and individuals to plan, protect and manage river resources.

2100 ENVIRONMENTAL MANAGEMENT

Human Waste

National Forest septic systems meet or exceed State of Arkansas requirements. Through education and information "casual" disposal of human waste is kept at levels which do not affect water quality in the river or the Outstandingly Remarkable Values.

Solid Waste

Solid waste collected from National Forest recreation areas is taken to approved solid waste disposal sites. Recycling efforts are continued at developed recreation sites. Litter patrols, clean-up days, and educational efforts are used to reduce litter within the river corridor.

Pesticides

Pesticides are used prudently. They are used to protect or enhance the Outstandingly Remarkable Values or are used only when use does not adversely affect the Outstandingly Remarkable Values.
2300 RECREATION

The Mulberry River corridor is managed for a variety of recreation opportunities. Both private and public developed recreation facilities are maintained to meet the needs of the public and enhance the quality recreational experience enjoyed by those visiting the area especially in the activities of canoeing, camping, fishing and swimming. River access sites have been improved when necessary to resolve visual and resource degradation concerns. While river recreation use levels have continued to rise, the quality of the recreation experience (as determined through User Surveys) has been maintained at or above 1995 levels.

2360 HERITAGE RESOURCES

The Mulberry River corridor has been surveyed for heritage resources, which have been evaluated and, if determined to be significant, are preserved.

2380 SCENERY MANAGEMENT

The Mulberry River corridor is well-known for its beautiful green water and riverine scenery. Visitors enjoy a wide variety of landscapes and ecosystems as they travel along the river in canoes or as they drive the adjacent roads.

Management activities, such as signage, recreation facilities, and timber harvesting, are subordinate to the river's natural appearance. Developed recreation areas blend in with the surrounding scenery and meet standards of the Recreation Opportunity area in which they occur.

The diversity of vegetative species, and age classes are important. The overstory is managed for large diameter tree character. Enhancement opportunities have been found for spring flowers and fall color. Views of special features along the river corridor have been enhanced. The historic character of the river, rock fences, openings and grass areas are considered part of the vegetative diversity and add variety along the river corridor.

2400 VEGETATIVE MANAGEMENT

The Mulberry River corridor exhibits mature forest characteristics. A variety of native upland and riparian vegetation communities support significant biological diversity in the river corridor. Vegetation is managed to enhance scenic, wildlife, and recreation values. Timber stands are not managed for timber production. Stands are treated to enhance health and beauty. Open fields on National Forest lands are managed for an early seral stage vegetative condition and riparian forest buffers are present between the fields and the river.

2500 WATERSHED AND SOILS MANAGEMENT

The Mulberry River maintains its free-flowing characteristics. The water quality of the river exceeds the standards set by the Arkansas Department of Pollution Control and Ecology.

Sediment bedload in the river system has been reduced by minimizing inputs through improved design and modification of all stream crossings (including culverts, bridges, and pipeline/utility lines), recreational access sites, the preservation of vegetative riparian zones, and the stabilization of critical eroding stream banks.
2600 WILDLIFE AND FISHERIES RESOURCES

Wildlife communities dependent on a diversity of landscapes are at abundant levels. Natural disturbance provides habitat for early successional species, and those that require unique habitat. Populations of game and non-game species are at healthy levels, balancing ecological and recreational needs.

The Mulberry River supports a superior smallmouth bass fishery. Very good populations of spotted bass, largemouth bass, longear sunfish, green sunfish, and channel catfish are also present. A reduced silt bedload results in increased aquatic invertebrate production and additional gravel spawning areas and pool habitat. Structural cover is also abundant due to the presence of large woody debris.

Threatened, endangered, and sensitive species and unique features are protected and monitored. Quality habitat exists for these species.

2700 SPECIAL USES

All outfitter and guides that use National Forest facilities operate under a special use permit. Special use permits for recreation events are issued to events that do not affect the outstandingly remarkable values. Other temporary and long term permits (utilities and roads) are evaluated on a case by case basis. All new special use permit applications are evaluated to ensure that the Outstanding Remarkable Values of the river are protected.

2800 MINERALS

MINING CLAIMS

Mining claims are administered according to 36 CFR 228 subpart A and Forest Service Manual 2810.

LEASABLE MINERALS

New oil and gas leases are issued with a no surface occupancy stipulation for lands within the designated river corridor. A controlled use stipulation is used on all other leased lands visible from the designated river corridor. Applications for prospecting permits for hardrock minerals within the designated corridor are denied.

OUTSTANDING AND RESERVED RIGHTS

The Forest Service recognizes the private mineral owners' rights and encourages a spirit of cooperation and understanding by both parties.

MINERAL MATERIALS

Common variety mineral activity is prohibited within the corridor except as necessary to benefit the outstandingly remarkable values.

In-stream gravel mining is regulated by the Arkansas Department of Pollution Control and Ecology. The Forest Service complies with state-issued recommendations.
5100 FIRE MANAGEMENT

Wildfires are suppressed to protect life, property, private lands, air, water, soil productivity and resource values.

Prescribed burning is applied to improve wildlife habitat and achieve recreational and scenery management objectives.

5400 LAND OWNERSHIP

The Forest acquires desirable tracts along the river only on a willing seller-willing buyer basis when the opportunity exists and when budget constraints allow it. Partnerships exist between the private land owners, the Forest Service and State of Arkansas to accomplish protection of the river attributes while respecting each partner’s rights and responsibilities. Where conflicts occur, the ownership boundaries are delineated to minimize trespass.

6700 HEALTH AND SAFETY

The Forest Service works with concerned citizens and landowners to maintain a safe and healthy environment on the river. There is coordination with search and rescue teams and the County Sheriff’s offices to respond to crises on the river and within the corridor. The Forest Service continues to comply with regulations regarding safety in developed recreation sites.

7700 TRANSPORTATION/ACCESS

The forest road system is maintained to facilitate year-round access to the developed recreation sites. Selected roads to dispersed sites are maintained as needed to protect resource values. Road maintenance and construction activities improve access for a variety of uses while protecting the river’s values. County and state road maintenance and construction work is monitored to ensure river values are protected. Trails are maintained and enhanced.
A. INTRODUCTION

The Standards [S] and Guidelines [G] state the bounds or constraints within which all practices will be carried out in achieving the planned goals and objectives for Wild and Scenic Rivers. Note: Where river segments are within Special Interest Areas or Wilderness, the more restrictive Management Area (MA) standards and guidelines are to be followed.

Unless otherwise noted in the following Standards and Guidelines, refer to the Forestwide standards and guidelines (Management Area Direction) outlined in the Forest Plan. Not all aspects of the Wild and Scenic Rivers Act are reflected in these Standards and Guidelines. The Act should be used in conjunction with this management direction.

B. PROGRAM AREAS

2200 RANGE MANAGEMENT

Scenic and Recreational Segments

[S] - Issue no new grazing permits.
[G] - Phase out woodland allotments that no longer meet NFMA and Forest Plan guidelines.
[G] - Maintain existing open fields, haylands, and improved pastures that are compatible with river values.
[G] - Any field may have a riparian buffer, where needed, that is not mowed or grazed.

2300 RECREATION MANAGEMENT

Scenic And Recreational Segments

[S] - Developed recreation areas will be managed in accordance with forestwide "Developed Recreation Areas" standards.
[S] - Facility development reflects ROS classification.

2350 TRAILS

Scenic Segments

[S] - New motorized trails will be prohibited within the corridor.
[G] - New non-motorized trails are permitted if they meet objectives for the Wild and Scenic River and the specified outstandingly remarkable values.

Recreational Segments

[G] - New motorized and/or non-motorized trails may be allowed if they meet objectives for the Wild and Scenic River and the specified outstandingly remarkable values.
2380 SCENERY MANAGEMENT

Scenic and Recreational Segments

[S] - The Visual Quality Objective is Retention.

2400 VEGETATION MANAGEMENT

Scenic Segments

[S] - Lands within the corridor will not be managed for timber production.
[G] - Vegetation management activities may be used to enhance the outstandingly remarkable values with an emphasis on aesthetic, scenic, historic, archeological, and scientific features.
[G] - Comply with the intent given in the management objectives specific for each river.
[G] - Correct impact or salvage material resulting from a catastrophic natural or human-caused disaster if necessary to maintain the outstandingly remarkable values.
[G] - Remove invasive, non-indigenous vegetation when appropriate for protecting river values.
[G] - Remove hazards for visitor safety using ROS guidelines (from "paved to primitive" settings).
[G] - Incidental or downed fuelwood may be removed for campfires.

Recreational Segment

[S] - Lands within the corridor will not be managed for timber production.
[G] - Vegetation management activities may be used to enhance the outstandingly remarkable values with an emphasis on aesthetic, scenic, historic, archeological, and scientific features.
[G] - Comply with the intent given in the management objectives specific for each river.
[G] - Correct impact or salvage material resulting from a catastrophic natural or human-caused disaster is permitted if values are not adversely affected.
[G] - Remove invasive, non-indigenous vegetation when appropriate for protecting river values.
[G] - Remove hazards for visitor safety using ROS guidelines (from "paved to primitive" settings).
[G] - Incidental or downed fuelwood may be removed for campfires.

2500 WATERSHED AND SOILS MANAGEMENT

Scenic and Recreational Segments

[S] - Prohibit all new water supply dams, flood control dams, hydroelectric power facilities, levees or other major diversion in the channel or river corridor.
[S] - Prohibit removal of mineral materials as per state regulations for extraordinary resource waters.
[S] - Use LAC standards to monitor water quality on streams with "Wild" segments.
[G] - Limit stream channel and bank improvements to protection of life, property, and outstandingly remarkable values. Use materials for rehabilitation work that meet the ROS classification.

2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES

Scenic Segments

[S] - Ensure new wildlife or fish habitat improvements contribute to maintaining or improving the outstandingly remarkable values.
[G] - Maintain existing wildlife and fish habitat improvements that do not conflict with the objectives for that river segment.

Recreational Segments

[G] - Provide habitat attracting wildlife and fisheries compatible with human activity.
[G] - Maintain existing wildlife and fish habitat improvements that do not conflict with the objectives for that river segment.

2700 SPECIAL USES

Scenic Segments

[S] - Prohibit motorized events within the corridor.
[S] - Permits shall not be issued for activities on National Forest lands that are inconsistent with the management goals for the river corridor.
[G] - New transmission lines, gas lines, and water lines should be placed within already existing rights-of-way. Where a reasonable alternative exists, the proposed route is to be located to best protect the Outstandingly Remarkable Values.

Recreation Segment

[G] - Motorized events may be allowed within the corridor.
[S] - Permits shall not be issued for activities on National Forest lands that are inconsistent with the management goals for the river corridor.
[G] - New transmission lines, gas lines, and water lines should be placed within already existing rights-of-way. Where a reasonable alternative exists, the proposed route is to be located to best protect the Outstandingly Remarkable Values.

2800 MINERALS

Scenic and Recreational Segments

[S] - Prohibit common variety minerals and mining claim operations within the designated river corridor.
[S] - Prohibit surface occupancy for new oil and gas leases.
[G] - Allow existing mineral operations to continue subject to Secretary of Agriculture regulations prescribed to protect rivers in the National Wild and Scenic River System.

5100 FIRE MANAGEMENT

Scenic Segments

[G] - Prescribed burns may be used to achieve a desired future condition if this enhances the outstandingly remarkable values while protecting water quality.
[G] - Limit hot burns in riparian areas.
Recreation Segment

[G] - Prescribed Burns may be used to achieve a desired future condition if this enhances values, while protecting water quality.

5400 LAND OWNERSHIP

Land Acquisition:

[S] - Acquire desirable tracts within the corridor only from willing sellers, when the opportunity exists.

7700 TRANSPORTATION/ACCESS

Scenic and Recreational Segments

[S] - Use minimal tool rule when doing maintenance on roads within Scenic segments that are within the Wilderness. Apply only the minimum tools, equipment, device, force, regulation, or practice that will bring the desired result.
[S] - Motorized vehicles may only cross at designated crossings. They may not travel up and down the river channel.
[G] - Maintain or reconstruct existing roads serving private land and those authorized for National Forest Management. Manage existing National Forest roads and proposed new construction to protect and enhance the river corridor.
V. OPERATIONS AND DEVELOPMENT

A. IMPLEMENTATION AND REVIEW OF THE COMPREHENSIVE MANAGEMENT PLAN

After approval of the comprehensive river management plan, the Forest Supervisor shall ensure that all permits, contracts, and cooperative agreements are consistent with the Forest Plan. All later administrative activities, including budget proposals, will be based on the comprehensive river management plan. This section will be looked at when considering any activity in the corridor on Federal Lands. This section is not intended to provide direction, but rather to be used as a guide when activities are considered.

B. MONITORING AND EVALUATION

Monitoring and evaluation of existing conditions against the Management Objectives should be done to determine how well plan objectives have been met and how closely management requirements have been applied. Based upon the evaluation, the inter-disciplinary team may recommend to the Forest Supervisor necessary management direction changes, revisions, or amendments to the comprehensive river management plan.

C. PROGRAM AREAS

1600 INFORMATION SERVICES

OPERATIONS.
Information services will address three needs: directional, behavioral, and interpretive/educational. They will inform river users about the general character of the river, the laws, regulations, and opportunities that pertain to recreation activities in the corridor, and about specific natural or cultural values or features. Information will be provided through a variety of means, including signs, brochures, and personal contact.

SIGNS.
Minimize "sign pollution" by keeping the number of signs to the minimum necessary for effective law enforcement, direction and information.

**Informational.** The primary Forest Service access sites will have a sign board/bulletin board to display important information to visitors. In general, all non-regulatory information will be placed on one sign board/bulletin board at the landings. Additional information signs should be located in the landing parking areas, or generally out of sight of the river channel.

Types of information to include on the sign board are:
* Visitor use guidelines, low impact behavior, responsible use of alcohol, and outdoor ethics.
* A map of the designated river corridor identifying public lands, recreation facilities/sites, landmarks on the river and primary roads and trails.
* Information and education to heighten awareness about river corridor’s plant and animal communities which are sensitive to human disturbance.
* All informational signing within the river corridor will be uniform in color and design following direction in the Forest Service Sign Handbook. The total number of signs in the corridor, especially those visible from the river, should be minimized. Sign size should also be kept at a minimum, giving consideration to the viewing distance and whether intended to be viewed from moving vehicles. Design should be coordinated with the Forest Landscape Architect.

**Regulatory.** Regulatory signing will be kept to a minimum. In general, at the primary river access sites, regulatory information will be posted on one sign board (consider combining with informational sign board either as an attached panel or all on single panel). Additional regulatory information may be posted in the parking areas or at the entrance of trails from parking area to landing sites. The type of regulatory information could include information on the Marine Safety Act and "pack-it-in, pack-it-out" litter control policy.

Forest Development Roads are subject to the Highway Safety Act Standards.

Existing roads, not open to public motor vehicle traffic, may be signed for non-motorized travel.

Signs identifying the designated river corridor boundary may be posted where the corridor coincides or crosses a primary road or trail, or when necessary to protect other National Forest interests.

**BROCHURES.**

A brochure may be developed for the designated portion of the river corridor. The brochure should include the following information:

* A map that identifies public lands, recreation facilities and access sites, landmarks and primary roads and trails.
* Recreation opportunities available in the river corridor.
* Brief description of the values for which the river was designated a National Wild and Scenic River, reasons for protection, and how users can protect these values.
* Inform visitors about regulation pertaining to commercial operators and camping regulations.
* A statement on outdoor ethics, respecting private property rights and responsible use of alcohol.
PERSONAL CONTACT.

There should be regular contacts between Forest Service representatives (Forest Service personnel, volunteers, law enforcement officers, special use permit holders, concessionaires) and visitors in the river corridor. Emphasis will be from March through May, with the focus of contacts at the river access points and the camping areas. The objectives of these contacts are to monitor recreation use and impacts, and to inform and educate visitors about regulations, low impact behaviors and special features of interest in the river corridor.

The District Ranger and District representatives should develop and maintain working relationships with adjacent landowners, commercial operators, local and state agencies, and user groups to assure support and participation in successful river management.

MONITORING AND EVALUATION PLAN.

Monitoring and evaluation in this resource area is dealt with in several sections of the Forest Plan. For example, the placement and condition of signs and bulletin boards is monitored through facility condition surveys and reports. Public comments about maps, signs, brochures, and public service will be collected through voluntary and solicited methods. Fee envelopes, trail registration cards, guest registers, letters, telephone calls, and face to face comments are some of the methods we will use to track the effectiveness of the Informational Services. Visitor/user surveys, such as the one developed by Arkansas Tech University for the Mulberry River, is one way to solicit public comments. See the Forest Plan for additional details on evaluation of monitoring results.

2100 ENVIRONMENTAL MANAGEMENT

OPERATIONS.

Drinking water and septic systems on National Forest lands will comply and meet all Arkansas Department of Health regulations. Education and information programs and materials will discuss solutions to disposal of human waste. For example, brochures and bulletin boards could have information about the locations of improved restroom facilities and what individuals can/should do when those facilities are not available. "Leave No Trace" programs can be used by the river manager to encourage responsible human waste disposal.

Solid waste from developed campsites will be disposed of at appropriate landfill facilities. Recycling stations can be established at recreation areas.

The Forest Service can assist the Mulberry River valley community in establishing trash disposal and recycling systems. Anti-litter and anti-trash dumping campaigns can be supported by the Forest Service to reduce the impact of solid wastes on the Mulberry River. The Forest Service will also support "pack-it-in and pack-it-out" and "Leave No Trace" concepts for canoeists, hunters, and other recreationists. Specifically, boaters should be discouraged from bringing glass containers onto the river. The Forest Service will continue to support the annual River Clean-up day in cooperation with other river partners.
Pesticides may be used within the corridor on public lands if restrictions regarding the type, frequency, methods of application, monitoring, and safety are strictly followed. Actual application of pesticides may be to maintain or enhance the Outstandingly Remarkable Values or may be used if there is no adverse effect on those values.

**MONITORING AND EVALUATION PLAN.**

- Meet or exceed State of Arkansas standards at all waste disposal and treatment facilities.
- Soil Water and Air section of the Forest Plan addresses evaluation and monitoring of pesticides.
- Building on the dispersed campsite inventory information collected in 1995, perceptual monitoring of dispersed recreation sites along the riparian area of the corridor should continue. Continue to assess the need to add or improve toilet facilities.

**2200 RANGE MANAGEMENT**

Issue no grazing permits within the corridor.

**MONITORING AND EVALUATION PLAN.**

Monitoring and evaluation in this resource area is dealt with in several sections of the Forest Plan. Since grazing allotments do not exist, Range Management Plans are not necessary. Refer primarily to the Soil, Water and Air provisions of the Forest Plan.

**2300 RECREATION MANAGEMENT**

Scenic Segments and Recreation Segments of the Mulberry Wild and Scenic River will be treated in a similar fashion under the Operations and Development guidelines. However, consideration should be given to the Recreation Opportunity Setting (ROS) for each segment of the river. More stringent guidelines exist for the development of facilities and improvements within the Scenic section of the corridor. Refer to the 1986 ROS Book, USDA, Forest Service, 1986.

A Roaded Natural recreation opportunity setting (ROS) shall be maintained on National Forest system lands from the headwaters to Cass Job Corps and from Baptist Vista Church Camp vicinity to Campbell Cemetery Recreation Area.

A Rural setting shall be maintained on National Forest system lands from the vicinity of Baptist Vista Church Camp to Campbell Cemetery Recreation Area.

A Semi-Primitive motorized setting shall be maintained on National Forest system lands from Campbell Cemetery to the Forest boundary.

Motorized recreation travel shall be restricted through Forest Supervisor’s Orders.

Camping on public lands will be permitted at Wolf Pen and Redding Campgrounds and at dispersed areas within the corridor on National Forest lands.

A program will be established to monitor recreation use patterns, impacts, and visitor preferences. Conduct a survey of recreation use in the corridor within the first five years of the river designation. The study shall be designed to collect, at a minimum, the following information:
use patterns (activity participation, timing and frequency, location, etc.)
* visitor characteristics (origin, group type and size, first-time visitor, etc.)
* visitor perceptions (desired experience, preference for management actions, conflicts or problems, motives for visiting the Mulberry River, etc.

Watercraft use will be monitored in the river corridor to evaluate and mitigate potential impacts to sensitive species or river values.

Non-motorized boats are the most suitable watercraft within all sections of the Wild and Scenic River. Canoes, kayaks, rafts, etc. will typically be allowed if they meet State Boating Safety regulations.

Dispersed recreation in the corridor (recreation that does not occur at developed sites) should be monitored to evaluate potential social, biological and physical impacts, and appropriate corrective actions taken if unacceptable impacts are identified.

The Redding Loop of the Ozark Hiking Trail and that segment of the main Ozark Highlands Trail which crosses the Mulberry, will be maintained for pedestrian use and to Forest Standards.

RECREATION DEVELOPMENT

The Forest Service will provide and maintain recreation facilities appropriate for the Recreation Opportunity Setting.

Recreation facilities shall be designed and maintained to provide a Roaded Natural or Rural experience in the Recreational segment, and a Semi-primitive Motorized experience in the Scenic section of the river.

A design narrative, following the direction in FSH 2309.13 should be developed prior to the construction or reconstruction of any recreation site or facility. The design narrative will provide the objectives of the site and general design concept.

Trash receptacles may be provided at developed recreation sites, such as Wolf Per, Redding, and Campbell Cemetery. Other access points, such as High Bank and Little Mulberry normally will not have trash receptacles unless they are needed for resource protection. Visitors should be encouraged to pack out all their trash under the "pack-it-in, pack-it-out" policy. Should appropriate funding levels not be maintained, a "pack-it-out" policy may be implemented at developed recreation sites as well.

New recreation developments should not be established within the affected environments of sensitive plants or wildlife species.

Expansion of existing recreation sites on National Forest System lands will be limited and will be supported by environmental analysis addressing the need, impacts and effects.

Additional development of public river access points may be considered after site specific environmental analysis.

Existing developed recreation areas should be brought to appropriate accessibility levels as funding becomes available. Capital improvements should follow the guidelines set forth in the Scenery Management section of this plan.
Information should be available for visitors on developed camping opportunities in the area, including private and state facilities. Visitors should rely on the private sector for most of the local camping opportunities.

2350 TRAILS

From Wolf Pen Access to the Forest Boundary, the Mulberry River is recognized and is managed as a water/canoe trail.

The Redding Loop of the Ozark Highlands Trail will be managed and maintained in accordance with Forest-wide standards and guidelines.

Development of new system trails should meet Forest Service standards for the intended trail use. Where feasible, new trails should be designed for a range of users, not single uses. Design and layout should be an interdisciplinary process.

A Design Narrative, following the direction in FSH 2309.13, should be developed prior to the construction of any new trail. The Design Narrative will provide objectives of the trail and general design concept.

Trail construction should involve only the amount of clearing as is necessary for safe passage of trail users. Trail layout should minimize necessity for clearing large trees or any unique vegetation. Trees that pose a hazard to trail users should be cut, or portions of the tree removed, but as much of the tree as practical should be left to provide wildlife habitat.

User-developed trails which cause unacceptable resource or social impacts should either be closed and fully rehabilitated, relocated to a less sensitive location, or hardened. Evaluation of the best corrective measures should consider the traditional uses of the trails, the relative importance of the trail as an access route to unique attractions in the corridor, potential impacts to local residents, and significance of the resource impacts. User-developed trails that provide important access to the river or recreation attractions should be reconstructed to meet Forest Service standards.

MONITORING AND EVALUATION PLAN.

Monitoring and evaluation in this resource area is dealt with in several sections of the Forest Plan. For example, the dispersed area use, developed site facility condition and off-highway vehicle impacts will be monitored using monitoring techniques and data sources specified in the Forest Plan. Other monitoring techniques may include:

-Canoe census at access points to document the number and type of watercraft by rental company and by private use.
-Recording visitor comments taken from fee envelopes and trailhead registration cards.
-Documentation of all dispersed campsites by photographing and measuring the improvements and impact area.
-Use of trail counters to count the number of canoeists on sections of the river.
-Collection of user data supplied by the outfitters in their annual special-use report.
The results of this monitoring along with regularly scheduled visitor/user surveys will be used to assess the need to implement user capacity restrictions. See the Forest Plan for additional details on evaluation of monitoring results.

2360 HERITAGE RESOURCES

OPERATIONS
The goal of managing heritage resources is to protect and preserve heritage resource properties and values within the Mulberry River corridor.

**Historic and Prehistoric Resources.** Conduct site specific surveys for all proposed ground-disturbing projects within the Mulberry River corridor. Survey intensity shall follow established Forest guidelines.

Complete Determinations of Effect and National Register evaluations and/or nominations for all heritage resource sites identified and recorded within proposed project areas.

**Cultural Values.** Preserve elements of the river corridor contributing to local social and cultural values.

**Interpretation.** As funds allow, provide interpretation of heritage resources within the Mulberry River corridor. Interpretation should be provided at developed recreation sites and/or the high use sites (refer to brochure discussed in 1600 Information Services).

No specific location information will be included in any developed interpretive material without full concurrence from the State Historic Preservation Office and/or the Advisory Council for Historic Preservation.

MONITORING AND EVALUATION PLAN
Monitoring and evaluation in this resource area is dealt with in the cultural (heritage) resource section of the Forest Plan. See the Forest Plan for additional details on evaluation of monitoring results.

2380 SCENERY MANAGEMENT

OPERATIONS
Management actions on National Forest system lands, such as vegetation management, development of recreation facilities, or construction of erosion control structures, must meet the Visual Quality Objective of Retention along both the Recreational and Scenic segments of the river. These guidelines apply only to National Forest lands, not private lands. Structures on National Forest lands should be:

- Located so that they are as unobtrusive as possible,
- Screened with native vegetation (with an emphasis on large, long-lived tree species - e.g. oak and hickory) to make them less evident when viewed from the river,
- Designed to blend in with natural surroundings,
- Constructed of "natural" appearing materials (e.g. encourage use of wood and rock on visible surfaces, vs. concrete or metal. Use of non-native materials is acceptable if adequately masked or screened by native materials or vegetation.
SIGNS

-When signs are installed which identify the Mulberry River as being part of the Wild and Scenic River system, the national logo will be used. See 1600 Information Services for other directions on signs.

MONITORING AND EVALUATION PLAN
Monitoring and evaluation in this resource area is dealt in the "Visual Quality" section of the Forest Plan. See the Forest Plan for additional details on evaluation of monitoring results.

2400 VEGETATIVE MANAGEMENT

OPERATIONS
Vegetation management will enhance and promote the appearance and structure of a biologically diverse ecosystem within the river corridor or enhance important components of the ecosystem (e.g. sensitive species habitat), particularly along the river and its immediate environment. Canopies should be deep and multi-layered and there should be an abundance of snags and downed logs.

The following actions will also be allowed within the Scenic and Recreational Sections of the river corridor:

Actions needed to correct impact or to salvage material resulting from a catastrophic natural or human-caused disaster.
Planting to help control erosion and to screen structures and developments visible from the river.
Sustaining the natural integrity of vegetative communities in the river corridor by prescribed burning, planting, or removal of encroaching vegetation.
Removal of hazards.
Collecting of downed woody material for use at campsites.

Hayfields. Hayfields may be maintained to provide visual diversity, early seral vegetation, and wildlife habitat. Riparian areas should be monitored for adequacy. Forest riparian buffers may be used.

MONITORING AND EVALUATION PLAN
Monitoring and evaluation in this resource area is dealt with in several sections of the Forest Plan including, "Recreation", "Timber", "Visual Quality", and "Protection". See the Forest Plan for additional details on evaluation of monitoring results. Continued monitoring of the vegetative component will be necessary to determine the progress in reaching a late seral stage. This will be used to determine what strategies to take to achieve this community. The establishment of the riparian zone adjacent to open land will need monitoring to determine health.
2500 WATERSHED AND SOILS MANAGEMENT

Where watershed improvement projects are undertaken, use materials that will blend in with the ROS designation. Improvement actions should occur on erosion sites/banks that are threatening other forest investments such as roads, or private land. Emphasis will be placed on minimizing visual impacts of erosion control activities.

WATERSHED MANAGEMENT

**Operations.** Water quality protection and improvement needed to meet the requirements of the Act will be attained through implementation of Best Management Practices (BMPs). Identification of the appropriate BMP and implementation will be accomplished through individual projects.

Continue to implement the Stream Quality Monitoring process designed by the Ohio Department of Natural Resources. Stream water quality data will be used to determine a Forest Stream Water Quality Index. A five percent (5%) decline in this index would be considered significant.

The Forest will continue to coordinate with the Arkansas Department of Pollution Control and Ecology, Arkansas Game and Fish Commission, Arkansas Forestry Commission, Arkansas Department of Health, Arkansas Soil and Water Conservation Commission, and Arkansas Natural and Scenic Rivers Commission, to assess and prevent future impacts to the water quality of the Mulberry River.

SOILS

**Operations.** Erosion into the Mulberry River or tributaries, or impacts to soils from existing National Forest uses, should be reduced either through information and education, structural or vegetative stabilization, or area closures. Where possible, the least restrictive method should be implemented first and monitored for effectiveness. Further restrictions or stabilization methods may be phased in, if necessary.

Any Forest Development Roads or segments of roads causing resource impacts will be evaluated for reconstruction or closure.

Continue to coordinate with the various County Judges and soil conservation agencies to eliminate erosion and other resource impacts from county road crossings/roads in the corridor.

STREAMBANK STABILIZATION

Evaluation of sites proposed for erosion control along the banks of the Mulberry River on National Forest lands should consider the natural dynamics and lateral movement of the river channel.

Stabilization should be limited to existing "severe" and "moderate" eroding banks on National Forest lands which are contributing significantly to sediment bedload levels. Future (long-term) stabilization efforts should focus only on eroding streambanks where forest or private structures are threatened.

Efforts shall be in a downstream direction, taking a "worst-first" and "upstream-first" approach (in terms of erosion class severity ranking).
Erosion control techniques shall, to the extent practicable, maintain or enhance free-flowing characteristics of the river. Cumulative amount of stabilization over time shall not exceed 5% of the total shoreline length within the designated corridor.

Emphasis should be placed on maintaining the scenic quality of the Mulberry River, with treatments blending in with the surrounding landscape, becoming essentially invisible to the untrained eye over time (within 5 years). A bio-engineering approach which combines traditional structural techniques with native vegetation plantings shall be employed. These include, but are not limited to: riprap, whole tree revetments, and vegetative plantings.

"Hard" techniques such as riprap shall be generally limited to those sites which have suitable existing access for equipment. Use materials that blend in with the surrounding vegetation. Large woody debris such as whole trees or root wads should be incorporated into riprap designs wherever possible to maintain natural scenic profiles and enhance instream fish cover.

Consideration should be given to the habitat needs of other riparian dependent species such as wood turtles and bank swallows. Certain eroding streambanks (i.e. clay banks, some sandy banks with southerly exposures) which provide good nesting habitat will be left untreated or treated less intensively. Stabilization structures shall be periodically maintained to prevent such structures from becoming visually obtrusive or safety hazards. Existing structures which have fallen into a state of disrepair will be either rehabilitated or removed. Both removal or repair shall be done in a manner which maintains the scenic character of the river and does not contribute to future streambank erosion.

MONITORING AND EVALUATION PLAN

Monitoring and evaluation in this resource area is dealt with in the "Soil, Water and Air" section of the Forest Plan. See the Forest Plan for additional details on evaluation of monitoring results. In addition to those requirements, the following procedures may be implemented as necessary:

- Inventory roads, trails and cutbanks to determine where impacts are occurring, and gather data for future actions.

- Collect water quality data every five years, beginning in the year 2000, to compare to established baseline conditions.
- Broad spectrum of chemical, physical, and biological parameters shall be collected and compared to historic baseline data. Since annual data is collected by the Arkansas Department of Pollution Control and Ecology at the Mulberry Gauging Station, it is felt that periodic sampling on a five year schedule is adequate to protect the water quality of the Mulberry River.

- Continue with the regular invertebrate sampling to determine water quality, and compare to State analysis. Stream water quality data will be used to determine a Forest Stream Water Quality Index. A five percent (5%) decline in this index would be considered significant.
WILDLIFE AND FISHERIES

Operations. The Arkansas Game and Fish Commission has the primary responsibility for the management of fish and wildlife populations, while the Forest Service has the primary responsibility for management of habitat on National Forest system lands. Wildlife and fisheries populations are inventoried and monitored by the Arkansas Game and Fish Commission (especially turkey, deer and fish). All riparian and aquatic habitat management activities will be coordinated with the Arkansas Game and Fish Commission. Management activities will contribute to the support of viable populations of native wildlife species found in the planning area.

Protect and enhance special habitat components within or adjacent to the corridor such as wintering habitat areas, wetlands, and seeps, raptor nests, large woody debris, cavity nesting habitat, and exposed banks.

Prescribed burning may be used to maintain and enhance the Outstanding Remarkable Values or for other purposes as long as it does not adversely affect the values for which the river was designated.

Fisheries Habitat Management

Maintain smallmouth bass fisheries habitat in the Mulberry River to maintain "Quality Stream" status with the Arkansas Game and Fish Commission.

Monitoring. The Forest Plan calls for monitoring of the wildlife and fisheries during the silvicultural prescription and sale review process, using inventory data and water quality monitoring data. For smallmouth bass fisheries, there will be no change from the existing Forest Land Resources Management Plan direction.

Evaluation. Maintain indicator species above minimum viable levels, as directed in the Forest Land Management Plan. For smallmouth bass fisheries, any sustained reduction (3 years) in population or a sustained reduction in water quality (3 years) would indicate a need for further/corrective action.

RIPARIAN MANAGEMENT

Vegetation should be managed for biological diversity to ensure healthy aquatic and terrestrial ecosystems.

Instream woody debris should be left undisturbed unless it constitutes a navigational hazard (if watercraft cannot go over, under, or around woody debris, it constitutes a navigational hazard and may be cut only to the extent necessary to get through).

The Forest Service, as principal riparian owner, shall work with primary river users and landowners to assess potential navigational hazards and determine clearing needs along the river.
**Monitoring and Evaluation Plan.** Monitoring and evaluation in this resource area is dealt with in the "Wildlife and Fish" section of the Forest Plan. See the Forest Plan for additional details on evaluation of monitoring results. The Forest Plan calls for monitoring of the wildlife and fisheries during the silvicultural prescription and sale review process, using inventory data and water quality monitoring data. For smallmouth bass fisheries, there will be no change from the existing Forest Land Management Plan direction. Maintain indicator species above minimum viable levels, as directed in the Forest Land Resources Management Plan. For smallmouth bass fisheries, any sustained reduction (3 years) in population or a sustained reduction in water quality (3 years) would indicate a need for further/corrective action.

**2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES**

**OPERATIONS**
The Forestwide standards for threatened, endangered and sensitive species will apply in this management area.

**MONITORING AND EVALUATION PLAN**
Monitoring and evaluation in this resource area is dealt with in the "Wildlife and Fish" section of the Forest Plan. See the Forest Plan for additional details on evaluation of monitoring results.

**2700 SPECIAL USES**

**PERMITS**

**Operations.** Special use permits are required, as directed in the Forest Service Manual, for organized recreation events that utilize National Forest lands or facilities within the river corridor.

Permits for other events shall be allowed only after considering social and environmental effects and limited to those that are compatible with the management objectives of the river.

Special-use permits shall be required for all commercial activities on National Forest system lands in the river corridor. Permits will be administered in accordance with Forest Service policy.

Issuance of permits for commercial activities should be based on demonstrated need for the service or activity.

Permits shall not be issued for activities on National Forest lands that are inconsistent with the management goals for Recreation or Scenic Sections of the Mulberry River corridor. For example, motorcycle enduro rides and music concerts, generally would not be authorized within the Scenic Segment of the river.

Rights-of-way for public roads, major utility lines, and gas pipelines are permitted within the following parameters:

- New transmission lines, gas lines, water lines, etc., will be discouraged. Where no reasonable alternative exists, restrict additional or new facilities to existing rights-of-way. Where new rights-of-way are indicated, evaluate the proposal against the effect to the outstandingly remarkable values as well as any additional social, environmental, and economic criteria such as: scenic, recreational, fish and wildlife values in the corridor.
**Monitoring and Evaluation Plan.** Monitoring and evaluation in this resource area is dealt with in the "Lands-Special Use Permits" section of the Forest Plan. Special use permit applications are analyzed as specified in the Code of Federal Regulations. Permits which already exist, are evaluated during the monitoring process for unacceptable conditions. Unacceptable conditions must be corrected or the permit is terminated. See the Forest Plan for additional details on evaluation of monitoring results.

**2800 MINERALS**

**OPERATIONS**
Manage for mineral prospecting and develop to minimize adverse environmental effects on other resource uses and values.

Administer all mining activities on National Forest lands according to 36 CFR 228 subpart A and FSM 2810.

All authorized surface use of a mining claim will be included in the plan of operations.

Essential off-claim uses and needs that can be tied to a specific claim will be authorized by special use permits.

Mineral activities which can not be tied to a specific claim will only be authorized in the plan of operation approved for such activities (i.e. active exploration not within the limits of a claim).

**MONITORING AND EVALUATION PLAN**
Monitoring and evaluation in this resource area is dealt with in the "Minerals and Geology" section of the Forest Plan. Gas well applications will be analyzed as specified in the Code of Federal Regulations. On-Shore drilling regulations also apply. The Bureau of Land Management is currently responsible for the down-hole analysis. Violations of On Shore Order Number 2 will be cause to require corrective actions by the gas well company. See the Forest Plan for additional details on evaluation of monitoring results.

**5100 FIRE MANAGEMENT**

**WILDFIRE SUPPRESSION**

*Operations.* Wildfire suppression within the river corridor will follow the same guidelines as suppression on adjacent lands, except additional efforts should be made for prompt rehabilitation of all control activity generated disturbances. The Incident Commander and Line Officer should review the need for a Burned Area Rehabilitation Plan, regardless of fire size.

Depending on severity of potential fire conditions, there should be an increase in patrols during fire seasons, as well as an effort made to increase public awareness of fire risk.

**PRESCRIBED BURNING**

*Operations.* Prescribed burning may be used as a tool to achieve vegetation, visual or recreation management objectives providing that the Outstandingly Remarkable Values are protected.
Monitoring and Evaluation Plan. Monitoring and evaluation in this resource area is dealt with in the "Protection" section of the Forest Plan. For example, each prescribed burn and wildfire will be reviewed by resource staff areas to assess the effectiveness of Forest Service actions and to assess the effectiveness of the prescribed burn or the damage caused by the wildfire. See the Forest Plan for additional details on evaluation of monitoring results.

5300 LAW ENFORCEMENT

Operations. Enforcement of laws and regulations is important for effective river plan implementation.

Maintain law enforcement presence in the river corridor during high use periods. Uniformed law enforcement personnel should make frequent contact with recreationists and commercial operators.

The Forest Service should strive to maintain cooperative agreements with the local county sheriff’s departments to provide:
- patrols within the river corridor during periods of heavy use to keep peace and to enforce State and local laws within the river corridor, and;
- assistance and support for Forest Service personnel in the enforcement of Federal regulations.

Supervisor’s Orders will exist to:
- prohibit motor vehicles in the river except at designated crossings on National Forest lands.

Other Supervisor’s Orders may be implemented as necessary to protect the outstandingly remarkable values, health and safety, or for other reasons which serve to enhance the river corridor on public lands.

Monitoring and Evaluation Plan. Monitoring and evaluation in this function area is not specifically dealt with in the Forest Plan. Law Enforcement is seen as supporting other resource areas, such as fee compliance, vehicle restrictions, and public safety. The effectiveness of this function area will be measured by perceptions of the officers and use of the Law Enforcement Monitoring and Assessment System. Variability that would initiate further action would be non-compliance of Forest Supervisor’s Orders, Federal Laws and Regulations, as well as state and local laws. See the Forest Plan for additional details on evaluation of monitoring results.

5400 LAND OWNERSHIP

LAND ACQUISITION

Operations. Lands shall only be acquired on a willing-buyer, willing-seller basis as the opportunities occur. The Forest Service will adhere to all land acquisition restrictions described in the Act.

The Forest Service should work in cooperation with other land owners in the river corridor to meet the objectives of the National Wild and Scenic Rivers Act as well as objectives of the landowners.
The Forest Service should continue to coordinate with the Arkansas Department of Pollution Control and Ecology and other conservation organizations to help provide information and technical advice for landowners on how to minimize impacts to Wild and Scenic Rivers Act objectives.

**Monitoring and Evaluation Plan.** Monitoring and evaluation in this resource area is dealt with in the "Lands" section of the Forest Plan. Monitoring will be for compliance with the Wild and Scenic Rivers Act. See the Forest Plan for additional details on evaluation of monitoring results.

**6700 HEALTH AND SAFETY**

**OPERATIONS**

Health and safety planning will address the following risks:

Whitewater canoeing is inherently a dangerous sport. All brochures and bulletin boards will address this risk. Public information will discuss actions which can be taken to lower the risk of personal injury, such as having equipment in good condition, not boating when the river is 4.5 feet or higher, leaving the river during rising water or storms, using Coast Guard approved personal flotation devices, using safety equipment appropriate for the watercraft being used, not consuming alcohol or drugs while boating, know your abilities and skill levels, portage around difficult areas, etc..

Flash floods occur along the Mulberry River. Boaters, swimmers, anglers, campers, hikers and hunters are all at risk of being entrapped by flash flooding on the Mulberry River. Flash flood warning signs will be posted at the entrance to developed recreation sites. Brochures and bulletin boards will also address the issue of flash flooding. When the opportunity occurs, the Forest may work with the National Weather Service to implement "Flash Flood Alert" programs for the Mulberry River valley.

Annual safety inspections will be conducted at all developed recreation sites. Unsafe conditions will be corrected.

In-channel dangers are inherent in white water rivers. All dangers cannot, nor should not be eliminated. When necessary, in-channel blockages such as limbs and down trees will be bucked to allow safe passage of watercraft. Generally, a four foot wide section will be considered wide enough for passage of boats.

Confrontations between recreationists and landowners will be addressed by the appropriate law enforcement authorities if other, non-legal remedies are ineffective.

Search and Rescue plans will be developed in conjunction with land owners, law enforcement, county search and rescue organizations, outfitters and others interested and normally involved in this type of planning.

Vehicle traffic will be controlled by speed limits, State vehicle laws, and National Forest regulations. The Forest Service will coordinate vehicle traffic control measures with the appropriate State and local agencies.
MONITORING AND EVALUATION PLAN

Monitoring and evaluation in this management area is dealt with in several sections of the Forest Plan and through the Health and Safety Code Handbook (Forest Service Handbook 6709.11). For example, testing of drinking water is covered under the "Recreation" section of the Forest Plan as well as by the Arkansas Department of Health. Monitoring will include mandatory testing (such as the water systems) and perceptual monitoring of accidents, incidents, and fatalities as documented in Law Enforcement Incident Reports and from personal observations.

7700 TRANSPORTATION

FOREST SYSTEM ROADS

**Operations.** No new permanent Forest System roads shall be developed in the river corridor without appropriate environmental analysis.

Layout and design of permanent roads should consider protection of scenic, recreational and other river values. The service level for each road will comply with Forest Service standards.

Temporary forest roads, roads constructed for short-term use and not intended to be part of the Forest’s transportation system may be developed for emergencies or for resource protection and management purposes. The layout and design of temporary roads should consider protection of scenic, recreational and other river values, and prevention of future illegal vehicle use. Temporary roads should also be rehabilitated as soon as feasible upon termination of administrative need.

**Bridges**

**Operations.** New bridge crossings over the main channel of the Mulberry River or primary tributaries in the designated corridor on National Forest lands shall not be permitted without appropriate environmental analysis.

Replacement of existing bridges shall be permitted only if an environmental analysis and Section 7 analysis (under direction of the Wild and Scenic River Act, 1968) determine a net benefit to the values and objectives of the National Wild and Scenic River corridor.

ROADS UNDER OTHER JURISDICTIONS

**Operations.** The Forest Service should coordinate with the counties, state and owners of private access roads to eliminate resource (sedimentation into the river or tributaries) or social impacts and to assure long-term protection and enhancement of river values.

**Monitoring and Evaluation Plan.** Monitoring and evaluation in this resource area is dealt with in the "Facilities" section of the Forest Plan. Transportation records will be kept on the Transportation Inventory System. Roads or trails found to be in non-compliance of the service level standards or which are causing an adverse effect to the river will be closed, rehabilitated, and/or repaired. See the Forest Plan for additional details on evaluation of monitoring results.
APPENDIX I

REFERENCES
(some references were used for background information and not cited)

Arkansas Department of Parks and Tourism. Whitewater Recreation in Arkansas. Little Rock, Arkansas; Arkansas Department of Parks and Tourism. 1984.


Herrick, Theresa A. "Mulberry River Boaters Study", Submitted to the USFS Ozark-St. Francis National Forests, Russellville, AR, July, 1996. Department of Parks, Recreation and Hospitality Administration, Arkansas Tech University, Russellville, AR.


Kopec, John. and Lewis, Stuart. Stream Quality Monitoring, A Citizen Action Program. Ohio Department of Natural Resources. Division of Natural Areas and Preserves. No Date.


APPENDIX II

LEGISLATIVE HISTORY

River management planning direction is contained in the Wild and Scenic Rivers Act (P.L. 90-542), and the Final Revised Guidelines for Eligibility, Classification and Management of River Areas, published by the U.S. Departments of Agriculture and Interior, - 47 Federal Register 39454 (September 7, 1982). Section 3 (b) of the Wild and Scenic Rivers Act requires that three activities be accomplished:

1. Establish detailed boundaries to include an average of not more than 320 acres per mile on both sides of the river [Amendment 7].
2. Determine the classifications applicable to each segment of the river "Arkansas Wild and Scenic Rivers Act of 1992".
3. A management plan is to be prepared for the actions needed to administer the river area.

Section 3(b) also states that publication in the Federal Register is required for boundaries and classifications... "shall not become effective until 90 days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives." Notice of completion and availability of management plans shall be published in the federal register. Section 10(a) of the Wild and Scenic Rivers Act provides for administration of system rivers and stresses that primary emphasis be placed on protecting and enhancing the scenic, historic, archaeological and scientific features of the rivers. Other uses are allowed "which do not substantially interfere with public use and enjoyment of these values." Authorization is given for development of individual river management plans which establish varying degrees of intensity for protection and development based on special features of the area. The 1982 guidelines list general management principles that must be addressed when federal agencies are preparing and implementing river management plans.

Amendment 7 to the Ozark-St.Francis Forest Land and Resources Management Plan established Management Area 9 (Wild and Scenic River Corridors) and requirements for continued protection and management (Table 4-18 in FLRMP Wild and Scenic River Management Requirements).

The Mulberry Wild and Scenic River Management Plan will be the basis for amending the Ozark-St. Francis National Forests Land and Resources Management Plan. This plan will be a guide for management of the Mulberry Wild and Scenic River, as designated by Section 3 (a) of the Wild and Scenic River Act C16 U.S.C. 1274 (a) as amended by the One Hundred Second Congress on January 3, 1992 (P.L. 90-542) and is the "Management Plan" referred to in the Wild and Scenic River Study Report and Legislative Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest, September, 1991.
APPENDIX III

GLOSSARY OF ACRONYMS AND TERMS

Best Management Practices - A practice or combination of practices that is determined by a State (or designated area-wide planning agency) after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals (Federal Register, Volume 40, No. 230 dated 11/28/75).

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

Biological Evaluation - A specific process required as a part of an environmental assessment that evaluates the potential effects of a proposed project on Proposed, Endangered, Threatened, and Sensitive species and their habitats.

Cultural Resource - The remains of sites, structures, or objects used by humans in the past-historic or prehistoric.

Cumulative effects or Impacts - Cumulative effect or impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal or person) undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40CFR 1508.7 - these regulations use effects and impacts synonymously.)

Decision notice - The written record of the decision made after a federal agency completes an environmental assessment. The deciding officer chooses one of the alternatives, or a blend of the alternatives, and the decision may be appealed by the public. The Forest Service combines the decision notice with the FONSI (Finding of No Significant Impact) required by NEPA.

Designated corridor - Those areas found within the corridors as it was described in the Federal Register.

Developed Recreation - Recreation that requires facilities that, in turn, result in concentrated use of an area. Examples of developed recreation areas are campgrounds and picnic areas; facilities in these areas might include roads, parking lots, picnic tables, toilets, drinking water and buildings.

Dispersed recreation - A general term referring to recreation use outside developed recreation sites; this includes activities such as scenic driving, hiking, backpacking, hunting, fishing, horseback riding, and recreation in primitive environments.

Diversity - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

Easements - An interest in real property that conveys use, but not ownership, of a portion of an owner’s property.
Habitat - The area where a plant or animal lives and grows under natural conditions. Habitat consists of living and non-living attributes, and provides all requirements for food and shelter.

Interdisciplinary Team (ID Team) - A group of individuals with different training assembled to solve a problem or perform a task. The team is assembled out of recognition that no one scientific discipline is sufficiently broad to adequately solve the problem.


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

Mitigation - Mitigation includes: (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; (c) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (d) reducing or elimination of the impact over time by preservation and maintenance operations during the life of the action; and (e) compensating for the impact by replacing or providing substitute resources or environments. (40CFR Part 1508.20).

National Forest Management Act (NFMA) - A law passed in 1976 as an amendment to the Forest and Rangeland Renewable Resources Planning Act, requiring the preparation of Regional Guides and Forest Plans and the preparation of regulations to guide that development.

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

Public involvement - A Forest Service process designed to broaden the information base upon which agency decisions are made by (1) informing the public about Forest Service activities, plan, and decisions, and (2) encouraging public understanding about and participation in the planning processes which lead to final decision making.

Recreation Opportunity Spectrum (ROS) - A framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences have been arranged along a continuum of spectrum divided into seven classes: Primitive, Semiprimitive Nonmotorized, Semiprimitive Motorized, Roaded Modified, Roaded Natural, Rural and Urban.

1. Primitive - Area is characterized by an essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

2. Semiprimitive Nonmotorized - Area is characterized by a predominately natural or natural appearing environment of moderate to large size. Interaction between users is low, but there is often
evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but would be subtle. Motorized recreation use is not permitted, but local roads used for other resource management activities may be present on a limited basis. Rustic and rudimentary facilities primarily for site protection. No evidence of synthetic materials. Use undimensioned native materials.

3. Semiprimitive Motorized - Area is characterized by a predominately natural or naturally appearing environment of moderate to large size. Concentration of users is low but there is often evidence of other users. The area is managed in such a way with minimum on-site controls and restrictions. Use of local primitive or collector roads with predominately natural surfaces and trails suitable for motorized vehicles like ATV's or OHV's. Rustic and rudimentary facilities primarily for site protection. No evidence of synthetic materials. Use undimensioned native materials.

4. Roaded Natural - Area is characterized by predominately natural-appearing environments with moderate evidence of the sights and sounds of people. Such evidence usually harmonizes with the natural environment. Interaction between users may be moderate to high, with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is allowed and incorporated into construction standards and design of facilities. Rustic facilities providing some comfort for the users as well as site protection. Use native materials but with more refinement in design. Synthetic materials should not be evident.

5. Rural - An area where the opportunity to observe and affiliate with other users is important as is convenience of facilities. Self-reliance on outdoor skills of little importance. Natural environment is culturally modified yet attractive (i.e. pastoral farmlands). Interactions between users may be high as is evidence of other users. Some facilities designed primarily for user comfort and convenience. Some synthetic but harmonious materials may be incorporated.

6. Urban - An area where the opportunity to observe and affiliate with other users is very important as is convenience of facilities and recreation opportunities. Urbanized environment with dominant structures, traffic lights and paved streets (like city parks or large resorts). Interaction between large numbers of users is high. Facilities mostly designed for user comfort and convenience. Synthetic materials are commonly used.

Riparian - Pertaining to areas of land directly influence by water or influencing water. Riparian areas usually have visible vegetative or physical characteristics reflecting this water influence. Stream sides, lake borders, or marshes are typical riparian areas.

Riparian Forested Buffer - A corridor that parallels a perennial, intermittent, or ephemeral stream with a varying width, where management practices are modified to lessen the impact on the stream.

River - A flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes. (Section 16(a) of the Wild and Scenic Rivers Act).

River Area - For study rivers, that portion of a river (segment or corridor) and its immediate environment comprising a minimum area extending at least 1/4 mile (1/2 mile to 2 miles in Alaska) from the ordinary high water mark. For designated rivers, the river and adjacent land within the authorized boundaries.
River Corridor - Land adjacent to the Wild and Scenic River, managed along with the river to maintain and/or enhance the outstandingly remarkable values of the river. Corridor boundaries may not encompass more 320 acres per river mile.

Sensitivity level - A measure of people's concern for the scenic quality of the National Forests. Three sensitivity levels are employed, each identifying a different level of user concern for the visual environment.

- Level 1 - Highest sensitivity
- Level 2 - Average sensitivity
- Level 3 - Lowest sensitivity

Standards and guidelines - Bounds or constraints within which all practices in a given area will be carried out, in achieving the goals and objectives for that area. Standards and guidelines provide environmental safeguards and also state constraints prescribed by law.

Visual Quality Objective (VQO) - Categories of acceptable landscape alteration measured in degrees of deviation from the natural-appearing landscape.

- Preservation - Ecological changes only.
- Retention - Management activities should not be evident to the casual Forest visitor.
- Partial Retention - Management activities remain visually subordinate to the characteristic landscape.
- Modification - Management activities may dominate the characteristic landscape but must, at the same time, follow naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middleground.
- Maximum Modification - Human activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

Watershed - The entire land area that contributes water to a drainage system or stream.
APPENDIX IV

SUMMARY OF PUBLIC CONCERNS

PRIOR TO JULY 25, 1996

INTRODUCTION

This summary of public concerns has been compiled from telephone calls, letters, personal conversations, and petitions. Public comments have been solicited at several points throughout the wild and scenic river process. The first request for comments occurred when thirteen rivers were selected for study to be included in the Wild and Scenic Rivers System. Additional comments were received when the Forest Land and Resources Management Plan was amended to protect the study rivers, when the corridors locations were studied for the final six rivers, and when the Forest Land and Resources Management Plan was amended (Amendment 7) to establish the corridors.

1600 INFORMATION SERVICES

Some users would prefer to restrict the number of signs within view of the river. Those who commented on this issue feel that the posting of private land is a negative visual impact and that the Forest Service should not consider posting National Forest lands or signing access points from the river. In contrast, other commentors thought that there might be less trespassing on private land if the National Forest lands were signed.

2100 ENVIRONMENTAL MANAGEMENT

Human Waste

There was a general concern about the negative affect of human waste on water quality. Specific mention was made of the sewage treatment plant at Cass Job Corps, possible effluent from drainfields on private land, and the occurrence of human waste from campers and canoeists.

Solid Waste

In letters, telephone calls and personal visits, some individuals expressed concern about litter and pollution. These concerns can be divided into several categories: litter generated by recreationists, illegal trash dumps, non-point source pollution, and other pollutants.

Litter generated by recreationists includes cans, glass containers and other debris lost during canoeing or purposefully dumped by the recreationists. The single biggest concern is the negative effect of broken glass on the river banks. Broken glass, and the danger of getting cut, is perceived as a serious problem. Other litter is concentrated at the dispersed campsites. During low water it is unsightly and during high water, it is washed down stream.
Illegal trash dumps are found throughout the Ozarks, on private as well as National Forest lands. Illegal dumping near the river is seen as a visual problem. Even if the trash is not dumped along the shoreline, heavy rains wash the trash into the river from a considerable distance.

One commentor suggested that we establish a volunteer program to clean the stream.

Pesticides

One commentor asked that the Forest Service evaluate all proposed activities within the watershed such as logging, road building, mining, pesticides, clearing etc. (commentor may also be including activities on private land, but it isn’t clear). One commentor specifically requested that we prohibit the use of pesticides and herbicides.

2300 RECREATION

The most common concerns were for continued access to the river for boating and a concern about inappropriate behavior exhibited by canoeists. Comments included: limit the number of canoeists, inappropriate behavior from canoeists, no user fees, recreation impacts; consider all users, not just canoeists, allow people to use and enjoy the river, limit 4-wheeler/ OHV access, OHV use in the corridor, control recreation use, prohibit the collection of user fees, provide affordable camping opportunities, continue river access for boating, develop a management plan for fishermen, paddlers, campers and hunters, and develop and regulate campgrounds and access points.

2380 SCENERY MANAGEMENT

Commentors are concerned that the scenic quality of the Mulberry River will not be maintained over time. Specific comments include: protection of the visual foreground, protect scenic beauty, maintain natural beauty, preserve scenic qualities, don’t endanger natural beauty; stop the use of clear-cuts, seedtree cuts and shelterwood cuts within view of the river, preserve the natural environment, and keep [the river] natural [and] allow only low impact uses.

2400 VEGETATIVE MANAGEMENT

The central concern over vegetation management is the belief that the Forest Service should let the riparian area revert to old growth by prohibiting logging in the river zone. The use of clear-cuts, seedtree cuts and shelterwood cuts should also be eliminated within view of the river. In general terms, commentors asked that the Forest Service keep streams unpolluted by restricting agricultural or logging practices within the watersheds. One commentor specifically requested that we prohibit the use of pesticides and herbicides.

2500 WATERSHED AND SOILS MANAGEMENT

Some individuals and groups contend that the comprehensive management plans should encompass the entire Mulberry River watershed (365 square miles) rather than just the river corridor (approximately 6 square miles).

In general, the public wants the river to be kept clean, and the watershed and water quality protected from pollution. Specific concerns include: unwise agricultural or logging within the watersheds (both inside and outside of the corridors), sedimentation and siltation, raw sewage, gravel removal from the river bed, and use of pesticides and herbicides.
There were several comments which were specific to the flow and volume of water in the river: water resource projects that affect free-flow of the river, no dams, continued water use from the Mulberry, and increased use of river for irrigation.

Comments were also received regarding streambank stabilization and erosion, and destruction of the shoreline and the corridor by cattle (on private land).

**Watershed Management/Research Programs**

One commentor suggested that we establish a River Study Center on the Mulberry River.

**2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES**

Fisheries, specifically for smallmouth bass, are one of the outstandingly remarkable values of the river. Comments dealt with: over-fishing, no restriction on fishing and hunting, no fish stocking, destruction of wildlife habitat, preservation of the river for habitat, and use together with conservation.

**2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES**

No specific comments.

**2700 SPECIAL USES**

One commentor was concerned about a gas pipeline that crosses the river.

**2800 MINERALS**

There is a general concern regarding in-stream gravel mining in Arkansas.

**5100 FIRE MANAGEMENT**

No specific comments.

**5300 LAW ENFORCEMENT**

One of the most critical law enforcement concerns centers on conflicts between landowners and recreationists. On the navigable portion of the river, conflicts occur between canoeists and landowners. On the non-navigable portion, above Wolf Pen Recreation area, the conflict occurs between landowners and anglers.

Some private landowners are concerned about discourteous recreationists. The Forest Service has had reports that some anglers and canoeists litter, are loud and boisterous, expose themselves to others, trespass on private land, and are aggressive and obnoxious.

Some private landowners are concerned that the Forest Service will regulate actions taken on private land. One landowner would like more law enforcement presence in the river valley. Another comment simply said "Law Enforcement". We are unsure if they wished more or less law enforcement.
5400 LAND OWNERSHIP

During scoping periods for the designation of the river corridor, many people were concerned that the government would condemn private land. This is no longer an issue, the river has been designated and the corridor established without condemnation of private land. Another commentor suggested that the Forest Service acquire (purchase) lands to protect the river and to acquire land near Forest Development Road 1504.

6700 HEALTH AND SAFETY

Those who commented on health and safety issues were concerned with the negative affect of human waste (see 2100 Environmental Management section) on water quality, aggressive confrontations between landowners and recreationists, heavy traffic on Franklin County Road 83 (Forest Development Road 1003), presence of camping sites within flash flood areas (Redding and Wolf Pen Recreation Areas), dangerous limbs and trees in the river channel, and the presence and effectiveness of search and rescue plans and efforts.

7700 TRANSPORTATION

Those who commented on roads, tended to be critical of the number, type and effect that roads have on the river system. Comments included: no new roads, close roads, don’t build roads, unapproved bridge/culverts at Oark, and siltation from roads. One commentor wants to restrict access for recreation reasons, he said: "provide areas with limited access".

Other commentors wanted to ensure continued access, more access, and/or improved access to the river. Comments included: need access point below Hell Roaring Falls, need improved access at Spirits Creek, development of public access, continued access for boaters, provide for free and unencumbered access to the river; crossings, trails, signs, and parking, and need good access points for boating.

The Forest Service received comments requesting continued access within the corridor to all terrain vehicles (ATVs), off-highway vehicles (OHVs), four wheelers, and three wheelers. Other commentors would like to close the corridor to ATVs, OHVs, and three and four wheelers.

COMMENTS OUTSIDE THE SCOPE OF THE PROPOSED ACTION

One commentor suggested that we "make this [the Mulberry River] part of a wilderness corridor system". While there are several other wild and scenic rivers on the Ozark National Forest that flow through designated wilderness areas, the Mulberry is not one of them. Only Congress can designate a wilderness area, and this proposal is beyond the scope of this document. One of the characteristics that was identified within the discussion of outstandingly remarkable values is the ease of public access to the river from main highways. Implementation of "wilderness" restrictions, like the closure of all roads, would not be in keeping with the intent of the Act by preserving the outstandingly remarkable values.

Some commentors suggested that the Forest Service prohibit commercial developments on private land near the river banks, while some commentors said that we should protect private property rights but still control riverside development.
INTRODUCTION

The Wild and Scenic River Study Report and Legislative Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest, completed in September 1991, recommended the designation of six rivers to the Wild and Scenic Rivers system. The rivers received official designation in April 1992 with the passage of the Arkansas Wild and Scenic Rivers Act by Congress. The law required that the Ozark-St. Francis National Forests establish river management corridors and management plans to protect the free-flowing nature of the rivers. The Forest Land Management Plan was amended on December 28, 1993, creating a Management Area for these boundary corridors. Creation of the management plans began shortly after that with draft plans completed in June, 1996.

Proposed Comprehensive River Management Plans were sent to 2,055 individuals who expressed an interest in this project on July 25, 1996, for their review and comment. Individuals were able to request and based on this request, were sent any or all of the six river plans. In addition, 1000 copies of the proposed amendment to the Forest Land Management Plan were also sent to individuals interested in both river management and forest planning for their review and comment. August 25, 1996, was identified as the deadline to receive comments. (NOTE: A few comments were received wanting to extend the review period. They felt that 30 days was not enough to adequately review all six plans or that the plans did not adequately address issues such as private lands or watershed and should be modified and reissued for public review.)

Of the 3,000 information packets sent, 257 responses were received. These responses can be grouped into four categories: 182 form letters, 46 original letters, 26 phone calls, and 3 office visits. The responses came from a wide spectrum of individuals representing four main special interest groups: environmentally based organizations; landowner rights group; recreation user groups; or other natural resource agencies. Most of the form letters are from individuals who were not on the original mailing list and will be added. Sixty-three of the respondents are out-of-state residents.

Forty-three of the 182 form letters were generated from a news article that appeared in the Northwest Arkansas Times on August 14, 1996. The individuals simply clipped the letter from the newspaper and signed their name. The remaining 136 form letters (51 from out-of-state residents) were comment cards issued by an unknown group that allowed individuals to check one of seven topics that they’d like to see addressed in the revised plans. This card also included a box to check if the individual wanted a moratorium issued on all soil disturbing activities in the affected watersheds. The issues and comments identified in the form letters are included in this summary.

Of the 257 responses received, only a few communicated strong support "for" or "against" the proposed management plans and Forest Plan amendment. A majority of the responses discussed concerns about specific topics included in both documents. The respondents who indicated support for the river plans felt they were comprehensive and focused on resource objectives. Most of these respondents felt the proposed standards and management area 9 direction was good. Some said staff should be commended and appreciated the thoroughness. A few agreed with the direction for activities on Federal land within the corridor, but felt that private land was not adequately covered.

A great number of respondents felt that the proposed plans did not adequately protect the rivers and that the Forest Service needed to expand the plans to include entire watersheds -- land outside of the existing corridor.
A majority of these comments were received through a form letter and strongly stated that the Forest Service should issue a moratorium on all soil disturbing activities in the watersheds of each river until management of roads, vegetation, herbicides/pesticides, wildlife corridors, grazing, mineral activity and ATV use is analyzed.

The following is a summary of public comment by topic:

**Outstanding Values:** Some indicated concern that the list of outstanding values for each river was non-inclusive. Values such as camping, equestrian use and canoe/kayaking were omitted and they felt that a full range of values should be considered in each plan.

**Monitoring:** Monitoring standards recommended in the plans, said some respondents, were not adequate and would not protect river values. They pointed out a need for a flora and fauna inventory, a system to monitor recreation use, and standards that protect stated goals and objectives. Two comments were received wanting provisions for adding new rivers to the scenic river system.

**Private Lands:** A strong contingency of respondents voiced concern about Federal control of private lands pointing out that management of the Federal lands in the corridor would impact private lands. Several of these respondents were concerned about restrictions that would interfere with livestock watering or irrigation from the rivers that flow through or adjacent to private lands, as well as mineral extraction, timber management and utility access to private lands. Some were concerned about the potential increase of trespassing and littering on private lands by recreationists. A few were adamant that the Forest Service has no right to control or effect private lands.

**1600 INFORMATION SERVICES:** Very few comments were received on information services. They wanted explanations of recreation fee process discussed in the plans, and an expansion of the education program to include other resources users not just recreationists.

**2100 ENVIRONMENTAL MANAGEMENT:** Almost half of the comments indicated a need for guidelines for the application of herbicides and pesticides in the entire watersheds. A majority of these comments were from the form letters.

**2200 RANGE:** Several comments were received concerning grazing in the river corridors. Of those, a majority were forms letters recommending all grazing be eliminated in the watersheds. A few wanted clarification of the 100 ft. riparian buffers and the conversion to native warm season grasses discussed in the Piney plan. Some were adamant that livestock have a right to water out of the river on private lands and were concerned about possible restrictions.

**2300 RECREATION:** Numerous comments recommended that the plans consider recreation in the entire watersheds, not just within the rivers corridors. A few were insistent that the plans recognize equestrian activities as a continuing use in the corridors. Some were also strongly opposed to continuing use of OHV/ATV’s in the corridor. A few were concerned that hunting was not emphasized as an important recreation use.

**2360 HERITAGE RESOURCES:** One person responded to this resource area. The respondent felt that the plans indicated that historic sites, such as rock fences, were only being protected for their scenic value. This person felt that the plans should focus on their historic value.
2380 SCENERY MANAGEMENT: Respondents concerned about this resource area felt that visual diversity would be lost if the Forest Service initiated plans to purchase bottomland pastures that commonly occur within the river corridor then convert these lands to forest. One respondent was concerned that restrictions would be placed on private land in order to regulate the scenery for recreationists. This same respondent did not feel that the plans adequately addressed maintenance of the "natural beauty" of the river. Finally, there was the suggestion that current vegetative communities could be enhanced to improve habitat diversity.

2400 VEGETATION MANAGEMENT: This resource section includes discussions on vegetation management, riparian areas, and vegetative resources. Most of the respondents said that the plans needed guidelines for vegetation management within the entire watersheds, not just standards for National Forest land within the corridors.

Another block of respondents was critical of National Forest timber management practices. Comments included statements such as: "stop cutting trees", "why should taxpayers subsidize the timber industry", "manage ONF sustainably, not as a tree farm." A small number stated that the plans did not analyze the effects of timber harvesting in the watersheds and asked for a moratorium of this activity. Some respondents addressed the use of salvage logging. Of those who responded, most want to be assured that there would be an evaluation of the effects from salvage logging and that there would be an opportunity for full public review of salvage proposals. A few number stated that any salvage logging in the corridors would encourage disaster. One respondent stated that the plans were not specific on the types of logging methods which would be allowed and suggested that only the single tree selection method be allowed. Several respondents supported either the proposed standards or encouraged vegetation management of timber. The comments included: "logging should be allowed outside the 1/4 mile corridor", "continue to manage forest under current logging rules and regulations", and "include vegetation manipulation as a tool to use in meeting river management objectives."

There seemed to be confusion about "riparian areas". One commenter said that a 100-foot riparian zone was not enough, one asked to see our riparian documentation, and one does not want us to use the term "riparian" and argued whether or not riparian areas exist on any of the rivers. One commenter expressed an opinion that the management plans should include private land within the riparian areas. One commenter suggested that large stable in-stream debris should be conserved and that unstable small debris should be removed. (Also see 2500 for further riparian issues).

A few commentors mentioned Special Interest Areas. One suggested that SIA's be protected for biodiversity, and another said that the SIA's recognized in Amendment 5 (FLRMP) should be considered in each watershed. There was also a suggestion that the old growth inventories should be completed. One respondent felt that protection and propagation of strictly native plants should be encouraged. The final issue under the Vegetation Management (2400) section deals with private land. A small number of comments were concerned about the effect of the plans on private land. Their concerns included: "people have right to water livestock out of the creek and to irrigate crops", "how will these plans affect existing riparian rights?", and "landowner timber rights must be protected".

2500 WATERSHED AND SOILS: Many respondents asked for watershed analysis of National Forest management practices which could affect the Wild and Scenic Rivers. A few other respondents stated "concerned that sound watershed management practices be used" and the Buffalo plan ignores "sediment run-off from watershed roading activities". (Also see Vegetation Management discussion).

One respondent wanted very clear standards for unacceptable resource impacts concerning soil. Another suggested a restriction of human use where any human induced erosion occurs. On respondent thought
the Standards should address erosion at heavily used recreation areas. A small number of respondents said that the plans failed to protect water quality and species dependent upon water quality.

There is a concern that water quality measurements are lacking. Another commentor suggested that a timeframe be established (if not already done) for bio-assays of significant environment or water quality indicators be used to establish baseline conditions. Two final comments include: "riparian ecology is not adequately addressed and nothing mentions ground water within the watershed or the effects of forest management in the watershed on riparian habitats", and "without clean water, our plants can’t grow and if our plants don’t grow, we will not have clean oxygen or clean water".

**2600 WILDLIFE AND FISHERIES:** Numerous comments recommended that the plans provide guidelines for connecting wildlife corridors with watersheds. (A majority of these comments were provided from the form letters) A few were insistent that the plans specifically clarify that hunting refers to public lands only. Some wanted the plans to make provisions to continue with wildlife habitat improvements projects and maintained what we have.

**2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES:** The few comments received for this area suggested that the plans include habitat plans for listed sensitive species and reduce ginseng permits to a minimum level.

**2700 SPECIAL USES:** The only comments received concerning special uses dealt with access. They indicated that the Forest Service should not deny utility access to private landowners that may cross Federal land near or in the corridor. It was also suggested that the Forest Service is considering the impacts to the river to be more important than providing access.

**2800 MINERALS AND GEOLOGY:** Several comments were received, via form letter, recommending the withdrawal of all mining and drilling permits from the watersheds. A few insisted that the plan clearly state that mineral activity will continue on private lands. Some were concerned that leasing restrictions on Federal land would affect the available mineral pool under private lands. Some also wanted to continue to extract gravel from private lands for personal use or for county roads.

**5100 FIRE MANAGEMENT:** Most of the comments made about fire management activities suggested the plans be more active in the use of prescribed fire, feeling it is an important part of the ecosystem. There was only one comment suggesting that fire management be restricted in the corridors.

**5300 LAW ENFORCEMENT:** One respondent felt landowners should continue to control trespassing on private lands, including the streambeds. Some of the other comments included that there should be no prohibitions of watercraft on private stream sections, and there was a need for a greater law enforcement presence during high use periods.

**5400 LAND OWNERSHIP:** The comments received concerning lands management ranged from the Forest Service becoming active in the affairs of private lands, to making sure private lands are not affected by any Forest Service restrictions or activities. Other comments included making sure no land would be exchanged or disposed of, a clarification of landowner rights, such as water from the river, and that land ownership included the streambed.

**6700 HEALTH AND SAFETY:** The few comments made about health and safety included a need for speed limit signs, and that navigational hazards only be removed on Federal lands. Navigational hazards on private land should only be removed by the landowner. There were two specific comments regarding
Barkshed Recreation Area on the Sylamore and whether it should be classified the same as Gunner Pool and that it needed improvement for public health and visitor safety.

**7700 TRANSPORTATION:** Most of the letters received addressed this management area. Most of those who addressed transportation issues expressed their opinion through a form letter stating "the plans need guidelines for the management of watershed road systems and the cessation of ATV use in the corridors". There were a few respondents who asked for a ban on ATV use and a few others who wanted guidelines for road systems but did not advocate closure of the corridors to ATVs.

Another large group of respondents said "plans did not include analysis of the harm that logging and road building activities are causing in the watershed".

Specific suggestions were also received, they include: "all temporary roads should be permanently closed after...use", "low water slabs be checked and evaluated to determine if structures have neg. impact on fish", and "...some uses such as mining and road building are preclusionary to other uses".

Sylamore: "there is a high use of ORVs and extensive abuse by ORVs".
Buffalo/Richland/Hurricane: "sediment run-off from watershed roading activities are ignored in the plans. ...plans continue to allow ATV use in most of the corridors. This, in effect, sanctions ATV crossings of tributary streams..."
Buffalo: "Road 1463A should be upgraded to allow vehicles with horse trailers to pass more safely".
Piney: "does not want any new roads to be built that will cross Piney".
Hurricane: "do not approve any further access roads or utility rights-of-way through river corridor" and "concerned about continued maintenance of road and creek crossing going into Sexton Cemetery".

There were only a couple of commentors that asked that all roads remain open and maintained ("better").

**PUBLIC CONTENT ANALYSIS TEAM:**

Miera Crawford, Cherokee National Forest  
Dick Bowie, Acting Recreation Staff Officer, OSFNFS  
Marge Dryden, ORA - Pleasant Hill Ranger District, OSFNFS  
Cary Frost, ORA - Bayou Ranger District, OSFNFS  
Martha Hayward - OSFNFS
Welcome to Mulberry Wild and Scenic River

The Mulberry River flows through National Forest and private land. Joint ownership of the river has maintained high-quality, smallmouth bass fishing and white-water floating.

To provide everyone with the best experience on the river, we have a few helpful suggestions:

**Safety:**
- Always wear a personal flotation device.
- Know the river level and your abilities.
- Remain sober.
- Don't take glass containers on the river.
- Register at canoe launch points.

**Courtesy:**
- In Arkansas, private land boundaries are marked with pinkish purple paint. This means “No Trespassing.” Please respect the privacy of the people who live along the river.
- Ask permission before you go on private land.
- Be courteous to other floaters and land owners.
- Pack out your trash. Don't leave cans and paper along the river.

**Ozark-St. Francis National Forests**
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APPENDIX VII

ARKANSAS FLOATERS KIT
## OUTFITTERS DIRECTORY

*NOTE: Addresses and telephone numbers are listed at the end of this chart.*

<table>
<thead>
<tr>
<th>Big Piney Creek</th>
<th>Eleven Point River</th>
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<td>Moore Outdoors</td>
<td>Woody's Canoe Rental &amp; Campground</td>
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<td>Hauette Helton</td>
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<th>Upper Buffalo River</th>
<th>Kings River</th>
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<td>Buffalo Outdoor Center, Ponca</td>
<td>Fletcher's Devil's Dive Resort</td>
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<td>David's Canoe Rental</td>
<td>Trigger Gap Float Service</td>
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<td>Gordon Motel &amp; Canoe Rental</td>
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<td>Houston Canoe Rental</td>
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<td>Lost Valley Canoe Service</td>
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<td>Razorback Canoe Rental</td>
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<th>Middle Buffalo River</th>
<th>Little Missouri River</th>
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<td>Buffalo Camping &amp; Canoeing</td>
<td>The Shed Out Back</td>
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<td>Buffalo Outdoor Center, Silver Hill</td>
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<td>Jarshall Canoe Rental</td>
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<td>River Hills Canoe Rental</td>
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<td>Tomahawk Canoe Rental</td>
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<th>Lower Buffalo River</th>
<th>Little Red River Above Greer's Ferry</th>
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<td>Barnes Canoe Rental</td>
<td>Middle Fork Canoe Rental</td>
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<td>Buffalo Point Canoe Rental, Inc.</td>
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<td>Buffalo River Fishing Resort</td>
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<td>Honey Trout Dock</td>
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<td>First Canoe Rental</td>
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<td>Dodd's Float Service Canoe Rental</td>
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<td>Pace Fishing Service</td>
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<td>Sportsman's Resort &amp; Trout Dock</td>
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<td>Woodsmen's Sport Shop &amp; Cabins</td>
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<td>Lindsey's Rainbow Resort</td>
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<td>Lobo Landing</td>
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<td>Ouachita &amp; Rocky Shoals Canoe Rentals</td>
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<td>Wheeler's Canoe Rental</td>
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<td>Many Islands Camp</td>
<td>Ouachita &amp; Rocky Shoals Canoe Rentals</td>
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<td>Saddler Falls Canoe Rental</td>
<td>Wheeler's Canoe Rental</td>
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<td>Southfork Canoe Rental</td>
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<td>Spring River Beach Club</td>
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<td>Spring River Canoe Rental</td>
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<td>Spring River Oaks Camp &amp; Canoe Rental</td>
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<td>Riverside Motel &amp; RV Park</td>
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<td>OUTFITTERS DIRECTORY</td>
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**BIG PINEY CREEK**
- Moore Outdoors
  - Route 2, Box 303M
  - Dover, Arkansas 72837
  - (501) 331-3606
- Paulette Helton
  - N. Star Route
  - Dover, Arkansas 72837
  - (501) 331-3305

**MIDDLE BUFFALO RIVER**
- Buffalo Camping and Canoeing
  - P.O. Box 504
  - Gilbert, Arkansas 72636
  - (501) 439-2888
- Buffalo Outdoor Center, Silver Hill
  - Route 1, Box 6
  - Highway 65 South
  - St. Joe, Arkansas 72675
  - (501) 439-2244

**UPPER BUFFALO RIVER**
- Marshall Canoe Rental—General Store
  - Route 4, Box 196
  - Marshall, Arkansas 72650
  - (501) 448-2300
- Silver Hill Canoe Rental
  - Route 1, Box 47
  - St. Joe, Arkansas 72675
  - (501) 439-2372 or 449-4649
- Tomahawk Canoe Rental
  - Route 1
  - St. Joe, Arkansas 72675
  - (501) 439-2617

**LOWER BUFFALO RIVER**
- Barnes Canoe Rental
  - HCR No. 66
  - Yellville, Arkansas 72687
  - (501) 449-6235
- Bennett’s Canoe Rental
  - HCR No. 66, Box 331
  - Yellville, Arkansas 72687
  - (501) 449-6431
- Buffalo Point Canoe Rental, Inc.
  - HCR No. 66, Box 383
  - Yellville, Arkansas 72687
  - (501) 449-4521 or 449-4510

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<td>Miller's Float Service</td>
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<td>Sportsman's Resort &amp; Trout Dock</td>
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<td>Stetson's Fishing Resort</td>
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<td>White River Lodge</td>
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<td>Wildcat Shoals Resort</td>
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<td>Hurst Fishing Service</td>
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<td>Norfork Trout Dock</td>
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<td>Rainbow Trout Resort</td>
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CURRENT RIVER
Current River Beach Campground
Box 184
Biggers, Arkansas 72413
(501) 892-5455

ELEVEN POINT RIVER
Woody's Canoe Rental & Campground
HC04, Box 433
Dalton, Arkansas 72455
(501) 892-9732

KINGS RIVER
Trigger Gap Float Service
Route 1, Box 654
Eureka Springs, Arkansas 72632
(501) 253-9247
Fletcher's Devil's Dive Resort
HCR01, Box 8
Eagle Rock, Missouri 65641
(417) 271-3396

LITTLE MISSOURI RIVER
The Shed Out Back
P.O. Box 318
Glenwood, Arkansas 71943
(501) 356-2329

LITTLE RED RIVER (ABOVE GREERS FERRY)
Middle Fork Canoe Rental
c/o Jones IGA Foodstore
Route 1, Box 2
Shirley, Arkansas 72153
(501) 723-4603

LITTLE RED RIVER (BELOW GREERS FERRY)
Big G Resort
Box 483
Heber Springs, Arkansas 72543
(501) 362-8194

Dripping Springs
P.O. Box 314
Pangburn, Arkansas 72121
(501) 728-1711

Lindsey's Rainbow Resort
350 Rainbow Rd.
Heber Springs, Arkansas 72543
(501) 362-3139

Little Red River Trout Dock
Star Route, Box 346
Heber Springs, Arkansas 72543
(501) 362-2197

Lobo Landing
Route 1, Box 200
Heber Springs, Arkansas 72543
(501) 362-5802

Swaying Bridge Trout Dock & Campground
Wilburn Route, Box 362
Heber Springs, Arkansas 72543
(501) 362-3327

MULBERRY RIVER
Byrd's Mulberry River Canoe Rental
HCR61
Ozark, Arkansas 72949
(501) 667-4066

Turner Bend Canoe Rental
Star Route 1
Highway 23 North
Ozark, Arkansas 72949
(501) 667-3641

Wayfarer of the Ozarks
Star Route 1
Ozark, Arkansas 72949
(501) 667-4998

OUACHITA RIVER
Ouachita Joe's Canoe Rental
P.O. Box 65
Pencil Bluff, Arkansas 71965
(501) 326-5517

Ouachita & Rocky Shoals Canoe Rentals
Star Route 2 Box 200
Mount Ida, Arkansas 71957
(501) 326-4710 or (501) 867-2382

Wheeler's Canoe Rental
Route 8, Box 81
Malvern, Arkansas 72104
(501) 337-9695

SPRING RIVER
Mammoth Spring Canoe Rental
P.O. Box 244
Mammoth Spring, Arkansas 72554
(501) 625-3645 or (417) 264-7592

Many Islands Camp
Route Two
Mammoth Spring, Arkansas 72554
(501) 856-3451

Saddler Falls Canoe Rental
Hwy. 63, 1 Mile North of Hardy
P.O. Box 391
Hardy, Arkansas 72542
(501) 856-2336 or 856-2824

Southfork Canoe Rental
Route 3, Box 124 A
Mammoth Spring, Arkansas 72554
(501) 895-2803

Spring River Beach Club
P.O. Box 850
Cherokee Village, Arkansas 72525
(501) 856-3292

Spring River Canoe Rental
P.O. Box 417
Hardy, Arkansas 72542
(501) 856-2594
**Spring River Oaks Camp and Canoe Rental**
Route 2, Box 66
Mammoth Spring, Arkansas 72554
(501) 856-3885

**Riverside Motel & RV Park**
Hwy. 9 North
Salem, Arkansas 72576
(501) 895-3591

**WAR EAGLE CREEK**
Withrow Springs State Park
Route 3
Huntsville, Arkansas 72740
(501) 559-2593

**WHITE RIVER**
Bull Shoals State Park Trout Dock
P.O. Box 205
Bull Shoals, Arkansas 72619
(501) 431-5521

Bull Shoals White River Landing
P.O. Box 348
Bull Shoals, Arkansas 72619
(501) 445-4166

Chamberlain's Trout Dock
Route 1, Box 141
Denton Ferry Road
Cotter, Arkansas 72626
(501) 435-6535

Cotter Trout Dock
P.O. Box 96
Cotter, Arkansas 72626
(501) 435-6525

Custom Expeditions
2000 Magnolia, Suite 43W
Little Rock, Arkansas 72202
(Operates out of Mountain View)
(501) 338-6700

Gaston's White River Resort
#1 River Road
Lakeview, Arkansas 72642
(501) 431-5202

**Gunga-La Trout Dock**
Route 1, Box 147
1 Mile below Bull Shoals Dam
Lakeview, Arkansas 72642
(501) 431-5606

**Jack's Fishing Resort**
Route 2, Box 185
Mountain View, Arkansas 72560
(501) 585-2211

**Jenkins Fishing Service**
P.O. Box 303
Calico Rock, Arkansas 72519
(501) 297-8181

**McClellan Trout Dock**
Route 2, Box 74
Norfork, Arkansas 72658
(501) 499-5589

**Miller's Float Service**
Box 277
Cotter, Arkansas 72626
(501) 435-6313

**Newland's Float Trips and Lodge**
Route 1, River Road
Lakeview, Arkansas 72642
(501) 431-5678

**Pace & Harkins**
Route A, Box 131
Flippin, Arkansas 72634
(501) 453-2667

**P.J.'s Resort Lodge**
P.O. Box 61
Norfork, Arkansas 72658
(501) 499-7500

**Rainbow Drive Resort**
Route 1, Box 185
Cotter, Arkansas 72626
(501) 430-5217

**Red Bud Dock**
Route 2, Box 541
Gassville, Arkansas 72635
(501) 435-6303

**Rivercliff Trout Dock**
P.O. Box 150
Bull Shoals, Arkansas 72619
(501) 445-4420

**Riverview Resort**
Route 2, Box 475
Eureka Springs, Arkansas 72632
(501) 253-8367

**Rose Fishing Service**
P.O. Box 82
Norfork, Arkansas 72658
(501) 499-5311

**Sportsman's Resort and Trout Dock**
HCR62, Box 96
Flippin, Arkansas 72634
(501) 453-2424

**Stetson's Fishing Resort**
HCR62, Box 102
Flippin, Arkansas 72634
(501) 453-2523

**White Buffalo Canoe Rental**
RR 2, Box 420
Eureka Springs, Arkansas 72632
(501) 253-7801

**White-Buffalo Resort**
Route 2, Box 163B
Mountain Home, Arkansas 72653
(501) 425-8555

**White Hole Acres Trout Resort**
Route A, Box 100
Flippin, Arkansas 72634
(501) 453-2913

**White River Lodge**
Route 1, Box 158
Cotter, Arkansas 72626
(501) 430-5133

**Wildcat Shoals Resort**
Route A, Box 166
Flippin, Arkansas 72634
(501) 453-2321

**Woodsman's Sport Shop & Cabins**
Route 2, Box 57
Norfork, Arkansas 72658
(501) 499-7454

**WHITE RIVER, NORTH FORK**
Gene's Trout Dock
Route 3, Box 348
Mountain Home, Arkansas 72653
(501) 499-5381

Hurst Fishing Service
P.O. Box 129
Cotter, Arkansas 72626
(501) 435-6414

**Norfork Trout Dock**
P.O. Box 129
Norfork, Arkansas 72658
(501) 499-5500

**Rainbow Trout Resort**
Route 3, Box 340
Mountain Home, Arkansas 72653
(501) 499-7214

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Information shown on this list of outfitters was provided by the various businesses and does not represent an endorsement by the State of Arkansas. Outfitters wishing to be included in future editions should contact: Arkansas Department of Parks and Tourism; Tourism Division; One Capitol Mall; Little Rock, Arkansas 72201.
APPENDIX VIII

MULBERRY RIVER BOATERS STUDY-EXECUTIVE SUMMARY
MULBERRY RIVER BOATERS STUDY

Submitted to:

U.S. Forest Service
Ozark-St. Francis National Forests
Russellville, Arkansas
July 1996

Prepared by:

Theresa A. Herrick Ph.D.
Department of Parks, Recreation & Hospitality Administration
Arkansas Tech University
EXECUTIVE SUMMARY

Reported are the results of a survey of boaters on the Mulberry River, a national wild and scenic river in Arkansas. Three hundred and twenty-five boaters were contacted by mail using a list provided by Turner's Bend Store, an outfitting business on Mulberry River, and on-site contacts with boaters made by Forest Service personnel during spring 1995. One hundred and thirty-two boaters responded by completing the questionnaire and returning it for a 40.6 percent response rate.

The purpose of the study was to obtain information from boaters about their river experiences and their preferences for management of the Mulberry River. The objectives of the study were: (1) to find out which sections of the river were being using by boaters; (2) to find out when boating use was occurring; (3) to discover what type(s) of watercraft were being used; (4) find out why people were floating the river; (5) find out the experience level of boaters on Mulberry River and other rivers; (6) find out what added to or detracted from boaters' whitewater experience on Mulberry River; (7) identify boaters' perceptions of crowding; (8) discover boaters' perceptions of environmental conditions on the river; (9) obtain boaters' preferences for management actions on the Mulberry River; and (10) obtain socioeconomic and demographic information about Mulberry River boaters.

The most popular starting location for Mulberry River float trips was Wolf Pen where 34 percent of boaters put-in, followed by Turner's Bend where 23 percent of boaters put-in. The most popular put-in time was 10:00 a.m. on either Saturday (29% of boaters) or Friday (21% of boaters). The most popular location to end their river trip was Turner's Bend where 64 percent of boaters took-out. Take-out times were mixed with 22.5 percent of boaters ending their river trip
at 4:00 p.m., 21 percent taking out at 3:00 p.m. and 20 percent completing their river trip at 5:00 p.m. Thirty percent of boaters preferred non-traditional floats from a variety of locations on the river, while 27 percent of boaters preferred to travel the Wolf Pen to Turner's Bend section of the river. Nineteen percent of boaters preferred the Redding to Turner's Bend section of the Mulberry River for boating. Twenty-two and one-half percent of boater respondents traveled in groups with 4 persons, while 16 percent preferred groups of 6 persons. The average number per watercraft was 1.9 persons. Over 55 percent of boaters preferred commercial canoes for travel, while another 29 percent of boaters preferred private canoes.

The most important reasons for visiting the Mulberry River, according to boaters, were: to have fun; to be in a natural setting; to view the scenery; to experience the excitement of running rapids; to be with friends or family; to get away from crowds of people; and to take chances in exciting situations. The least important reason for visiting the Mulberry River was to do some fishing.

Over 91 percent of boaters had previous whitewater experience, averaging over 8 years of whitewater floating experience among them. Boaters floated on average 6.5 times per year, with an average 43 trips among them. Over 65 percent of boaters had previous experience on the Mulberry, averaging 4 trips per year, with an average of 6 years experience on this river. Boater respondents averaged 22.7 total whitewater trips on the Mulberry River. Over half (52.3 %) of the boaters indicated the Mulberry was better than most of the other rivers they floated, while 29 percent indicated the Mulberry was about the same as most of the other rivers respondents had floated. Most Mulberry River boaters rated their whitewater skills as either intermediate (46.9 %) or advanced (40%), while 12 percent of boaters rated their whitewater boating skills as beginner.
The recreational activities participated in by most boaters were: sightseeing, swimming/sunbathing, camping, picnicking, and hiking.

The majority of Mulberry River boaters rated their float trip excellent or very good. The situations that added to boaters' river experience were: large amount of whitewater in the river; difficulty of rapids; number and length of rapids; watching other people come through the rapids; the number of watercraft in your group; and the opportunity to leisurely swim during your river trip. None of the suggested river situations detracted from boaters' river experience. Over 90 percent of boater respondents indicated that they did not feel crowded on the day of their Mulberry River trip either while on the river, at the put-in location or the take-out site. Some boaters (65%) indicated they had to wait for other boaters to get through, on average, 2.9 rapids during their trip. Over 73 percent of respondents had to wait while other boaters put-in, but 78 percent said they did not have to wait to take-out at the end of their trip. Fifty-seven percent of respondents were day trippers, choosing not to camp as part of their river trip, either on the river or at the put-in or take-out locations. Those boaters who did camp (43%) stayed, on average, 1.8 nights.

Boaters on Mulberry River indicated they found no problems during their river experience. Respondents supported the following proposed management actions: prohibit the use of glass containers; require people to carry out their own trash; provide garbage containers; improve put-in and take-out areas; provide campsites along the river; have management provide a river ranger; provide more information at put-in and take-out points; and provide more parking at put-in and take-out points. Boaters opposed none of the proposed management actions. Fifty-eight percent of boater respondents said no management actions were needed at this time to protect the river.
and its surroundings from being damaged by recreational use and 93 percent of respondents indicated there were no conflicts between different river activities at the present time. Fifty-seven percent of boaters neither agreed or disagreed with current management of the Mulberry River, while 38 percent of boaters agreed with current management of the river.

The following is a profile of boater respondents on the Mulberry River. The majority of respondents were male (78.5%), averaging 35 years of age and over 15 years of education, with a fairly wide distribution of income levels, although the average range for household income was $30,000 up to $40,000 per year. Respondents lived, on average, 155 miles from the river and over 45 percent worked in professional or administrative occupations, while 23.8 percent worked in "blue collar" operations and 21.5 percent were employed in sales or clerical positions.
APPENDIX IX

WILD AND SCENIC RIVERS ACT
WILD AND SCENIC RIVERS ACT

1 An Act
To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that

SEC. 1. (a) This Act may be cited as the "Wild and Scenic Rivers Act".

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

SEC. 2 (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system... Upon receipt of an application under clause (ii) of this subsection, the Secretary shall notify the Federal Energy Regulatory Commission and publish such application in the Federal Register. Each river designated under clause (ii) shall be administered by the State or political subdivision thereof without expense to the United States other than for administration and management of federally owned lands. For purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation Act of 1965 or any other provision of law shall not be treated as an expense to the United States. Nothing in this subsection shall be construed to provide for the transfer to, or administration by, a State or local authority of any federally owned lands which are within the boundaries of any river included within the system under clause (ii).

1 The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) consists of Public Law 90-542 (October 2, 1968) as amended. P.L. 99-590 (October 30, 1986) was the last Act that added generic amendments to the Act. Additional footnotes can be found following the text of the Act. (Provisions of the Wild and Scenic Rivers Act that are applicable only to specific rivers have been deleted from this version of the Act in the interest of brevity. The Federal Power Commission is now the Federal Energy Regulatory Commission).
b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, administered as one of the following:

(1) Wild river areas - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

SEC. 3 (A) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(Designation language for individual W&S rivers)(116 listed)

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection (a) of this section shall, within one year from the date of designation of such component under subsection (a) (except where a different date is provided in subsection (a)) establish detailed boundaries therefore; which boundaries shall include an average of not more than 320 acres of land per miles measured from the ordinary high water mark on both sides of the river; determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments. Notice of the availability of the boundaries and classification, and of subsequent boundary amendments shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

(c) Maps of all boundaries and descriptions of the classifications of the designated river segments, and subsequent boundary amendments to such boundaries, shall be available for public inspection in the offices of the administering agency in the District of Columbia and in locations convenient to the designated river.

(d) (1) For rivers designated on or after January 1, 1986, the Federal agency charged with the administration of each component on the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for each such segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands. The plan shall be prepared, after consultation with State and local governments and the interested public within three full fiscal years after the date of designation. Notice of the completion and availability of such plans shall be published in the Federal Register.

(2) For rivers designated before January 1, 1986, all boundaries, classifications, and plans shall be reviewed for conformity within the requirements of this subsection within 10 years through regular agency planning processes.

SEC. 4 (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture, or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of such river or section thereof under this Act. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers (i) with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and
scenic rivers system, and (ii) which possess the greatest proportion of private lands within their areas. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary land and interests in land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of a State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date of which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.

(d) The boundaries of any river proposed in section 5(a) of this Act for potential addition to the National Wild and Scenic Rivers System shall generally comprise that area measured within one-quarter mile from the ordinary highwater mark on each side of the river. In the case of any designated river, prior to publication of boundaries pursuant to section 3(b) of this Act, the boundaries also shall comprise the same area. This subsection shall not be construed to limit the possible scope of the study report to address areas which may lie more than one-quarter mile from the ordinary high water mark on each side of the river.

SEC. 5. (a) The following rivers are hereby designated for potential addition to the national wild and scenic river system:

*(designation language for individual W&S study rivers)*

(b)(4) For the purposes of conducting the studies of rivers named in subsection (a) there are authorized to be appropriated such sums as necessary...

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

(d)(1) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and
investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

(2) The Congress finds that the Secretary of the Interior, in preparing the Nationwide Rivers Inventory as a specific study for possible additions to the National Wild and Scenic Rivers System, identified the Upper Klamath River from below the John Boyle Dam to the Oregon-California State line. The Secretary, acting through the Bureau of Land Management, is authorized under this subsection to complete a study of the eligibility of such segment for potential addition to the National Wild and Scenic Rivers System. Such study shall be completed, and a report containing the results of the study shall be submitted to Congress by April 1, 1990. Nothing in this paragraph shall affect the authority or responsibilities of any other Federal agency with respect to activities or action on this segment and its immediate environment.

SEC. 6. (a) (1) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation or by exchange in accordance with subsection (d) of this section. Lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

(2) When a tract of land lies partially within and partially outside the boundaries of a component of the National Wild and Scenic System, the appropriate Secretary may, with the consent of the land owners for the portion outside of the boundaries, acquire the entire tract. The land or interest therein so acquired outside the boundaries shall not be counted against the average one-hundred-acre-per-mile fee title limitation of subsection (a)(1). The lands or interests therein outside such boundaries, shall be disposed of, consistent with existing authorities of law, by sale, lease, or exchange.

(b) If 50 per centum or more of the entire acreage outside the ordinary high water mark on both sides of the river within a federally administered wild, scenic or recreational river area is owned in fee title by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection, the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefore, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or the Secretary as the circumstances require.
(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate Secretary jurisdiction over such lands for administration in accordance with the provision of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of land and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g)(1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years or, in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date retained by the owner.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term "improved property", as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, (except where a different date is specifically provided by law with respect to any particular river), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of non-commercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

SEC. 7. (a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.) on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the National Wild and Scenic Rivers System. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty day in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would effect the component and the values to be protected by it under this Act.

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water
resources project that would have a direct and adverse effect on the values for which such river might be
designated, as determined by the Secretary charged responsible for its study or approval—

(i) during the ten-year period following enactment of this Act or for a three complete fiscal year
period following any Act of Congress designating any river for potential addition to the national wild
and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the
Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on
the basis of study, determine that such river should not be included in the national wild and scenic
river system and notify the Committees on Interior and Insular Affairs of the United States Congress,
in writing, including a copy of the study upon which the determination was made, at least one hundred
and eighty days while Congress is in session prior to publishing notice to that effect in the Federal
Register: Provided, That if any Act designating any river or rivers for potential addition to the national
wild and scenic river system provides a period for the study or studies which exceeds such three
complete fiscal year period the period provided for in such Act shall be substituted for the three
complete fiscal year period in the provisions of this clause (i); and

(ii) during such interim period from the date a report is due and the time a report is actually
submitted to Congress; and

(iii) during such additional period thereafter as, in the case of any river the report for which is
submitted to the President and the Congress for inclusion in the national wild and scenic rivers system,
is necessary for congressional consideration thereof or, in the case of any river recommended to the
Secretary of the Interior under section 2(a)(ii) of this Act, is necessary for the Secretary’s consideration
thereof, which additional period, however, shall not exceed three years in the first case and one year
in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, develop-
ments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto
which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the
potential wild, scenic or recreational river area on the date of designation of a river for study as provided by
section 5 of this Act. No department or agency of the United States shall, during the periods hereinbefore
specified, recommend authorization of any water resources project on any such river or request appropri-
tions to begin construction of any such project, whether heretofore or hereafter authorized, without advising
the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in
writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting
to the Congress in writing at the time it makes its recommendation or request in what respect construction
of such project would be in conflict with the purposes of this Act and would affect the component and the
values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of
this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of
Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress
and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall
likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or
resumed before they are commenced or resumed.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under

SEC. 8. (a) All public lands within the authorized boundaries of any component of the national wild and
scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion
in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the
United States. This subsection shall not be construed to limit the authorities granted in section 6(d) or 14A
of this Act.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any
river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other
disposition under the public land laws of the United States for the periods specified in section 7, subsection
(b), of this Act....
SEC. 9. (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that—

(i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;

(ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of national forest lands, by the Secretary of Agriculture; and

(iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the components in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system....

SEC. 10. (a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife refuge system, as the case may be, is administered, and in the case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation
purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forest in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or County-owned lands.

SEC. 11. (a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas.

(b) (1) The Secretary of the Interior, the Secretary of Agriculture, or the head of any Federal agency, shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice, and cooperation may be through written agreements or otherwise. This authority applies within or outside a federally administered area and applies to rivers which are components of the Wild and Scenic Rivers System and to other rivers. Any agreement under this section may include provisions for limited financial or other assistance to encourage participation in the acquisition, protection, and management of river resources.

(2) Whenever appropriate in furtherance of this Act, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to utilize the following:


(B) For activities on all other lands, section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of statewide comprehensive outdoor recreation plans).

(3) For purposes of this subsection, the appropriate Secretary or the head of any Federal agency may utilize and make available Federal facilities, equipment, tools, and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal agency deem necessary or desirable.

(4) No permit or other authorization provided for under provision of any other Federal law shall be conditioned on the existence of any agreement provided for in this section.

SEC. 12 (a) The Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion in accordance with section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, following the date of enactment of this sentence, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate, enter into written cooperative agreements with the appropriate State or local official for the planning, administration, and management of Federal lands which are within the boundaries of any rivers which approval has been granted under section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.
SEC. 13 (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.

(b) The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

(g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and right-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: Provided, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

SEC. 14 (a) The claim and allowance of the value of an easement as a charitable contribution under section 170 and title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate of its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

SEC. 14A. (a) Where appropriate in the discretion of the Secretary, he may lease federally owned land (or any interest therein) which is within the boundaries of any component of the National Wild and Scenic Rivers system and which has been acquired by the Secretary under this Act. Such lease shall be subject to such restrictive covenants as may be necessary to carry out the purposes of this Act.

(b) Any land to be leased by the Secretary under this section shall be offered first for such lease to the person who owned such land immediately before its acquisition by the United States.

SEC. 15... (applies to components of NW & S Rivers Alaska)

SEC. 16. As used in this Act, the term—
(a) "River" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, creeks, runs, kills, rills, and small lakes.

(b) "Free-flowing," as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.
The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: Provided, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

(c) "Scenic easement" means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner’s consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for the purposes of this Act. Such an acquisition shall not constitute fee title ownership for purposes of section 6(b).

SEC. 17. (Appropriation language for specific rivers)

Selected Laws Amending or Related to the Wild and Scenic Rivers Act:

92-560
93-621
94-199
94-486
95-87
96-312
96-487
99-590
99-663
100-33
100-150
100-412
100-552
100-534
100-557
100-605
100-633
100-677
101-175
101-612
101-628