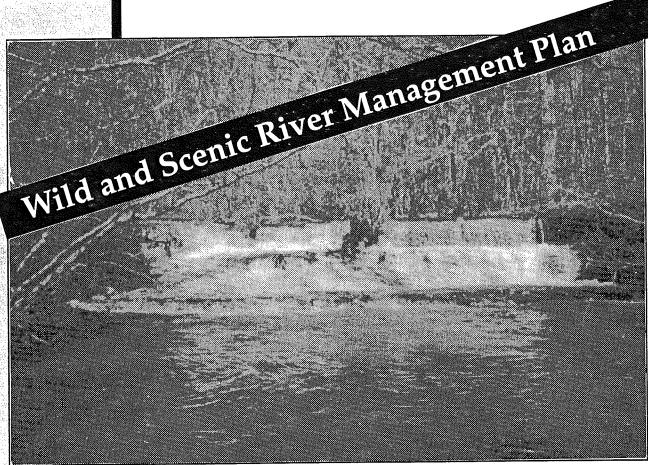
Buffalo River



U.S. Forest Service Photo

USDA Forest Service
Ozark-St. Francis National Forests



October 1996



# COMPREHENSIVE MANAGEMENT PLAN BUFFALO WILD AND SCENIC RIVER

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# **BUFFALO WILD AND SCENIC RIVER**

# COMPREHENSIVE MANAGEMENT PLAN

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# COMPREHENSIVE MANAGEMENT PLAN FOR BUFFALO WILD AND SCENIC RIVER

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#### PURPOSE OF THE PLAN

#### INTRODUCTION

The purpose of this comprehensive management plan is to protect the Outstandingly Remarkable Values of the river as well as its free-flowing condition and water quality. Current Best Management Practices stipulated by the Forest Land and Resources Management Plan provide both protection and monitoring for the stream's watershed and encompassing areas that may affect river segments.

The Buffalo Wild and Scenic River Management Plan provides direction for managing the land within the boundaries of the designated corridor that fall within National Forest lands. The Forest Service has not and will not establish regulatory restrictions for private land. This plan does not change, modify or affect any current federal, state or local laws or regulations in force prior to the Wild and Scenic River designation. This plan was prepared by the U.S.D.A. - Forest Service for the portion of the Buffalo River within the Ozark National Forest.

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

The Buffalo Wild and Scenic River flows through the Upper Buffalo Wilderness and is the primary natural feature of the Wilderness, resulting in the need to coordinate management of the Wilderness and the designated Wild and Scenic River. Where the two designations overlap, the more restrictive regulations will apply.

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.

#### 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.

## 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 the Wild & Scenic 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 the Wild & Scenic 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, and 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 plans'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.

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.

#### NATIONAL FOREST LANDS

#### 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 Scenic and Wilderness.
- 2.) Foster the inherent biological richness of riparian and aquatic ecosystems and the biotic significance of riparian corridors as "connectors" between fragmented habitats.
- 3.) 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.
- 4.) Continue to work with the National Park Service in monitoring and protecting the ecological values (including water quality) of the Buffalo National River.
- 5.) Forward "Leave No Trace" principles and backcountry ethics internally and externally.
- 6.) Provide opportunities for backcountry and wilderness-dependent recreational experiences.

This plan will be a guide for management of the Buffalo Wild and Scenic River, as designated by Section 3 (a) of the Wild and Scenic River Act (16 U.S.C. 1273 (A)(II)) as amended by the One Hundred Second Congress on April 22, 1992.

Environmental Assessments and Decision Notices will be prepared as projects are planned, per the National Environmental Policy Act (NEPA).

#### **OUTSTANDINGLY REMARKABLE VALUES**

Two Outstandingly Remarkable Values were identified for the Buffalo River [Wild and Scenic River Study Report and Final Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest 1991].

"Wilderness. The segment within Upper Buffalo Wilderness has a combination of values perceived as representing vestiges of primitive America as confirmed by wilderness designation in 1975. This wilderness is the only wilderness within the Ozark National Forest which is designated as a Class I Air Quality Area.

**Scenic**. The surrounding terrain is mostly characterized by highly varied and strongly dissected terrain with uneven, sharp ridges and/or cliffs with significant vertical relief, large unusual rock outcrops or formations, and slopes greater than 35%. The stream is clear and exhibits rapids and still pools with reflecting qualities."

#### **EXISTING CONDITIONS**

#### LOCATION AND ACCESS

The Wild and Scenic segments of the Buffalo River are located in northwestern Arkansas, Newton County, on the Buffalo Ranger District, Ozark National Forest. Nearby unincorporated communities are Boxley, Mossville, Edwards Junction, Fallsville and Red Star. The Buffalo River flows generally west to east for 150 miles, beginning in the Boston Mountains and crossing the Salem and Springfield Plateaus, before its confluence with the White River.

The headwaters of the Buffalo River fall entirely within National Forest lands. Beginning at a point approximately 16 miles from its headwaters, the Buffalo River was congressionally designated as the Buffalo National River. This 95,730 acre unit of the National Park System was established in 1972 "...for the purposes of conserving and interpreting an area containing unique scenic and scientific features, and preserving as a free flowing stream an important segment of the Buffalo River in Arkansas for the benefit and enjoyment of present and future generations...".

Primary access to the Wild and Scenic portion of the river is from Dixon Ridge Road which is just east of Fallsville off of Scenic By-Way 21. This road crosses the Buffalo at a natural rock ford.

#### CORRIDOR BOUNDARIES AND CLASSIFICATION

The river corridor is described using a metes and bounds system of survey across National Forest land tying to known monumented corners. There is no private land within the corridor. It allows for a corridor of about one quarter mile on each side of the river. This corridor encompasses areas seen from the river by varying corridor width on Federal lands and staying within the 320 arce/mile limit guideline. [Ozark-St. Francis Forest Land and Resources Management Plan, Amendment #7].

The total acres of Wild and Scenic River corridors that could be included in Wilderness areas is 6580 acres. No Wilderness designations will be changed. Forest acreage in Wilderness will remain unaffected.

The Buffalo River was divided into two segments based on the Congressional Classifications. This reflects the types and levels of existing development, access, recreation opportunity and the potential for classification as a unit separate from adjacent segments. The Arkansas Wild and Scenic Rivers Act of 1992 states in SEC. 2. WILD, SCENIC, AND RECREATIONAL DESIGNATIONS:

BUFFALO RIVER, ARKANSAS.--The 15.8 mile segment from its origin in section 22, township 14 north, range 23 west, to the Ozark National Forest boundary, to be administered by the Secretary of Agriculture in the following classes:

- (A) The 6.4 mile segment from its origin in section 22, township 14 north, range 24 west, to the western boundary of the Upper Buffalo Wilderness, as a scenic river.
- (B) The 9.4 mile segment from the western boundary of the Upper Buffalo Wilderness to the Ozark National Forest boundary, as a wild river.

#### SOCIAL AND ECONOMIC CONDITIONS OF THE AREA

The Ozark and Ouachita Highlands include a wealth of public land providing both wilderness, backcountry, developed outdoor recreational opportunities. Within a 150 mile radius of the Buffalo National River are 4.2 million acres of National Forest lands.

The Ozark, Ouachita and Mark Twain National Forests contain 19 designated wilderness areas totaling 194,917 acres. The Buffalo National River has 36,000 acres of designated wilderness. An additional 9,874 acres of wilderness are designated in two National Wildlife Refuges (Mingo in Missouri and Big Lake in Arkansas) within the region.

Long distance hiking opportunities are provided by the Ozark Highlands Trail, which crosses the Ozark National Forest and extends to the Buffalo National River. Nine streams on the Ozark, Ouachita, and Mark Twain National Forests are in the National Wild & Scenic Rivers System. Ozark National Scenic Riverways, a unit of the National Park System in southern Missouri, includes 134 miles of Current and Jacks Fork Rivers. Five U.S. Army Corps of Engineers' reservoirs provide ample boating, fishing, and camping opportunities, within a two hour drive of the Buffalo River.

Five urban centers are within a three hour drive of this area: Springfield, MO., Tulsa, OK., Fayetteville-Springdale, AR., Memphis, TN., and Little Rock, AR. The area within a 250 mile radius of the river has a population of approximately seven million people.

#### 1600 INFORMATION SERVICES

Near Dixon Ford, the Forest Service has installed a bulletin board to provice area regulations, safety tips, and emergency services contacts. The Ozark Interpretive Association and area outlets offer maps [Buffalo National River - West half, Trails Illustrated] of this portion of the River. There is also a Forest Service map for the Upper Buffalo Wilderness, which is good quality, but does not have the boundary changes made with the 1984 Wilderness additions. The 1993 corrected quadrangles of the area do not depict the current Wilderness boundaries or the Wild and Scenic river corridor boundaries.

#### 2100 ENVIRONMENTAL MANAGEMENT

Environmental management includes solid waste, pesticide, and hazardous materials management. There are no known existing problems.

Pesticide use was allowed in the corridor in the past, but not in recent years. Application of pesticides would follow the guidelines established in the <u>Forest Land and Resources Management Plan</u>, Amendments 4 and 5. There are standards regarding the type, frequency, and methods of application, and monitoring, and safety. Ten percent of project areas on the Forest are monitored for off-site movement of herbicides to assure water quality protection. Procedures for monitoring and reporting results are in the "<u>Herbicide Monitoring Plan for Water Quality</u>, 1993. Ozark-St. Francis National Forests."

## 2120 AIR QUALITY

The Upper Buffalo Wilderness is classified as a Class I area by the 1977 Clean Air Act. Northern Arkansas air quality is better than National Ambient Air Quality Standards (NAAQS). No major industrial developments or large cities are near to the southwest, west or northwest to allow prevailing winds to transport pollutants into the region. Occasionally, southwest winds may transport pollutants from the southwestern United States. Also, northeast winds may prevail long enough to transport pollutants from the northeastern United States.

Because of this Class I Airshed status the Buffalo has on going air quality monitoring programs. The three Air Quality Related Values identified for this area are: water quality, visibility, and vegetation diversity.

#### 2200 RANGE MANAGEMENT

Grazing is permitted in two woodland range allotments which include portions of the river corridor. Currently, there are 64 head of cattle under two Forest Service permits with a total of 320 AUM's (Animal Unit Month of forage = the amount of forage that a 1,000 pound cow will eat in a month) consumed in one five month grazing season. These are woodland allotments that range from approximately 6400 to 10,000 acres in size. Neither allotment is fenced to prevent cattle from entering the river or the corridor.

#### 2300 RECREATION MANAGEMENT

Recreation Opportunity Spectrum (ROS) & Limits Of Acceptable Change (LAC)

Two well-accepted concepts of recreation management were incorporated into the planning process. The Recreation Opportunity Spectrum (ROS) provides a means for classifying areas in relation to the types of recreation opportunity experiences that are or can be provided and the settings in which they occur.

The Limits of Acceptable Change (LAC) concept was used to develop strategies for managing use to maintain the desired ROS. The LAC concept does not focus attention on limiting use to an estimated capacity, but it can provide an estimate of the desired level of use. River managers may have several possible solutions to overuse problems including encouraging users to adjust their habits.

Allocating or limiting use may be necessary if resource and social conditions deteriorate. The planning process was designed to be flexible and respond to changes in river conditions without the need for major revisions. The process emphasizes objectives and establishes a monitoring system that will trigger implementation of management options on the Buffalo Wild and Scenic River to protect its unique qualities.

#### **CURRENT RECREATION USE**

Most recreational use along this portion of the river occurs within Upper Buffalo Wilderness. Camping, hiking, fishing and hunting are the most common uses. The number of days per year when adequate flows for floating exist range from 0 to 10 but are estimated to average 6-7 days per year. Experienced whitewater boaters float the Wild segment immediately following rain storms. River difficulty is rated Class III-IV with an average gradient drop of 38 feet per mile.

Within the Scenic segment, primary recreational use is during hunting seasons. Off-road vehicles like ATVs and 4-wheel drive trucks frequent the area. There is also some horseback and mountain bike riding. Both of which are becoming more popular upon discovery of this backcountry portion of the Buffalo River.

The only available visitor use data comes from a two part registration card. One part is filled out at the start of the trip and the other part is filled out after completion of the trip. The following data was derived from these cards and was selected as key indicators for social parameters using the LAC process.

## \*WILDERNESS VISITOR USE DATA [from registration cards]

Upper Buffalo	1992	1993	1994
Average Overall Experience [1-10 With 10 As Best]	8.4	8.5	8.8
Total # Of Visitors	856	1054	1292
Average Group Size	2.7	2.6	3.35
Average # Of Groups Encountered	1.7	1.2	1.5

\* 1995 data has not been analyzed [75% cut in Forest's Wilderness Budget for fiscal year 1996]. Based on a 1990 study done on Caney Creek Wilderness, roughly 45% of wilderness visitors do not register. For example, in 1994, there were 1,294 visitors. Therefore double this number (1292) X (2) = 2584 visitors. This reflects use by hikers, kayakers, hunters and fisherman who do not register or get counted formally. The data do not reveal clear trends since there are still significant data gaps. The registration boxes may be empty or vandalized during a prime use season, or registration boxes may not be optimally placed. A new portal location was added (Boen Gulf access) in 1993. While not a new access, a registration portal and bulletin board were installed in 1993. It was also indicated on the Trails Illustrated Map in 1993. The registration box below Dixon Ford is primarily used by hikers entering this portion of the river corridor. Based on card returns few whitewater boaters use this registration process.

In 1992, the Upper Buffalo Wilderness campsites were inventoried with the following findings: [1 = lowest impact; 5 = greatest impact]. There were 41 Class 1 sites which were recorded and then obliterated, but not inventoried; 19 were inventoried for a total of 60 campsites. [see campsite condition classifications in LAC section]

In 1994, these same campsites were re-inventoried using a rapid inventory method developed by Cole (1989). Four midwestern wilderness areas in Arkansas, Missouri, and Illinois were inventoried for comparison. The average campsite area is 705 sq.ft. with a barren core of 88 sq.ft. The average campsite vegetation loss is 28%. The average increase of exposed mineral soil is 10%. Both of these reflect the lighter use as compared to Caney Creek. Each campsite has on average two damaged trees, one tree with exposed roots, one fire scar, and two social trails.

#### **OFF HIGHWAY VEHICLES**

Off Highway Vehicles (OHVs), ATVs, and four wheelers, are permitted to use open Forest Service roads within the river corridor. These vehicles are prohibited from being driven on closed Forest Service roads or within the wilderness boundaries. The Forest Land Resources Management Plan (page 4-14) states, "Exclude vehicles from streams except at designated crossings". This policy would include passenger cars, four wheel drive trucks, motorcycles, as well as OHVs. State law prohibits ATVs on County roads and State Highways.

#### **TRAILS**

There are no designated trails within the corridor.

## 2360 HERITAGE RESOURCES

The river corridor is considered a high probability area for both historic and prehistoric sites. More than 18 prehistoric and historic sites have been recorded in the Upper Buffalo Wilderness with at least 7 of those documented within the river corridor. Most of the sites are either prehistoric bluff shelters or remnants of old house-places (rock walls, linear rock piles, chimney falls,).

#### 2380 SCENERY MANAGEMENT

## **Visual Quality Objectives**

The Wild and Scenic Rivers Act requires that the corridor sufficiently protect the Outstandingly Remarkable Values which qualified the stream to be included in the Wild and Scenic River System. Scenic values of the Buffalo are considered to be Outstandingly Remarkable. The surrounding terrain within the Wild segment of the Buffalo is highly varied and strongly dissected terrain with uneven, sharp ridges and/or cliffs with significant vertical relief, large unusual rock outcrops or formations, and slopes greater than 35%. The stream is clear and exhibits distinctive waterfalls, rapids, cascades, and still pools with reflecting qualities.

The Buffalo River is regionally and nationally known for its scenery. There are few sights and sounds of human activity in this portion of the River. Visitors enjoy a wide variety of landscape zones as they travel along the river. Within the WILD portion of the corridor, there are remnant clearings associated with old house places. Riparian vegetation is intact with some evidence of beavers, hogs, historically-used campsites and pioneer roads.

There are several hardwood regeneration areas (clear-cuts) within the SCENIC corridor. These stands were harvested in 1987 under a Visual Quality Objective [VQO] of maximum modification. It should be noted that after the sale was in progress, both district staff and the Forest Supervisor recommended modification so as to retain vegetative buffers along the stream itself. This was to protect resource values which were considered to be the limiting factor, not visual quality.

#### 2400 VEGETATION MANAGEMENT

Vegetation within the corridor ranges from mature upland hardwoods to old fields growing up in sumac, sassafras, cedars and blackberries among others. Typical hardwood species include red and white oaks, shagbark, mockernut and bitternut hickories, and black gum. Better site conditions in riparian areas allow for the growth of other species such as beech, basswood, sweetgum, river birch, sycamore, walnut, and hophornbeam. There is also an above average amount of cucumber magnolia. Such areas may exhibit lush understory characteristics with species such as viburnums, witch hazel, spice bush, black cohosh, paw paw, and with numerous multi-stemmed umbrella magnolia. It may also include herbaceous species such as alumroot, goldenseal, bloodroot and ginger.

Other sections may display less diversity mainly due to site limiting factors such as site aspect or soil quality and moisture. Here, white and red oak predominate with hickories intermixed.

Typically the understory will be comprised of such species as dogwood and red maple and herbaceous species such as huckleberry, greenbriar, and Virginia creeper, and scattered native grasses and sedges such as poverty grass, little and big bluestem and panicums. Several introduced species occur: fescue, orchard grass and multiflora rose--mainly within the old fields in the upper reaches of the corridor.

There are several shortleaf pine stands within the corridor, a number of which are historic old fields planted in pines 30-40 years ago. However, shortleaf pine is capable of maintaining dominance on poor sites and seeding into and colonizing abandoned fields that seem too far away for seed travel. If all the pine is of a single age, it was probably planted. If a range of pine ages and other shade intolerants (especially sweetgum) mixed in, natural old field invasion is probably occurring. Once pine either maintains crown dominance or perishes (intolerant) on these type areas, the stand structure of naturally seeded and planted stands have a similar "look".

Most of the corridor shows evidence of historic logging activity. Trees, for the most part, represent second and third growth forests. In the more canyon-like valleys it's possible to find large diameter trees such as beech, black gum, ash, cherry, walnut, and both northern red and white oaks. Thirty inch diameter walnuts, cottonwoods, basswood, and beech are not uncommon in tributary canyons leading into the corridor.

#### 2500 WATERSHED AND SOILS

The Buffalo River watershed covers 1,323 square miles (846,720 acres). From its headwaters in the Boston Mountains, the Buffalo flows eastward for 150 miles to its confluence with the White River. The U.S. Forest Service administers 17 miles of the river from the headwaters to the National River boundary. Within this area the watershed encompasses approximately 65 square miles. National Forest lands constitute approximately 27% (226,800 acres) of the total Buffalo River watershed.

Designated uses of the Upper Buffalo River as per the Arkansas Department of Pollution Control and Ecology are: (1) Extraordinary Resource Waters, (2) Natural and Scenic Waterways.

Extraordinary Resource Waters - This beneficial use is a combination of the chemical, physical and biological characteristics of a waterbody and its watershed which is characterized by the scenic beauty, aesthetics, scientific values, broad scope recreation potential and intangible social values.

Natural and Scenic Waterways - This beneficial use identifies segments which have been legislatively adopted into a state or federal system.

In 1994, Arkansas passed legislation to prohibit in-stream gravel mining from the State's Extraordinary Resource Waters. The State legislation and the federal Clean Water Act's 404 permit process cover stream channels up to the "ordinary high water mark". Beyond that, the Forest Service has jurisdiction on public National Forest lands. The Forest Service has no jurisdiction on private lands.

Since January, 1990, district personnel have collected water quality data at two different sample sites on the Buffalo River. The objective of the Upper Buffalo Wilderness Water Quality Monitoring Plan is to identify changes in the water quality of the Buffalo River over time.

Natural water quality and water flow are governed by three main factors:

1.) Climate (mainly precipitation and evaporation). The Ozark area has four distinct seasons with a temperature range from 10-15 degrees below zero to over 100 degrees F.

Winters have occasional cold periods of brief duration with daily temperatures near zero in January and February. Annual precipitation measures around 50 inches at Buffalo Tower, but annual precipitation amounts range considerably from this average. Snowfall occurs in the Upper Buffalo Wilderness, covering the ground for a few days to occasional extended periods. Showers can be locally heavy and occasionally have produced 5 to 10 inches of rain in a few hours. Such storms will cause flooding in the Upper Buffalo River and its tributaries. These same streams may be dry in the late summer and fall some years.

- 2.) Vegetation (seasonally variable leaf on/leaf off). Approximatedly 70% of the physiographic area of the Boston Mountains is forested [U.S. Geological Survey Report 95-4042]. Streams in the Boston Mountains have some of the lowest nutrient concentrations of Arkansas streams [U.S.G.S. Water-Resources Investigations Report 94-4022].
- 3.) Geology (type of rock and soil). Some of the least mineralized streams in the Ozark Plateaus Study Unit are in the Boston Mountains; dissolved-solids concentrations in water from streams commonly are one-fifth to one-half of the dissolved-solids concentrations in water from streams in other areas. Water in these streams generally is a calcium bicarbonate type and commonly is more acidic and has lowering buffering capactiy (lower alkalinity) than water in other streams.

#### Soils

The Buffalo River corridor is within the Boston Mountain and Springfield Plateau and contains a variety of soils originating from interbedded sandstone, shale, siltstone and some limestone and dolomite. The floodplain soils range from loams to cobble. Side slopes are steep to very steep with generally shallow soils on the slopes. The slopes are broken by resistant sandstone benches that serve as collection points for soil being moved down-slope. Soils on the benches are deeper than on the slopes. Ridge tops within the corridors contain well-drained, shallow soils that are loamy, gravelly or stoney.

District files depict several dominant soil types within the river corridor. Some 1972 acres of Nella-Steprock Complex 40-60%, 483 acres of Nella-Enders Association 20-40%, and roughly 490 acres of Eden-Newnata Complex at 8-20% slope are present. Also present are 268 acres of Ceda-Kenn Complex 0-3%, 140 acres of Eden-Newnata Complex 20-40%, 110 Enders-Leesburg St. Loam 20-40%, and some 103 acres of Eden-Newnata Complex 20-40%. Descriptions of the soils found along the Buffalo are found in Newton and Madison County Soil Surveys.

## 2600 WILDLIFE, FISHERIES, AND RIPARIAN RESOURCES

The Forest Service, with the cooperation of 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.

A variety of animal life is found within the corridor. Mammals, such as eastern pipistrelle bats, gray squirrels, raccoons, white-tailed deer, wood rats, and black bear occur. Neotropical migrant birds, such as the ovenbird, wood thrush and red eyed vireo, are well represented along with species like the Louisiana waterthrush and parula warblers which favor riparian habitat. In the old fields where mixed herbaceous plants and shrubs are found, species such as the yellow-breasted chat, yellowthroat and summer tanager may be found.

Where fish are concerned, the Buffalo River was given "Blue Ribbon Smallmouth Bass Stream" status by the Arkansas Game and Fish Commission's 1995 Smallmouth Bass Management Plan. "Blue-Ribbon" streams are managed with special length and creel limits.

The upper reaches of the river differ in character from downstream reaches where the river widens and supports larger fishable pools. This portion of the Buffalo River is in the Boston Mountain ecoregion. However the fish community is more characteristic of the Ozark Highland Ecoregion. It supports diverse communities of indigenous or adapted species of fish and other forms of aquatic life. Fish communities are characterized by a major proportion of sediment sensitive species; a diverse, often darter-dominated community exists but with nearly equal proportions of minnows and sunfish.

## 2670 THREATENED AND ENDANGERED AND SENSITIVE SPECIES

Sensitive species (species being monitored by the State and the Ozark National Forest) which are likely to occur within the river corridor or the Upper Buffalo Wilderness:

Common Name	Scientific Name	Status
Ozark Chinquapin Yellow Mandarin Golden Seal	Castanea pumila var. ozarkensis Disporum lanuginosum Hydrastis canadensis Mimulus floridbundus	Sensitive Conservation Conservation Conservation
Monkey flower Bald Eagle	Haliaeetus leucocephalus alascanus	Threatened

The mountain lion (<u>Felis concolor</u>) is listed as federally endangered; however, the U.S. Fish and Wildlife Service considers the species to be extirpated within the state.

#### 2700 SPECIAL USES

#### **OUTFITTERS/CONCESSIONAIRES**

There are no permitted outfitters nor concessionaires currently on this portion of the Buffalo River. Some limited shuttle services for floaters may occur without the benefit of Forest Service permits.

#### **UTILITY CORRIDORS**

There are no existing utility corridors within the Wild and& Scenic River corridor.

#### 2800 MINERALS AND GEOLOGY

The geology of the Buffalo River watershed can be divided into two general categories with regard to their interaction with ground and surface water. The first category, mainly at higher elevations (in the Boston Mountains Plateau), is comprised mostly of sandstones and shale. The second category, mainly at intermediate and lower elevations (the Springfield and Salem Plateaus), is composed of sandstone, limestones and dolomites.

The headwaters of the Buffalo River lie within the eastern portion of the Boston Mountains and consist basically of two units: the plateau or uplands and the canyons or hollows. The uplands are broad and flat or gently rounded. The hollows, which separate the upland areas, are usually high-walled drainages with either very steep slopes or sheer rock walls. The area contains more sandstone bluffs than limestone bluffs. The land beside the Buffalo River is steeply sloping and rocky with occasional high adjacent limestone bluffs. There are also flat areas along the river which were cleared for pasture land and home sites.

The Scenic segment is dominantly within the Atoka Formation which is shale with subordinate amounts of sandstone and silt. Also present but with greater dominance downstream is Bloyd Shale which is composed of shale, sandstone, limestone. This is obvious at the Dixon Ford. Continuing downstream within the Wild segment Pitkin, Fayetteville, Batesville Formations which are dominantly limestone with some shale are evident. The Hale Formation which is shale, sandstone, and limy sandstone is also found. Near the northern boundary of the Upper Buffalo Wilderness, the Boone Formation which is composed of limestone and chert is represented.

## 2810 - Mining Claims (Public Domain)

There are no known mining claims staked within the designated river corridor. There are four tracts totaling 285.49 acres of public domain lands within the corridor.

#### 2820 - LEASABLE MINERALS

340 acres of National Forest land within the river corridor have active oil and gas leases.

## 2830 - OUTSTANDING & RESERVED MINERAL RIGHTS

There are five tracts of land with a total of 578 acres of subsurface ownership within the corridor.

#### 2850 - 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 policy prohibits gathering of stone in any stream channel on public 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. There are no active gravel pits on public land within the river corridor.

#### 5100 FIRE MANAGEMENT

#### WILDFIRE

Wildfires within the corridor are treated the same as those that occur within the general forest area except for the "wild" segment within the Upper Buffalo Wilderness. The Wilderness areas have a separate fire management plan which contains a decision-tree process to determine needs to contain, confine, or control for resource values and private land protection.

There have been no wildfires within the river corridor within the last five years.

#### PRESCRIBED BURNING

Currently, prescribed burning could be used only where it appropriately maintains or improves scenic or recreational values. Within Wilderness, the existing Forest Land Management Plan stipulates no use of prescribed burning. No prescribed burning has been done within the final river corridor.

#### 5300 LAW ENFORCEMENT

#### **JURISDICTION**

The Forest Service law enforcement officers have jurisdiction to enforce Federal laws, regulations and Forest Supervisor's Orders on National Forest lands. County Sheriffs and the Arkansas State Police enforce state laws and also have jurisdiction within the National Forest boundary. The Arkansas Game and Fish Commission enforces State fisheries and wildlife laws 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 state wildlife laws.

#### **COOPERATIVE AGREEMENTS**

The Ozark National Forest has a cooperative agreement with the Newton County Sheriff to patrol National Forest recreation areas under certain conditions. There has always been an informal mutual assistance agreement between the Sheriff's office, State Police, Arkansas Game and Fish Commission, the Forest Service, and the National Park Service. Officers will reciprocate for back-up and assistance.

#### FOREST SUPERVISOR'S ORDERS

The following applies only to Upper Buffalo, Hurricane Creek, Richland Creek, East Fork, Leatherwood Wilderness areas. Order no. 00-04-61 prohibits possessing or using a wagon, cart, or other mechanized vehicle [CFR 261.57 (h). Pursuant to 36 CFR, Section 261.50 (e), the following persons are exempt from this order: (1) Wheelchair users when used as a necessary medical appliance.

#### 5400 LAND OWNERSHIP PATTERNS

There is no private land within the corridor. The U.S. Forest Service administers sixteen miles of the river from the headwaters to the northern proclamation boundary for the Ozark National Forest. All lands within the corridor are in federal ownership.

#### 5460 RIGHTS-OF-WAY

There is one existing R.O.W. within the Scenic corridor [T13N, R23W, SW of the NE of the NW of Sec 5.]. The length of the easement is less than a tenth of a mile and is about three tenths of a acre.

#### 6700 HEALTH AND SAFETY

In the fall of 1995, the Forest developed a Search and Rescue Plan to facilitate rescues in remote areas. [see Appendix H]

Based on recommendations from paddlers the following information is posted on the bulletin board downstream from Dixon ford:

## "DANGER - EXPERIENCED BOATERS ONLY - NO RESCUE AVAILABLE.

At a minimum there should be two boats (three is better), and two to three people with full floatation for the boats, PFDs, and helmets recommended. Extra paddles, rescue ropes, Z-drag and first aid kit recommended for canoes and kayaks.

# RIVER DIFFICULTY - CLASS III - IV WITH AN AVERAGE GRADIENT DROP OF 38 FEET PER MILE!!!

Distance is 15 miles (This is a very long whitewater run, be prepared to rescue yourself) it will take at least 8 hours. In order to be navigable there must be 8 inches of air space or less at the Ponca Bridge. When flows exceed one foot or more above the bridge at Ponca, DIFFICULTY RISES DRA-MATICALLY!!!"

#### 7700 TRANSPORTATION

#### **EXISTING ROADS**

The Scenic segment of Buffalo Creek is traversed by a number and variety of roads. Forest Development Road 1463, Dixon Ridge, has a low-water ford crossing on the Main Prong of Big Buffalo Creek. North of the ford this becomes Forest Development Road 1410. Forest Development Road 92269C weaves in and out of the creek. There are a variety of lesser used Forest Development roads which provide access to the creek, dispersed camps, other public lands, as well as to private land. The Wild portion of the corridor falls within the Upper Buffalo Wilderness which is restricted to non-motorized, non-mechanized access. The use of wheelchairs by people with disabilities is an allowable exception but not very practical in this particular terrain.

Within the Scenic corridor of the Buffalo, there are 17.2 miles of road. Of those miles, seven miles have been closed by man-made barricades, leaving 10.2 miles of open road.

The major access road to the area is FDR 1463, Dixon Ridge Road. The 1463 road is a maintenance level 3, traffic service level C road (mixed traffic), from state Highway 16 until it reaches Buffalo Creek where it becomes FDR 1410. Kapark Road, FDR 1410, is a maintenance level 2, traffic service level D, from 1463 to county road NES. Maintenance level 3 roads are maintained for passenger cars. All other roads in the area have been assigned maintenance level 1 or 2. Maintenance level 1 indicates roads that are currently not being used. Maintenance level 2 roads are maintained for high clearance vehicles.

The following open roads are maintenance level 2, traffic service level D: 92266F, 92269C, 92269D, 92283B, 92283E, 92252A.

This area has not been inventoried for old roadbeds. Based on historical data, there are another 20% not mapped or in inventory systems.

Current Forest Supervisor orders state that it is prohibited to operate any motorized vehicle on a closed and/or rehabilitated temporary travelway or operating a motorized vehicle in an area posted as closed or closed by an earthen mound, gate or other object which a reasonable and prudent person would consider closed to motorized traffic. 36 CFR 261.56

#### DESIRED FUTURE CONDITIONS

#### INTRODUCTION

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

#### PROGRAM AREAS

#### 1600 INFORMATION SERVICES

Signs will be restricted to those which are necessary for safety, effective law enforcement, direction, and interpretation. These signs will be located outside the Wilderness where possible. Information regarding the course of the river (a river map), safety, backcountry use ethics, and National Forest regulations will be available from sources like the Ozark Interpretive Association and other area outlets. Emphasized will be placed on providing information to visitors before they enter the area.

#### 2100 ENVIRONMENTAL MANAGEMENT

Environmental waste and hazardous materials do not enter the Buffalo. Problems are corrected as soon as possible contacting appropriate agencies and/or personnel. [Each district has a hazardous waste coordinator.]

## 2120 Air Quality Related Values [AQRV] For The Upper Buffalo Wilderness

## Scenery (Visual)

Prevent any future visibility impairment resulting from manmade air pollution. Remedy visibility impairments from manmade air pollution.

#### Floral Diversity

Currently, management philosophy and direction is for old growth forest conditions. Species richness and community composition for the vegetation will be maintained as defined by the baseline survey 1990-1991, within the parameters of expected normal successional trends. A trend analysis showing unexplained species loss will trigger on-site air pollution monitoring.

#### Water Quality

Species richness, composition and biomass for fisheries will be maintained as defined by the Boston Mountain Ecoregion definition and site specific information as it becomes available. This is in conformance with the State of Arkansas Department of Pollution Control and Ecology Regulation No.2; Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas.

## Visibility and Regional Haze

Visibility and regional haze conditions within Class I areas may be impacted as a result of increases in prescribed burning smoke. "Significant progress" toward the National Visibility Goal should therefore consider some level of smoke induced haze as a natural component of baseline visibility. It is recommended that the State, EPA and Federal Land Managers negotiate an acceptable level of prescribed fire for ecosystem management purposes.

## 2200 RANGE MANAGEMENT

Within the corridor no grazing of domestic livestock takes place. Woodland allotments are phased out or require permittees to keep stock out of the corridor. Dixon and Kapark allotments have been phased out if they no longer meet NFMA and Forest Plan guidelines.

#### 2300 RECREATION

The Scenic segment is changed to semi-primitive non-motorized as its ROS classification. With Forest Plan revision this area is evaluated for this potential opportunity to enhance river values. It would be the only scenic segment classified as non-motorized. There is no private land involved. The Scenic segment of the Buffalo River corridor is managed for a variety of recreational activities including hunting, hiking, biking and horseback riding. The parking area below the ford remains undeveloped. There is no driving into the riverbed except at Dixon Ford where there is a solid rock crossing.

The Wild Segment of the River corridor is managed for experiential qualities such as physical challenge, and spiritual values like opportunities for solitude. Watercraft passage remains a challenge and is limited by natural conditions. Only skilled, experienced paddlers float this stretch of the river. Most recreational users access the area by foot. Use levels remain relatively low and opportunities to experience solitude are common.

#### 2360 HERITAGE RESOURCES

The Buffalo River has been surveyed for heritage resources, which have been evaluated and, if determined to be significant, are preserved. Opportunities are provided to visitors to learn more about these past uses of the area. Prehistoric and historic features like old rock walls and rock chimney-falls are still present showing evidence of past living patterns. Information is disseminated off-site to visitors emphasizing the importance of preserving these artifacts and features for future generations.

Plants, animals, and culturally important areas are located within the river corridor, providing an element of cultural continuity and cultural importance to local communities and contributing to their sense of pride and ownership of the river.

#### 2380 SCENERY MANAGEMENT

Current management direction is referred to as Visual Quality Objectives [VQO's], but the Forest Service is implementing scenery management in a new Handbook entitled Landscape Aesthetics. VQOs have moved into Landscape Character Goals and Scenic Integrity levels.

Maintaining the Landscape Character of the River Corridor is an important part of maintaining the quality of the recreation experiences along the corridor.

The Wild segment of the Buffalo runs through the heart of the Upper Buffalo Wilderness. Nature is allowed to run her course (natural succession and natural forces of deterioration). Diversity of vegetative species and age classes is important. A percentage of the area needs to be managed for large diameter tree character. The historic character of the river (rock fences, openings and grass areas) should be considered part of the vegetative diversity and considered as adding variety along the river corridor. This is an important part of the cultural character of the river corridor.

The Buffalo River corridor is well known for its beautiful blue-green water and riverine scenery. Visitors enjoy a wide variety of landscapes as they travel along the river. There are few sights and sounds of human activity.

In general, naturally eroded areas are left untreated, allowing visitors to experience dynamics of free-flowing rivers. Natural riverine processes proceed unhindered by human manipulation. Eroded areas may need to be stabilized especially if accelerated by disturbances upstream or downstream.

#### 2400 VEGETATION MANAGEMENT

Vegetation character and structure continue to provide a diverse component of the ecosystem. Species composition provides diversity reflective of the different community types within the corridor. For example, riparian vegetation, for the most part, should reflect a multi-layered canopy with a mature overstory and multi-species understory.

The desired condition of the forested land within the corridor is late seral hardwood and late seral hardwood/shortleaf pine. The riparian areas adjacent to open land are managed similar to what is described in Forest Publication NA-PR-07-91 "Riparian Forest Buffers".

#### 2500 WATERSHED AND SOILS MANAGEMENT

Excellent water quality in the Buffalo River is an important component of this healthy aquatic cool water ecosystem. Aquatic habitat is provided by preserving cover in the form of overhanging banks and large woody debris in the river channel. In general, the water quality parameters on the Buffalo River remain within baseline levels present in 1992 and continue to exceed the standards set by the Arkansas Department of Pollution Control and Ecology.

Natural erosional and depositional processes are in a state of dynamic equilibrium within the river. Natural changes in the stream channel may occur, resulting in eroding streambanks which creates habitat for those species dependent on such disturbances.

Within the Scenic corridor, human-caused erosion is rehabilitated using natural appearing methods. Bank stabilization and other watershed improvements are undertaken when needed to protect resource values.

#### 2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES

Wildlife communities dependent on mature forest landscapes will remain abundant, while other species remain abundant. Populations of game and non-game species are at healthy levels, balancing ecological and recreational needs. Feral hogs are eradicated.

The Buffalo River corridor links core areas such as the Upper Buffalo Wilderness, the Buffalo National River and the Mulberry River. This linkage provides continuity between animal and plant populations to better maintain population viability.

Fish communities continue to support a diversity of aquatic life. Where the river widens to provide fishable pools, healthy populations of smallmouth bass thrive.

## 2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES

Threatened, Endangered, and Sensitive species, and unique communities are managed to maintain and enhance viability. Non-wilderness segments are prioritized for efforts to provide quality habitat.

#### 2700 SPECIAL USES

WILD segment: There are no commercial permits issued that would compromise wilderness values.

**SCENIC** segment: All outfitter and guides that use public lands on the National Forest operate under special use permit. New permit applications are evaluated to ensure river values are protected.

Special use permits for recreation events do not diminish overall river values and comply with river objectives.

Other temporary and long term permits (utilities and road rights-of-way) are evaluated based on protecting and enhancing river values. Special use permits to access private lands are granted when no other non-Forest Service route is available AND river values are protected.

#### 2800 MINERALS

WILD SEGMENT: There is no mineral entry.

SCENIC SEGMENT: Surface occupance outside the corridor protects water quality and river values.

#### **OUTSTANDING & RESERVED RIGHTS**

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

#### MINERAL MATERIALS

There is no gravel mining as per State-issued recommendations for extraordinary resource waters.

#### 5100 FIRE MANAGEMENT

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

Prescribed burning is a tool used prudently for forest health, subordinate to Wilderness and Scenic values.

#### 5400 LAND OWNERSHIP

Partnerships exist between the private land owners, the Forest Service, and State of Arkansas to protect the river attributes while respecting each partner's rights and responsibilities. Where conflicts occur, the ownership boundaries are delineated to minimize conflict.

#### 7710 TRANSPORTATION

The forest road system is maintained to facilitate year-round access. Selected roads are maintained for high clearance vehicles only. Road closures are maintained to be effective. Road maintenance and construction improve access for multiple uses while protecting the river's values. The Wild portion of the corridor falls within the Wilderness which is restricted to non-mechanical and non-motorized access.

## STANDARDS [S] AND GUIDELINES [G]

#### 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.

#### PROGRAM AREAS

#### 2200 RANGE MANAGEMENT

## Wild Segment

Same as Management Area 1- Wilderness.

## Scenic 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

## Wild Segments

Same as Management Area 1 - Wilderness, in addition;

[S] - Apply LAC standards based on indicators selected for river segment classification.

## Scenic Segment

- [S] Developed recreation areas will be managed in accordance with forestwide "Developed Recreation Areas" standards.
- [S] Facility development reflects ROS classification.
- [S] Extend LAC standards for scenic segments adjoining Wilderness.

#### **2350 TRAILS**

## Wild Segment

[S] - Trails allowed in the corridor for resource protection.

## **Scenic Segment**

- [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.

#### 2380 SCENERY MANAGEMENT

## Wild Segment

Same as Management Area 1 - Wilderness.

## Scenic Segment

[S] - The Visual Quality Objective is Retention.

#### 2400 VEGETATION MANAGEMENT

## Wild Segment

Same as Management Area 1 - Wilderness

## **Scenic 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 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.

#### 2500 WATERSHED AND SOILS MANAGEMENT

#### Wild Segment

Same as Management Area 1 - Wilderness, in addition;

- [S] Prohibit all new water supply dams, flood control dams, hydroelectric power facilities, levees or other major diversions in the channel or river corridor.
- [S] Use LAC standards to monitor water quality.

## **Scenic Segment**

- [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.
- [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.
- [S] Use LAC standards to monitor water quality on streams with "Wild" segments.

## 2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES

## Wild Segment

Same as Management Area 1 - Wilderness.

## Scenic Segment

- [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.

#### 2700 SPECIAL USES

## Wild Segment

Same as Management Area 1 - Wilderness, in addition;

[S] - Prohibit new transmission lines, gas lines, water lines, rights-of-way.

## Scenic Segment

- [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.

#### 2800 MINERALS

#### Wild Segment

Same as Management Area 1 - Wilderness.

## Scenic Segment

- [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**

## Wild Segment

Same as Management Area 1 - Wilderness.

## **Scenic Segment**

- [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.

#### 5400 LAND OWNERSHIP

## Wild and Scenic Segment

[G] - Provide assistance to private landowners to encourage practices that enhance Wild and Scenic River goals and objectives.

## Land Acquisition:

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

#### 7700 TRANSPORTATION/ACCESS

#### Wild Segment

Same as Management Area 1 - Wilderness.

#### Scenic Segment

- [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.

#### OPERATIONS AND DEVELOPMENT

#### INTRODUCTION

After approval of the comprehensive river management plan, the Forest Supervisor should ensure that all permits, contracts, and cooperative agreements are consistent with the Forest Plan. All later administrative activities including budget proposals should be based on the comprehensive river management plan. The Forest Supervisor can change proposed implementation schedules without an EIS when funding does not match proposed annual budgets, provided long term goods and service levels are not jeopardized.

Monitoring and evaluation objectives 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.

The Wild and Scenic River Plans which also contain Wilderness acres, use the concepts outlined in LIMITS OF ACCEPTABLE CHANGE (LAC) System for Wilderness Planning, by Stankey et .al. (1985). LAC is a planning process consisting of a series of interrelated steps leading to the development of measurable objectives, defining desired backcountry and wilderness conditions. It also suggests management actions necessary to maintain or achieve desired conditions. Emphasis is placed on defining and achieving the resource and social conditions desired for the area rather than determining how many users an area can absorb. This process has been determined to be more effective than attempting to establish carrying capacity. Carrying capacity was first designed for range management.

The LAC process requires managers to define desired backcountry and wilderness conditions and to undertake actions to maintain or achieve these conditions. The process consists of nine major steps:

- Step 1 identifies area concerns and issues.
- Step 2 defines and describes opportunity classes (management zones).
- Step 3 is the process of selecting resource and social indicators which represent backcountry conditions.
- Step 4 is an inventory to determine the condition of the indicators selected.
- Step 6 identifies alternative opportunity allocations.
- Step 7 identifies management actions required to implement each alternative.
- Step 8 is the evaluation and selection of an alternative.
- Step 9 is the implementation of the preferred alternative and the establishment of a program to monitor indicators.

Goals, by definition, are broad statements of intent, direction and purpose. Management objectives are statements that describe the specific conditions sought, serve as criteria in determining what management actions are needed, and are used as the basis for evaluating the effectiveness of management actions.

All areas within the river corridors and the Wilderness are designated in one of four Opportunity Classes. Each Opportunity Class is described in terms of the desired resource, social, and managerial conditions for that area. These descriptions provide guidance for management decisions related to backcountry resources and use.

Opportunity Classes are designated based upon the following criteria:

- 1. Type and amount of use
- 2. Accessibility and challenge
- 3. Opportunity for solitude
- 4. Current resource conditions
- 5. Management uses

## LIMITS OF ACCEPTABLE CHANGE (LAC)

## **Opportunity Class Description**

<u>Class</u> 1: Natural environment with little evidence of recent impact by humans. Outstanding opportunities for solitude exist and the sense of challenge is high. No trails are maintained and no signs are provided for visitor assistance.

<u>Class 2</u>: Natural environment with some evidence of human impact in the form of trails and campsites. Opportunities exist for solitude and sense of challenge is still high. New trails should be built only for resource protection.

<u>Class 3</u>: Natural environment with evidence of land use and/or recreational activities. Opportunities for solitude often exist but may be rare in peak recreational seasons. Trails and signs may be provided for natural resource and visitor protection. Existing trails will be maintained (for light use) at primitive trail standards. Scenic values are primary emphasis.

<u>Class 4</u>: Natural environment with obvious evidence of land-use and/or recreational activities and impacts. Opportunities for solitude may exist. Trails and/or signs may be provided for natural resource and visitor protection, and for educational purposes. Modest facilities may be provided for recreational activities.

#### **Segment Classifications**

<u>Segment</u>	<b>Classification</b>	Length
Headwaters	Scenic	6.4
Buffalo Wilderness	Wild	9.4

The delineation of Opportunity classes was based on river use patterns, access, management concerns, and resource considerations.

## **Segments By Opportunity Class**

#### SCENIC segment is Opportunity Class 3 or 4.

Headwaters to Wilderness Boundary: Primary access to this area is by the Dixon Ridge Road FS 1463, a gravel all weather road from State Highway #16 to the river. The only Class 4 area within the corridor is the area near the ford. Facilities include bulletin board, registration box, and parking for several vehicles.

## WILD segment is Opportunity Class 2

Wilderness Boundary to the Northern Boundary: This Opportunity Class starts .2 of a mile east of the Dixon Ford and flows through the Upper Buffalo Wilderness area. Access to this area is also by the Dixon Ridge Road FS 1463.

#### INDICATORS AND STANDARDS

Indicators and standards are used to help determine when corrective management actions should be implemented. Indicators are relevant, measurable factors which signify the condition of the backcountry setting. Standards are threshold levels established for each indicator. Standards are set at the upper level of what is considered acceptable, not necessarily what is desirable.

Monitoring of indicators should enable management to know whether backcountry conditions are getting better or worse. Management still has the latitude to correct unanticipated problems not addressed by standards. The indicators and standards for each opportunity class are displayed in the following table.

A policy of nondegradation should be employed. The nondegradation policy seeks to prevent further degradation of current resource and social conditions in areas which are still well within standards and restore substandard settings to minimum levels.

# LAC INDICATORS & STANDARDS

Indicators	Class 1	Class 2	Class 3	Class 4	Comments
Total campsite area (sq.ft.)	Less than 500sq.ft.	750-800 sq.ft.	800- 1000sq.ft.	90% of sites are less than 2,000 sq.ft. with none greater than 3,500 sq.ft.	Evident by vegetation impacts
Number of fire rings	zero	zero	No more than 1	No more than 1	In order to maintain a standard of "0" in Class 1 and 2, there may need to be a "stoves only" restriction
Campsite condition (1=Best, 4=Worst) [Maximum number per square mile]	None rated more than "2"	No sites rated "4"	No sites rated above "4"	No more than 4 campsites within 1/4 sq.mile; condition "4" sites should be evaluated for restoration or closure	See campsite condtion descriptions
Overall satisfaction (rate experience 1-10 with 10=Best)	Overall rating 8 or above	Overall rating 8 or above	Overall rating 8 or above	Overall rating 8 or above	Average overall experience rating from registration cards for 1992- 94 was 8.6
Contact with other groups (Average # of groups encountered per outing)	No more than 1	No more than 2	No more than 5	No more than 5	Not to be exceeded more than 4 days/yr (weekends / holidays)
Preferred group size	6	6-8	No more than 10 (90% of the time)	No more than 10 (90% of the time)	More than 75 requires a special use group permit)  [10/96 LAC]

#### OPPORTUNITY CLASS AND CAMPSITE DESCRIPTIONS

# **Opportunity Class Descriptions**

- Class 1: Natural environment with little evidence of recent impact by humans. Outstanding opportunities for solitude exist and the sense of challenge is high. No trails are maintained and no signs are provided for visitor assistance.
- Class 2: Natural environment with some evidence of human impact in the form of trails and campsites. Opportunities exist for solitude and a sense of challenge is still high. New trails should be built only for resource protection.
- Class 3: Natural environment with evidence of land use and/or recreational activities. Opportunities for solitude often exist but may be rare in peak recreational seasons. Trails and signs may be provided for natural resource and visitor protection. Existing trails will be maintained (for light use) at primitive trail standards. Scenic values are primary emphasis.
- Class 4: Natural environment with obvious evidence of land-use and/or recreational activities and impacts. Opportunities for solitude may exist. Trails and/or signs may be provided for natural resource and visitor protection, and for educational purposes. Modest facilities may be provided for recreational activities.

#### **CAMPSITE CONDITION DEFINITIONS**

- 1. Campsite barely distinguishable; slight loss of vegetation cover and/or minimal disturbance of organic litter.
- 2. Campsite obvious; vegetation cover lost and/or organic litter pulverized in primary use areas.
- 3. Vegetation cover lost and/or organic litter pulverized on much of the site, some bare soil exposed in primary use areas.
- 4. Nearly complete or total loss of vegetation cover and organic litter, bare soil widespread. Soil erosion may be obvious, as indicated by exposed tree roots and rocks and/or gullying.

# Upper Buffalo Wilderness Buffalo Wild & Scenic River LAC Indicators and Standards

AIR QULAITY RELATED VALUES [AQRV]	INDICATORS	LAC STANDARD
Water Quality/AQRV	<u>pH</u>	Mean annual pH will be maintained above 6.0
vvater Quanty///QICV	<u>Alkalinity</u>	Mean alkalinity will be maintained at 10mg/L or more (based on lower site only)
Floral Diversity/AQRV	Ozone	Based on baseline data collected by DPC&E at Deer Work Center.
*Scenery/Visibility/AQRV	*Standard Visual Range (SVR)	*SVR will not be reduced by human causes more than 10% of the 90th percentile (clean days) as determined by the USFS visibility monitoring program. Spring and fall seasons are the most critical.
*IMPROVE = Interagency Monitoring of Protected Visual Environments		*Note: SVR and LAC standard will be rewritten when there is sufficient IMPROVE data.
LIMITS OF ACCEPTABLE CHANGE	INDICATORS	LAC STANDARD
Water Quality/LAC	Fecal Coliform	Lower site = 27 col/100mL Upper site = 71 col/100mL
+Nondegradation based on arithmetic mean of baseline	Turbidity	Lower site = 9 FTU Upper site = 17 FTU
data collected quarterly in 1990-95		+Exceeding standard would trigger management action to determine cause
		[10/96 mla/cn]

# LAC MONITORING AND MANAGEMENT ACTIONS

# Monitoring for LAC Indicators

All indicators listed require a monitoring program to determine whether they are within the standards set for each of the Opportunity Classes.

<u>Campsite Condition</u>: Monitoring procedures are detailed in the <u>Buffalo Ranger District Backcountry Campsite Inventory and Monitoring Procedures</u> (1992). All sites will be monitored at least once every five years on a rotating basis. Sites which failed to meet standards will be monitored the following year to determine whether corrective actions have been successful. A dbase 111+ data management program has been developed to store and analyze all campsite monitoring data.

<u>Social Indicators</u>: Group size, contact with other groups, and overall satisfaction should be monitored yearly using data collected from wilderness registration cards (both those collected at portals and those mailed in to the district office at Jasper). For example, if there's a swing downward in overall satisfaction, this should trigger on site discovery as to cause at that location. For example, it could be tied to increased encounters with other groups or perhaps more encounters increases overall experience.

<u>Water Quality</u>: Monitoring of water quality indicators will be accomplished through the existing monitoring program. Site specific investigations will be carried out in additional areas if evidence of water quality degradation is found.

# Potential Management Actions

Improving Unacceptable Site Conditions (In order of Preference)

<b>Opportunity</b>	Class	1	&	<u>2:</u>

- \* Offsite Leave No Trace Education
- \* Contact Repeat Users
- \* Campsite Restoration
- \* Designated Campsites
- \* Limit Size of Groups Camping
- \* Prohibit Open Fires
- \* Seasonal Campsite Closures
- \* Individual Campsite Closures
- \* Area Camping Closure
- \* Camping Permit

# Opportunity Class 3 & 4

- \* Information and Education
- \* Increase Forest Service contacts
- \* Contact Repeat Users
- \* Campsite Restoration
- \* Limit size of groups camping
- \* Designate Campsites
- \* Campsite Closures
- Prohibit Stock
- \* Install Toilets
- \* Require Camping Permits

Directed at <u>Social Indicators</u> (In order of Preference)

# Opportunity Class 1 & 2:

- \* Encourage Use in Other Areas
- \* Modify or Remove Existing Facilities
- \* Camping Permits
- \* Limit Size of group

# Opportunity Class 3 & 4

- \*Encourage Use at Other times or places
- \*Improve or Modify Existing Facilities
- \*Limit Size of Groups Camping
- \*Camping Permits

#### **PROGRAM AREAS**

## 1600 INFORMATION SERVICES

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

Wilderness backcountry ethics and information are provided "in-town" rather than on site.

#### SIGNS

Minimize "sign pollution" by keeping the number of signs to the minimum necessary for safety, effective law enforcement, direction and interpretation. Forest Development Road is subject to the Highway Safety Act standards.

## **Informational**

The Dixon Ridge Road bulletin board should display important information to visitors. All non-regulatory information should be placed on ONE sign board.

Types of information to include on the sign board are:

- \* Visitor use guidelines, Leave No Trace outdoor ethics.
- \* Safety precautions and emergency contact numbers.

Informational signing within the river corridor should be minimal. There will be **no signing within the wilderness** portions of the corridor. No reflective surfaces, tape, lettering or symbols should be used on informational signs unless critical for visibility from moving vehicles.

## Regulatory

Regulatory signing should be kept to a minimum. In general, regulatory information should be posted on informational sign board.

Existing roads, not open to public motor vehicle traffic, should be signed for non-motorized travel. Signs identifying the designated river corridor boundary should be posted only where the corridor coincides or crosses a primary road.

Warning signs are usually made with reflective material.

Construction may require signs for safety and directions.

#### **BROCHURES**

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

- \* Classification of rapids and inherent dangers associated with Wilderness and backcountry recreation.
- \* A map that identifies public and private 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 help protect these values
- \* Inform visitors about regulations

\* Interpretation of outdoor ethics, respecting private property rights and "Leave No Trace" practices.

#### PERSONAL CONTACT

Wild: Opportunities for solitude prevail.

Scenic: Contacts between Forest Service representatives (Forest Service personnel or volunteers) and visitors in the river corridor should be mostly at the Dixon Ridge Road river access site. Emphasis will be from November through April, with the focus of contacts timed with storm-event-related use. The objectives are to monitor recreation use and impacts, and to inform and educate visitors about regulations, and special features of interest in the river corridor.

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

# 2100 ENVIRONMENTAL MANAGEMENT

<u>Operations</u>. Septic systems on National Forest lands will comply and meet all Arkansas Department of Health regulations. Education and information programs and materials should discuss solutions to disposal of human waste. "Leave No Trace" programs can be used by the river manager to encourage responsible human waste disposal.

Support "pack-it-in and pack-it-out" and LNT concepts for kayakers, hunters, hikers and other recreationists. Discouraged bringing glass containers into the river.

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.

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. Perceptual monitoring of dipersed recreation sites to assess the need to add or improve toilet facilities.

# 2120 AIR QUALITY MANAGEMENT

Wild = Class I Airshed Standards

The Forest will continue to coordinate with EPA and the Arkansas Department of Pollution Control and Ecology in monitoring for nondegradation of air quality in the Upper Buffalo Wilderness which is a Class I area.

Allow for the use of prescribed fire for purposes of ecosystem management. Assure that prescribed burning programs comply with the provisions of the Clean Air Act as well as all other applicable State and Federal Laws.

Scenic = Class II Airshed, Same As General Forest

#### 2200 RANGE MANAGEMENT

#### WILD AND SCENIC

Issue no new grazing permits that include the area within the corridor. Phase out existing woodland range permits according to direction in the current Forest Land and Resources Management Plan.

## Monitoring and Evaluation Plan.

Track NEPA process for range allotment analysis when pertinent to river corridor values.

#### 2300 RECREATION

# **ROS EXPERIENCE CHARACTERIZATION**

#### WILD SEGMENT - PRIMITIVE RIVER

<u>Naturalness</u>s - Unmodified natural environment. No evidence of human development. No impoundments, diversions, or channel modifications.

<u>Access</u> - No developed access sites along the river. Traditional water craft consistent - motorized use prohibited.

<u>Remoteness</u> - Highest expectations of experiencing isolation from the sights and sounds of humans. Strong sense of remoteness.

<u>Social Encounters</u> - No expected contact with other individuals. None to little evidence of other individuals. Very small party size (6-12) and few boats per group.

<u>Visitor Management</u> - Self-reliance through application of outdoor skills in an environment that offers a high degree of challenge and risk. No on-site visitor management controls or regulations apparent. On outfitter trips, visitors participate in orientation of the river and perceive a high degree of challenge and risk.

<u>Facilities</u> - No facility development for user comfort. Regulations for human waste disposal. Low impact camping practices required.

## SCENIC SEGMENT - SEMI-PRIMITIVE MOTORIZED RIVER

Opportunity is to enhance this portion of the Buffalo River by not allowing ATV and OHV use within the corridor with the exception of Dixon ford crossing on FDR 1410.

Naturalness - Largely undisturbed natural environment. Little evidence of human development.

<u>Access</u> - Very few trailed access sites developed along the river. Primitive roads to designated access points along the river. Haul roads parallel the river for most of this segment.

<u>Remoteness</u> - Moderate expectation of solitude and experiencing isolation from the sights and sounds of others. Sense of remoteness.

<u>Social Encounters</u> - Few contacts with other users. Little but some evidence of other users. Small party size (8-20).

<u>Visitor Management</u> - Self-reliance through application of outdoor skills in an environment that offers a moderate degree of challenge and risk. Only a few, subtle on-site visitor management controls or regulations are apparent. Visitors experience a high to moderate degree of challenge and risk.

<u>Facilities</u> - Minimal facility development primarily for resource protection. See ROS Primer and Field Guide. Regulations for human waste disposal and camping practices required.

# **Recreation Opportunities**

- 1.) A semi-primitive, motorized recreation setting should be maintained on National Forest system lands within the Scenic River corridor; a primitive, non-mechanical/non-motorized recreation setting should be maintained for the Wild River corridor.
- 2.) Motorized recreation travel should be restricted to "open" roads on public lands. ATV use is governed by current Forest policy.
- 3.) Dispersed camping should be discouraged within 200 feet [70 adult steps] of creek unless on hardened surface (rock slab or gravel bar).
- 4.) Conduct a survey of recreation use in the corridor within the first ten years of plan implementation. The study should focus on storm-event paddlers, hunting seasons, with incidental sampling via registration portals and a infra-red river traffic counter during seasonal use periods. Design should be to collect, at a minimum, the following information:
  - \*use patterns (activity participation, timing and frequency, location)
  - \*visitor characteristics (origin, group type and size, first-time visitor)
  - \*visitor perceptions (desired experience, preference for management actions, conflicts or problems, expectations for visiting Buffalo River)
- 5.) Watercraft use will be monitored, primarily at the parking area just downstream from the Dixon Ridge Road ford.
- 6.) Dispersed recreation in the corridor should be monitored to evaluate potential social, biological and physical impacts, and appropriate corrective actions taken if unacceptable impacts are identified. Use LAC indicators and standards selected for that segment.

# **Recreation Development**

The Forest Service will maintain recreation facilities appropriate for the Recreation Opportunity setting. No new recreation developments or facilities are proposed within the river corridor. Facilities must meet river management objectives and satisfy the protection requirement of W&SR law.

## **Trails**

Currently, there are no trails proposed for development. Development of new trails that enter or fall within the corridor (excluding Wilderness) should only be constructed where anticipated visitor needs indicate that a trail is necessary to provide access consistent with the outstandingly remarkable values and unavailable outside the corridor, to provide for important interpretation of resources found within the corridor, or to prevent degradation of resources within the corridor. Any planned trail should meet Forest Service standards for the intended trail use and be consistent with Forest Land and Resource Management Plan guidance for overall trail system development. Design and layout should be an interdisciplinary process.

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 area landowners, and significance of the resource impacts. In general, user-developed trails determined to be causing unacceptable impacts should be closed and rehabilitated. Those user-developed trails that provide important access to the river or recreation attractions may be reconstructed to meet Forest Service standards if compatible with long-term management goals for the river corridor.

## 2360 HERITAGE RESOURCES

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

# Wild Segment

- -Remove old fences from the trees and posts where feasible.
- -Do not do any brushing in the old road system but let nature re-claim.
- -Sites or structures that do not qualify for the National Register of Historic Places are allowed to deteriorate naturally unless they are deemed necessary for the purposes of wilderness, or serve administrative purposes.

# **Scenic Segment**

# Historic and Prehistoric Resources

- -Conduct site specific surveys for all proposed ground-disturbing projects with the Buffalo River corridor.
- -Complete Determinations of Effect and National Register evaluations and/or nominations for all cultural resource sites identified and recorded within proposed project areas.
- -Sponsor a Partners-in-Time partnership to do a complete inventory of the river corridor.

#### Cultural Values

- -Preserve elements of the river corridor contributing to local social and cultural values. Reassess social and cultural values of the river corridor once every ten years.
- -Maintain relationship with the Newton County Historic Society and the Arkansas Archeological Society to ensure recognition of culturally significant features.

# **Interpretation**

- -Provide off-site interpretation of cultural resources within the Buffalo River corridor. (refer to brochure discussed in 1600 Information Services).
- -No specific location information will be included in any developed interpretive material without full SHPO and Advisory Council for Historic Preservation concurrence.

#### 2380 SCENERY MANAGEMENT

# **Operations:**

**WILD** = Preserve scenic and historic character of area.

**SCENIC** = 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 and be appropriate for the Recreational Opportunity Setting.

# Monitoring and Evaluation.

Ask the question: Does this protect and/or enhance the Outstandingly Remarkable Value of Scenery? Does it meet the intent implied by the overall objectives for this Wild and Scenic River.

#### 2400 VEGETATIVE MANAGEMENT

#### WILD SEGMENT

The management of vegetative cover should be to retain the primeval character of the environment and to allow ecological processes to operate freely.

#### **SCENIC SEGMENT**

Vegetation management can enhance and promote the appearance and structure of a biologically diverse ecosystem within the river corridor such as to favor sensitive species habitat. Let future inventories determine needs for restoration.

# Vegetation may be managed to:

- -Enhance the quality of wildlife habitat for indigenous species within the corridor with emphasis on enhancement of present ecotypes to support native populations.
- -Correct impact or to salvage material resulting from a catastrophic natural or human-caused disaster. Concern should be on the EFFECT of disasters, not on what may have caused it.
- -Control erosion and screen structures and developments visible from the river.
- -Sustain the integrity of vegetative communities in the corridor by removal of encroaching vegetation (like mimosa or multiflora rose).
- -Removal of hazards where visitor safety is a concern.

#### **Fuelwood**

- -Cutting or collection of firewood is not permitted for commercial or private home use unless this takes you towards a desired future condition.
- -Incidental collection of downed woody material for use at campsites is permitted [use of camp stoves is preferred].

Riparian zone management adjacent to open land should be managed to provide for a healthy buffer. This buffer may vary from 30-100 feet and should be allowed to expand naturally. The purpose of this zone is to create a stable ecosystem along the waters edge, provide a zone to cycle nutrients, provide shade to moderate and stabilize water temperature, and to provide large woody debris for the water ecosystem. The dominant vegetation should consist of native trees and shrubs, and be managed for a late seral stage. Management of this zone should be limited to bank stabilization, and tree removal for safety reasons. Prescribed burning in this zone should be used sparingly and done under cool burn techniques.

Monitoring and Evaluation. Continued monitoring of the vegetative component will be necessary to determine the progress in reaching a late seral stage. This should 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

The Forest will continue to coordinate with the Arkansas Department of Pollution Control and Ecology, and the National Park Service to assess and prevent future impacts to the water quality of Buffalo River. Follow current Forest Service direction and Regulation No. 2, as Amended for Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas [see Sec. 6. specific standards].

Achieve the goals in the Federal Water Pollution Control Act, as amended. Water quality protection and improvement needed to meet the requirements of the Act will be attained through implementation of Best Management Practices (BMPs) as identified in "Water Quality Management for National Forest System Lands", April, 1979. The FLRMP provides direction to protect water quality in the entire watershed outside the corridor.

# WILD SEGMENT - Water Quality

-Continue water quality monitoring program established in 1990 for the Upper Buffalo Wilderness (TREND ANALYSIS). Current sampling regime is quarterly.

# **SCENIC SEGMENT** - 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. Participate in all studies and evaluations of projects affecting the Wild and Scenic River.

The Forest will continue to coordinate with the Arkansas Department of Pollution and Ecology, Arkansas Game and Fish Commission, Arkansas Forestry Commission, Arkansas Department of Health, and Arkansas Natural and Scenic Rivers Commission, to assess and prevent future impacts to the water quality of the Buffalo River. Emphasize coordination with the Buffalo National River, National Park Service.

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

#### Streambank Stabilization

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

Consideration should be given to the habitat needs of other riparian dependent species such as wood turtles and bank swallows. Certain eroding streambanks (clay banks, some sandy banks with southerly exposures) which provide good nesting habitat should be left untreated or treated less intensively.

- 1. Streamside forests should be used in conjunction with sound land management systems that include nutrient management and sediment and erosion control.
- 2. Sediment removal The streamside forest must be wide enough to filter sediment from surface runoff. Maximal effectiveness depends on uniform shallow overland flow. Percent removal of Total Suspended Solids is a good indicator of effectiveness.
- 3. Nutrient removal Periodic flooding and the presence of forest litter contribute to conversion of nitrate to gaseous nitrogen by denitrification. Plant uptake also accounts for significant removal of nitrogen.
- 4. Periodic minor ground shaping may be necessary to encourage dispersed flow and prevent concentrated flow.
- 5. A portion of the riparian forest immediately adjacent to the stream should be managed to maintain a stable streamside ecosystem and to provide detritus and large stable debris to the stream.
- 6. Crown cover should be managed to minimize fluctuations in stream temperature and to maintain stream temperatures within the range necessary for instream aquatic habitat.
- 7. Instream slash and debris removal practices should be revised to conserve existing large stable debris by retaining useful stable portions of jams whenever possible. Unstable tops and smaller debris with potential to form problem jams should be removed a sufficient distance to prevent re-entry during storm events.

Follow Best Management practices recommended by USDA Natural Resources Conservation Service in Watershed Plan-Environmental Assessment For Buffalo River Tributaries Watershed, May 1995. Follow guidelines in USDA FS bulletin NA-PR-07-91, "Riparian Forest Buffers".

#### Monitoring and Evaluation Plan.

Effectiveness of methods for preventing further erosion should be regularly monitored.

# **SCENIC SEGMENT - Soils**

# Operations.

- -Sedimentation into Buffalo River or tributaries, or impacts to soils from existing human uses, shall be reduced either through information and education methods, structural or vegetative stabilization, or enforced closures. Where possible, the least restrictive methods should be implemented first and monitored for effectiveness. Further restrictions or stabilization methods may be phased in if necessary.
- -Any Forest Roads or segments of roads identified as causing unacceptable resource impacts should be evaluated for reconstruction or closure. Projects (including road reconstruction or other significant changes in vegetative cover or soil movement) within the designated Scenic corridor should have a site-specific reconnaissance performed and specific mitigating measures should be developed if necessary.
- -Block vehicle traffic into river corridor just below Dixon ford at parking area adjacent to river. This was an access to an old hunting camp which was adjacent to a high river bank. Over the last five years this bank has been washed away. Currently vehicles have been driving right into the river bed.
  -Evaluate need for mitigation for sediment entry at Dixon Ford. North side of river has road sediment delivery to stream channel following storm events.
- -Continue to coordinate with County Judge and soil conservation agencies to eliminate erosion and other resource impacts from county road crossings/roads in the corridor.

Monitoring and Evaluation Plan. See "Soil, Water and Air" section of the Forest Plan.

# 2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES

The State of Arkansas, Game and Fish Commission (G&FC), 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. All riparian and aquatic habitat management activities will be coordinated with the Arkansas G&FC.

# WILD SEGMENT - Wilderness Management Objectives for Wildlife:

- 1.) To seek natural distribution, numbers, population composition, and interaction of indigenous species of wildlife.
- 2.) To allow natural processes, as far as possible, to control wilderness ecosystems and their wildlife.
- 3.) To keep wildlife wild, with its behavior altered as little as possible by human influence.
- 4.) To permit viewing, hunting, and fishing where such activities are: biologically sound, legal, and carried out in the spirit of a wilderness experience.
- 5.) To favor the protection and restoration of threatened and endangered species dependent on wilderness conditions whenever appropriate.
- 6.) To seek the least possible degradation of the qualities that make for wilderness naturalness, solitude, and absence of permanent visible evidence of human activity within the constraints of all overriding legislation applicable to wildlife in a particular wilderness.

## **GUIDELINES**

- 1.) Respect overriding legislation.
- 2.) Allow natural processes to shape wilderness habitat.

- 3.) Use minimum impact tools where natural processes must be supplemented or simulated.
- 4.) Favor wilderness-dependent endangered species.
- 5.) Manage for wild indigenous species.
- 6.) Encourage angling styles that are part of and compatible with wilderness experience.
- 7.) Favor hunting and trapping methods and conventions that foster wilderness-dependent experiences.
- 8.) Promote wilderness wildlife research using appropriate methods.

# SCENIC SEGMENT - Wildlife Habitat Management

- 1. Management activities should contribute to the support of viable populations of native wildlife species found in the planning area.
- 2. Protect and enhance special habitat components within to the corridor such as bark and cavity nesting habitat, wetlands and seeps, raptor nests, large woody debris, and exposed banks.
- 3. Provide information on the wildlife habitat and values associated with the corridor for visitors.
- 4. Prescribed burning may be considered to enhance wildlife habitat and ecosystem functions as long as scenic values are not measurably impaired. [see 2120 Air Quality].

# Fisheries Habitat Management

Riparian vegetation should be managed for late seral stage to provide for the long-term input of woody material (large woody debris) to adjacent aquatic ecosystems.

Instream woody debris should be left undisturbed. Navigational hazards are not to be considered. (Wilderness and backcountry paddling have inherent risks which require more technical knowledge and scouting needs.) The only exception would be just below Dixon Ford at the traditional launch site (if watercraft cannot go over, under, or around woody debris, it may be cut only to the extent necessary to get through). In general, the maximum watercraft clearing width for navigational hazards should not exceed four feet. This procedure is not allowed within the Wilderness boundaries.

Monitoring and Evaluation Plan. See policies and guidelines for Fish and Wildlife management in National Forests and BLM Wilderness areas; Chapter 20, sec., 23, FSH 2309.19.

## 2670 THREATENED, ENDANGERED AND SENSITIVE PLANTS AND ANIMALS

The goal of endangered, threatened and sensitive species management is to identify, monitor, protect, and enhance these species and associated ecosystem components within the corridor. These activities are required by the Endangered Species Act of 1973 (ESA), the Forest Service Manual (2670), and the Forest Plan.

WILD SEGMENT: Actions necessary to save endangered species should include only what is necessary and should follow the minimum tool rule.

#### **SCENIC SEGMENT**

Implement current conservation strategies for species identified. Emphasize information, education, and enforcement of regulations designed to protect endangered, threatened or sensitive species. Coordinate with visitors, landowners, partners, and other resource agencies. Prevent the introduction of non-native plant and animal species that may have adverse affects on river values.

<u>Operations</u>. The Forestwide standards for threatened, endangered and sensitive species will apply in this management area.

<u>Monitoring and Evaluation Plan</u>. 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

#### WILD SEGMENT

Prohibit special uses which do not protect and enhance river values. Favor wilderness-dependent activities. Coordinate with the Resource Management Division of the Buffalo National River.

#### SCENIC SEGMENT

All outfitter and guides that use public lands on the National Forest operate under special use permit. New permit applications are evaluated to ensure river values are protected.

Special use permits for recreation events should be issued provided the event does not affect the Outstandingly remarkable values.

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 should be discouraged. Where no reasonable alternative exists, restrict additional or new facilities to existing rights-of way. Where new rights-of-way are needed, evaluate the proposal against the effect or impacts to the outstandingly remarkable values as well as any additional scenic, recreational, fish and wildlife values in the corridor.

Monitoring and Evaluation 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

#### WILD SEGMENT

There are no existing rights prior to 1/1/84. Grant no new mining claims or mineral leases as per the Wilderness Act of 1964.

Federal lands within the boundaries of the river areas designated and classified as WILD, are withdrawn under the mining and mineral leasing laws by Section 9 of the Wild and Scenic Rivers Act.

#### SCENIC SEGMENT

<u>Operations</u>. Manage for mineral prospecting and develop to minimize adverse environmental effects on other resource uses and values.

Federal lands within the boundaries of river areas, designated and classified as SCENIC are not withdrawn under the Act from the mining and mineral leasing laws.

Existing valid claims or leases within the river boundary remain in effect and activities may be allowed subject to regulations in a manner that minimizes surface disturbance, water sedimentation, pollution and visual impairment. Reasonable access to mining claims and mineral leases should be permitted. Mining claims, subject to valid existing rights, can be patented only as to the mineral estate and not the surface estate, subject to proof of discovery prior to the effective date of designation.

For rivers designated as SCENIC, filing of new mining claims or mineral leases is allowed but is subject to reasonable access and regulations in a manner that minimizes surface disturbance, water sedimentation, pollution and visual impairment.

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

Monitoring and Evaluation Plan. See "minerals and geology" section of the Forest Plan. See also Section 9 of the Wild & Scenic Rivers Act.

## **5100 FIRE MANAGEMENT**

#### WILD SEGMENT

- -The Buffalo Wild River segment should follow the fire policy established for the Upper Buffalo Wilderness.
- -Use light-on-the-land techniques based on contain, confine, and control decision tree for Wilderness fire plan.
- -Abide by the minimum tool rule.

#### SCENIC SEGMENT

Wildfire Suppression in the river corridor will follow the guidelines stated in the FLRMP, 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 Burns**

Prescribed burning may be used as a tool to achieve vegetation, visual or recreation management objectives. Burn within parameters for air quality of Class I airshed and riparian zones which need cool, not hot, burns.

[see 2120 Air Quality]

Monitoring and Evaluation Plan. Monitoring and evaluation in this resource area is found 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 wild fire.

#### 5300 LAW ENFORCEMENT

<u>Operations</u>. Enforcement of laws and regulations is critical for effective river plan implementation. Adequate enforcement has been a primary concern for area landowners, conservation groups, traditional user groups, and Forest Service administrators.

- 1. Maintain appropriate agency law enforcement presence for primitive and semi-primitive recreational setting in the river corridor.
- 2. The Forest Service should maintain cooperative agreements with the Newton County Sheriff's Department to provide:
  - a.) Search and Rescue [SAR] operations for visitor protection and assistance. [see Appendix H, Search and Rescue Plan for Wilderness Areas] \* River rescue efforts will require technical expertise in order to provide that rescuers are not put at risk. The Buffalo National River SAR unit should be contacted immediately along with the Newton County Sheriff.
  - b.) Assistance and support for Forest Service personnel in the enforcement of Federal and state regulations. This should include violations such as the illegal harvesting of ginseng, etc.
- 3. The Forest Service will maintain cooperative agreement with the Arkansas Game & Fish Commission in the enforcement of state regulations. This effort should include stopping the illegal release and/or stocking of feral hogs.

#### **SUPERVISOR'S ORDERS:**

#### Order no. 00-08-108

-prohibits operating any motorized vehicle on a Forest Development Road or any portion thereof that is posted as closed or closed by an earthen mound, gate or other object which a reasonable and prudent person would consider closed. 36 CFR 261.54(e)

-prohibits operating any motorized vehicle on a closed and/or rehabilitated temporary travelway or operating a motorized vehicle in an area posted as closed or closed by an earthen mound, gate or other object which a reasonable and prudent person would consider closed to motorized traffic. 36 CFR 261.56

-prohibits possessing or using a wagon, cart, or other mechanized vehicle in Wilderness areas on the Ozark National Forest. 36 CFR 261.57 (h). Wheelchair use is exempt from this order.

Pursue obtaining Supervisor's Orders to:

- 1) Prohibit the release of feral hogs.
- 2) Prohibiting driving ATVs up and down the stream bed.

Monitoring and Evaluation Plan. Law enforcement is seen as supporting other resource areas, such as vehicle restrictions, public safety, ginseng harvesting restrictions. 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.

## 5400 LAND OWNERSHIP

# Operations.

National Forest system lands within the river corridor should generally not be exchanged. Exceptions may be considered on an individual basis upon completion of an environmental analysis.

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 National Wild and Scenic Rivers Act objectives.

Lands in the river corridor, particularly those with frontage on the river or with important habitat for threatened or endangered species, should be acquired as the opportunities occur.

The Forest Service should work cooperatively 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. This could include assistance in getting technical and/or financial support from sister agencies like the Natural Resource Conservation Service, Arkansas Department of Pollution Control and Ecology, and the U.S. Corps of Engineers.

# 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.

# **Land Acquisition**

Lands in the river corridor, particularly those with frontage on the river or with important habitat for threatened or endangered species, will be acquired on a willing-buyer, willing-seller basis as the opportunities occur.

# Land Exchange

National Forest System lands within the river corridor will generally not be exchanged. Exceptions may be considered on an individual basis upon completion of an environmental analysis.

Monitoring and Evaluation Plan. Monitoring will be for compliance with the Wild and Scenic Rivers Act.

## 6700 HEALTH AND SAFETY

Operations. Health and safety planning should address the following risks:

-Drinking water advisories should be made known. Suggest that backcountry users carry potable water, filter and/or boil creek or spring water before using for cooking or drinking.

-Whitewater canoeing is inherently dangerous. All brochures and bulletin boards will address this risk. Public information should 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 in flood stage, using U.S. Coast

Guard approved personal floatation 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, provide key people with your trip plan.

There are no developed recreation sites on these segments of the Buffalo River. Suggested wording for bulletin boards would be:

#### "WARNING!

This recreation area has not been inspected for safety. Hazardous conditions, including falling trees and limbs, may exist in this area. Those choosing to use the area do so at their own risk."

In-channel dangers are inherent in whitewater streams. Dangers cannot, nor should not be eliminated within a Wilderness setting. In-channel blockages such as limbs and down trees should be portage if this can be done safely. The area where most paddlers launch is outside the Wilderness. Generally, a four foot wide section should be considered wide enough for passage of boats.

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.

Search and Rescue is coordinated with the County Sheriff's Office and local SAR units including the Buffalo National River. See appendix for further information and key contacts. Note: Key contacts need to be updated every five years (annually would be better, but may not be practical).

<u>Monitoring and evaluation</u> is dealt with in several sections of the Forest Plan and through the Health and Safety Code Handbook (Forest Service Handbook 6709.11). Monitoring of accidents, incidents, and fatalities will be documented in Law Enforcement Incident Reports and from personal observations.

## 7700 TRANSPORTATION

<u>Operations</u>. River use may increase slightly or not at all as a result of designation. Provide maps and signs to direct use to publicly owned access sites. No use of private lands is allowed unless special arrangements are made with the landowner. Private landowners are still entitled to post their property with "No Trespassing" signs or require users to obtain landowner permission. In the state of Arkansas, purple (lavender) paint is used to mark private land.

No easements for public access have been identified as needed. However, a trail or road easement for public use must be specifically purchased from the landowner. Other types of easements such as for protection of visual resource qualities would probably not involve provisions for public use.

<u>Monitoring and Evaluation Plan</u>. District Ranger needs to stay in contact with private landowners to insure that public access problems are not impacting them.

#### **Forest Service Roads**

**Operations**. No new roads will be developed in the river corridor without appropriate environmental analysis.

Layout and design of permanent system roads should consider protection of scenic, recreational and other river values.

Comply with Best Management Practices.

Temporary forest roads constructed for short-term use and not intended to be part of the Forest's transportation system may be developed for emergency and for resource protection and management purposes.

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 be rehabilitated as soon as feasible upon termination of administrative need.

Close and restore roadbeds if needed to protect and/or enhance riparian values.

#### **Roads Under Other Jurisdictions**

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

# **Bridges**

**Operations.** There are no bridges on the Buffalo River within the Forest Service proclamation boundary. Bridge installation would 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 Corridor.

Monitoring and Evaluation Plan. See "Facilities" section of the Forest Plan. Transportation records should 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 should be closed, rehabilitated, and/or repaired.

## APPENDIX A

#### LEGISLATIVE HISTORY

The Wild & 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 Management Area #9 for these boundary corridors. Creation of the management plans began shortly after that with draft plans completed in June 1996.

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 Fed. Reg. 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 [Public law S.1743, "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, archaeologic 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.

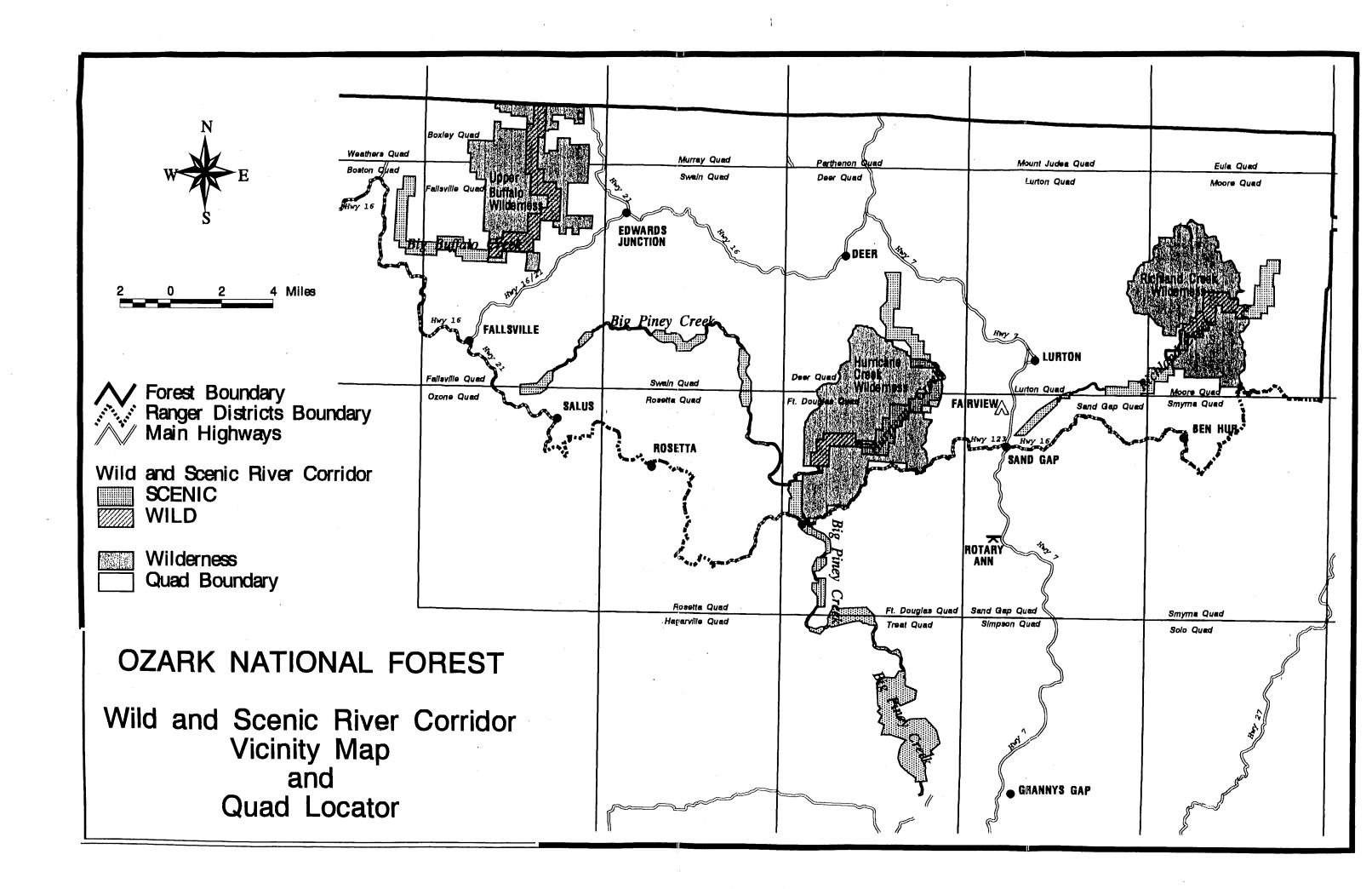
Amendment 7 to the Forest Land Management Plan established Management Area 9 (Wild and Scenic River Corridors) and requirements for continued protection and management (Table 4-18 in FLMP Wild and Scenic River Management Requirements).

The Buffalo Wild and Scenic River Management Plan will be the basis for amending the <u>Ozark-St. Francis National Forest Land and Resources Management Plan</u>. This plan will be a guide for management of the Buffalo 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 April 3, 1992 (P.L. 90-542) and is the "Management Plan" referred to in the <u>Wild and Scenic River Study Report and Legislative Environmental Impact Statement on Thirteen Rivers in the Ozark National Forest, September, 1991.</u>

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# APPENDIX B

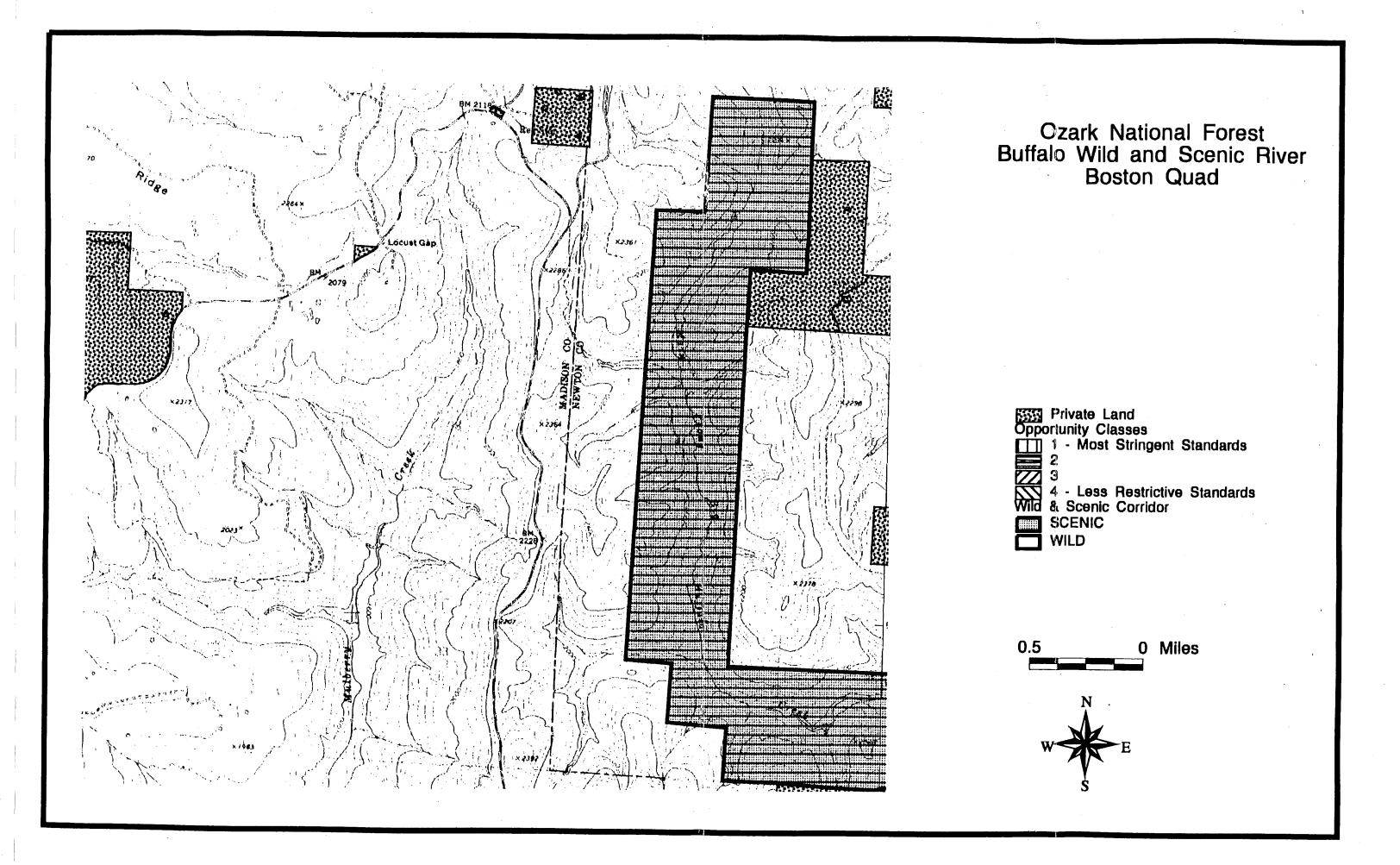
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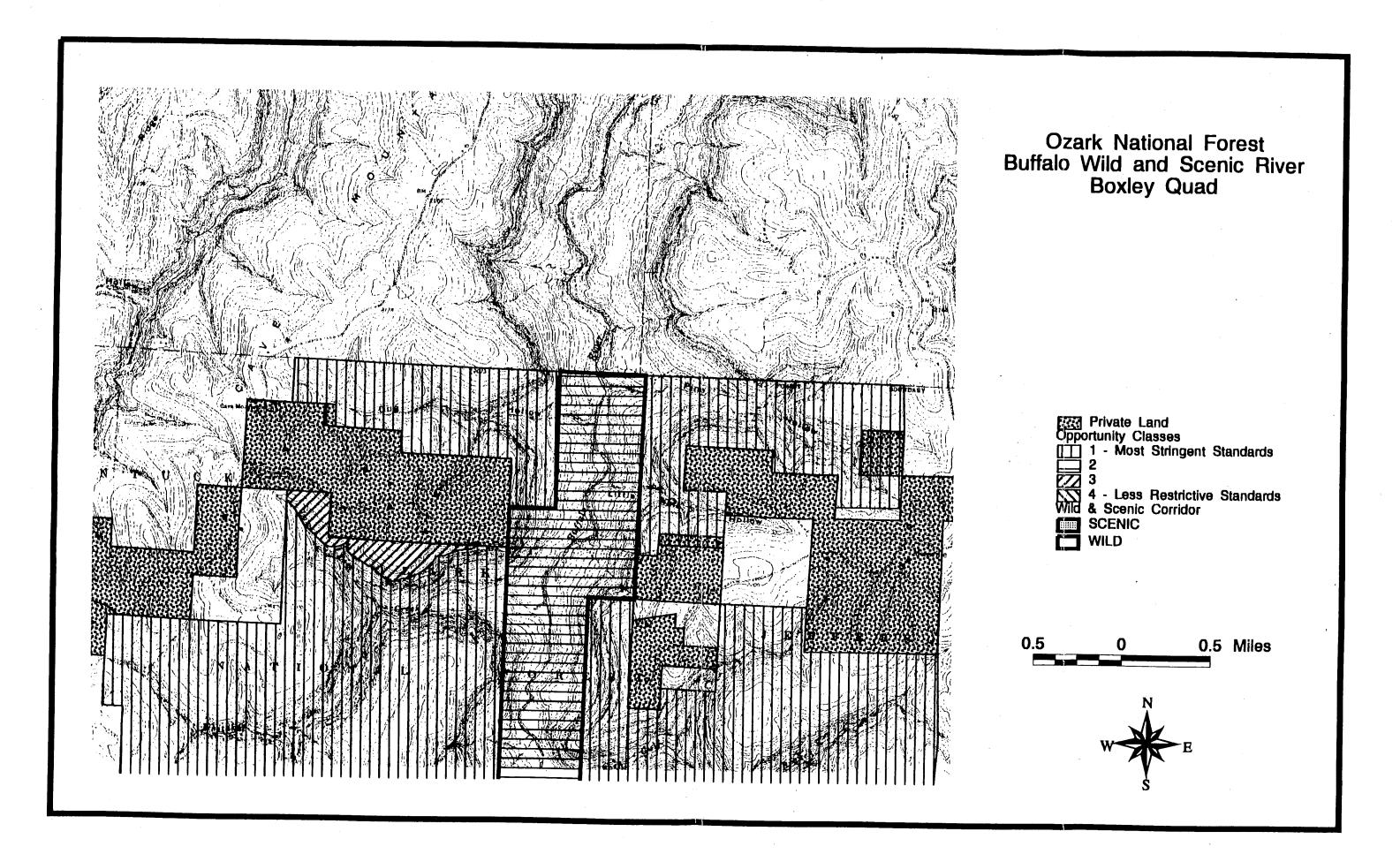


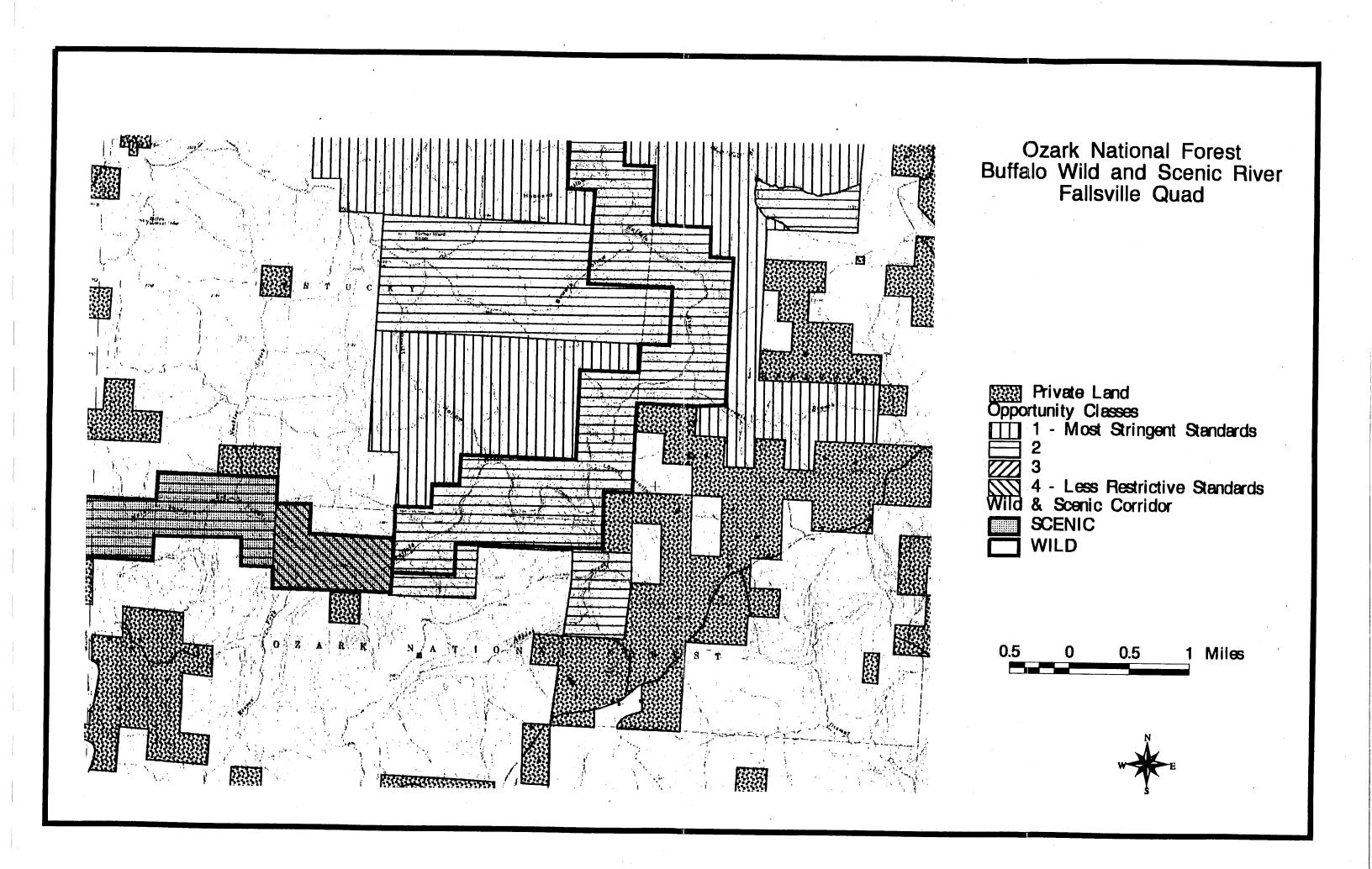
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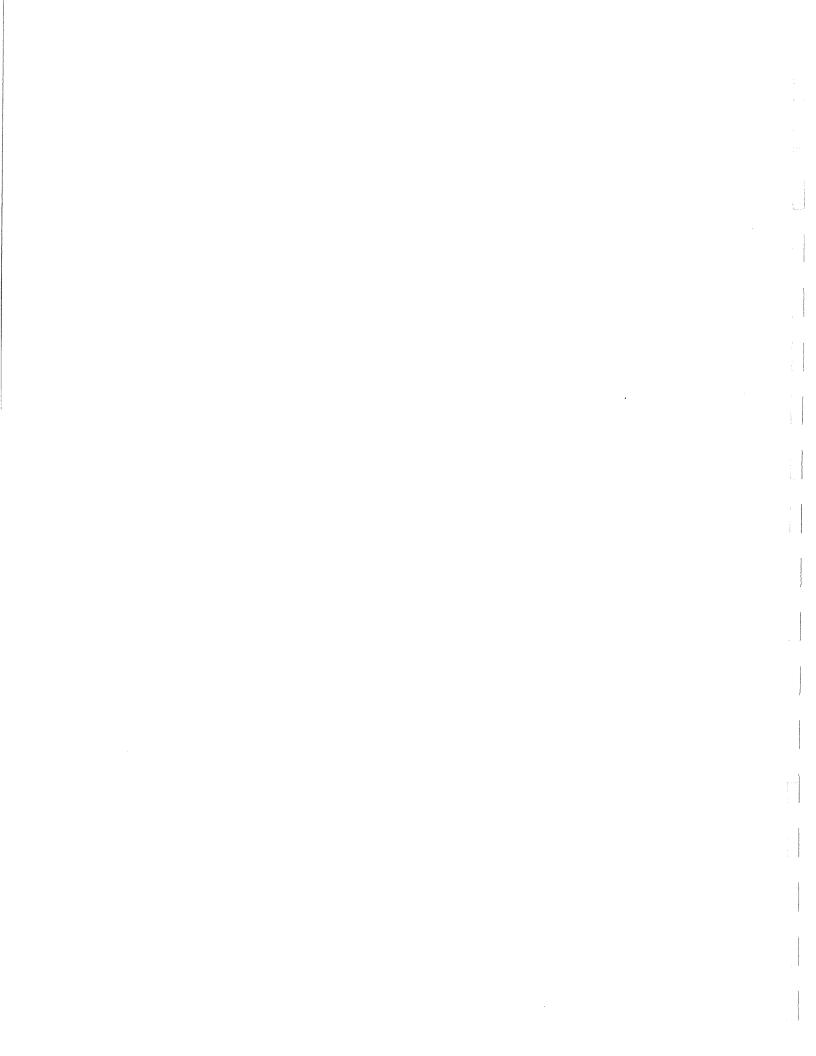
# APPENDIX C

# RIVER SEGMENTS BY WILD & SCENIC CLASSIFICATIONS AND OPPORTUNITY CLASS ALLOCATIONS









#### APPENDIX D

# Summary Of Public Concerns before July 25, 1996

This summary of public concerns was drawn from telephone calls, letters, personal conversations, public meetings and an Open House held at the district office in Jasper on 10/17/92. These public meetings were focused on the Limits of Acceptable Change (LAC) planning process for the three Wild & Scenic Rivers with "Wild" segments. These "Wild" segments all flow through Wilderness (Upper Buffalo, Richland Creek, and Hurricane Creek Wilderness areas).

12/5/92 - Deer cafeteria (32 present plus Forest Service personnel)

1/30/93 - Deer Community Building (27 present plus FS personnel)

2/27/93 - Deer Community Building (17 present plus FS personnel)

4/24/93 - Deer Community Building (13 present plus FS personnel)

6/12/93 - Boxley Church (12 present plus FS personnel)

Public comments have also been solicited at several points throughout this Wild and Scenic River determination process. The first request for comments occurred when 13 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 (Amendment #2), when the corridor locations were evaluated for the six congressionally designated rivers, when the Forest Land and Resources Management Plan was amended (Amendment #7) to establish corridors, and finally, when drafting this comprehensive management plan process.

Landowners in Northern Arkansas are very concerned about land condemnation and the possibility of condemnation of scenic easements. They have farmed, raised families and lived on the land along the streams for many years; some since pioneer days in the early 1800's. They want no interference from the Forest Service nor any other agency and strongly oppose inclusion of their land in the corridor. Their opposition is based on the belief that this another move by the Federal Government to acquire additional land as was done along the Buffalo National River in the 1970's. They are convinced there is no need for additional protection for the creek since it has fared well under their stewardship in the past.

Concerns about condemnation and encroachment of the Federal government into private landowner rights stimulated formation of the Arkansas Scenic River Landowners Association. These concerns arose over the past history of condemnation used by the National Park Service in establishing the Buffalo National River corridor in Arkansas and used by the Forest Service on the Eleven Point Wild and Scenic River in Missouri. Current Federal implementation of the Threatened and Endangered Species Act and wetland protection issues have reinforced landowner concerns. This group strongly supported scenic river management alternatives which minimized inclusion of private lands within a river corridor.

The Wild and Scenic River corridor has no effect on private land ownership. According to the Act, condemnation of land for fee title (the complete taking of land) is not allowed for any private land within the corridor since more than 50% is in Federal ownership. The Act does allow condemnation of easements for conservation or scenic reasons as a last resort to be exercised only to protect river values and/or to insure public access. However, none have been identified for these river segments.

#### 1600 INFORMATION SERVICES

Public concern: In general those persons commenting felt that additional signs would not be necessary or appropriate. However it was recommended that the Forest Service post river hazard information at the portal just below Dixon Ford.

#### 2230 RANGE MANAGEMENT

Public Concern: There is a general concern that continued woodland grazing threatens water quality values.

## 2300 RECREATION / 6700 USER SAFETY

One of the chief concerns was for boater safety. Paddlers commented that over the years the popularity of headwaters of the Buffalo has brought more inexperienced boaters to the area. They're rescuing inexperienced boaters more frequently. They also noted the limitations for ground assisted rescues. Specifically they asked about identifying rescue points at Curtis Cemetery and on the road below the Mountain View Church [this is within the Upper Buffalo Wilderness Unit on the Buffalo National River].

Public concern: Along with this came the concern for expeditious Search and Rescue [SAR]. Paddlers asked that the Forest Service post river hazard information at places like Dixon Ford. They also asked that we screen boaters for experience levels.

## 2360 HERITAGE RESOURCES

Public concern: With the increase use in these areas, there will be more inherent destruction of cultural resources. Another concern was for visitor safety and animal loss from man-made hazards such as old ground level wells)

#### 2400 VEGETATION MANAGEMENT

Public concern: Overall perception is that these areas would not be managed for timber but rather preserved.

## 2500 WATERSHED AND SOILS

Public Concern: The overall concern is that the watershed is not being protected. The perception is that logging practices of the past (including the road systems and skid trails) have impacted the overall quality of the watershed.

# 2600 WILDLIFE, FISHERIES AND RIPARIAN RESOURCES

Public concern: Impacts from introduced exotics (feral hogs, mimosa, multiflora rose). In particular the concern was expressed that feral hogs have the potential to impact sensitive plant communities, turkey nests, and potential for sport hunting perpetuating the reintroduction of more rather than extirpation.

# 2670 THREATENED, ENDANGERED AND SENSITIVE SPECIES

Public concern: Need for protection provisions for PETS (Proposed Endangered, Threatened and Sensitive species) including restrictions on commercial collection of goldenseal, ginseng and other herbs).

Recommendation was made to protect linkages like the Terrapin branch drainage area which connects with the proposed additions for the Dismal Creek Special Interest Area. Sensitive elements listed were: Disporum lanuginosum, Carex communis, enclosed landscape, Dodecatheon frenchii, Upland headwater stream - Terrapin, Lycopodium lucidulum, Heuchera villosa, Mixed mesophytic forest with high quality stands of beech, oaks, basswood, magnolias and rich understory.

#### 2700 SPECIAL USES

Public concern: What would happen if a large group came to use one of these areas? Would outfitters and guides be allowed?

#### 2800 MINERALS AND GEOLOGY

Public concern: What would be the protection from strip mining such as those for lead mining in Missouri?

Public Concern: Geologic maps of the area would facilitate planning efforts on these W&S Rivers.

#### 5400 LAND OWNERSHIP PATTERNS

#### TRESPASS ON PRIVATE LAND

Concern is need for rescue access via Curtis Cemetery.

#### 5300 LAW ENFORCEMENT

Public concern: Will the Forest Service be able enforce regulations for these areas (for illegal ATV use, user conflicts, responsiveness to private landowners problems from increased recreation use).

#### 7700 TRANSPORTATION

Public concern: Would public land access points be better identified to avoid landowner conflicts? In general the sentiment was to not upgrade road levels in these areas. The existing transportation system has both helped and hurt the area.

# Summary Of Public Concerns after July 25, 1996

#### 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 individual 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.

# **METHOD**

Content analysis is one of several methods of analyzing public response. As an analytic system, content analysis is a means of separating portions of responses into various categories so that the message may be more thoroughly examined and reviewed, interpreted and evaluated. To state it more simply, in the analysis process the information in each letter is broken down into pieces, then grouped back together to tell the story of the public's opinions on the topic at hand. The primary intent of this method of analysis is to capture comments in the public's own language. It accurately captures and displays public concerns and reasoning about particular issues or actions presented for comment. The writer's reasoning is included regardless of the reviewer's opinion about its logic or worth. Content analysis is

meant to reproduce ideas, not evaluate them. The result is an organized summary of what the publics are saying that a decision maker can review.

A coding system is used to keep the analysis process systematic, visible and trackable. The coding system was designed specially for this project capturing the topic description, as well as any editorial comments and information requests.

Members of the analysis team read each letter completely highlighting all comments, opinions and supporting statements with a transparent marker. The appropriate topic code was then placed next to the highlighted comment. Each letter and subsequent coded comments were entered into a database where they were sorted by topic code. Reviewers studied each topic query eliminating duplicate comments to create a comprehensive summary of what the public said. These summaries are included in the "Results" section of this report.

## **RESULTS**

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:

Outstandingly Remarkable Values: Some indicated concern that the list of outstandingly remarkable 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 fewer 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 commentor 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 commentor expressed an opinion that the management plans should include private land within the riparian areas. One commentor 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 time frame 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

negative 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..."

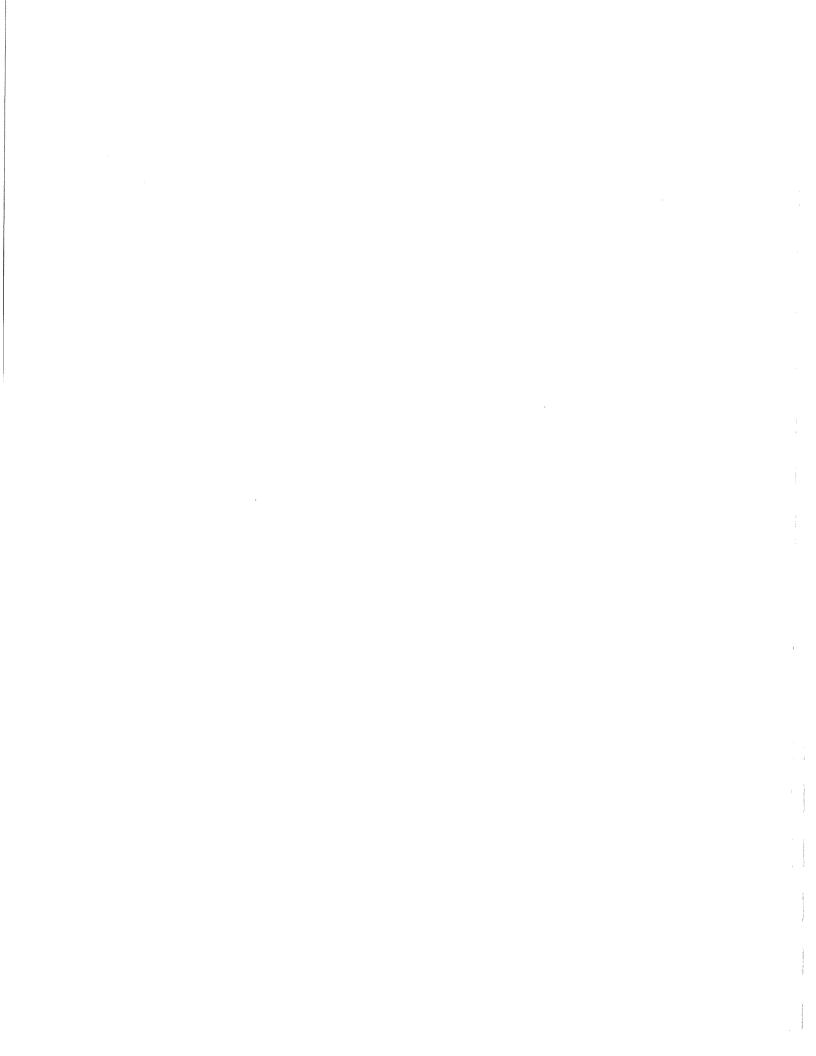
Buffalo: "Road 1463A should be upgraded to allow vehicles with horse trailers to pass more safely".

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



#### APPENDIX E

#### WATER MONITORING PROGRAM

In January of 1990 the district initiated a water monitoring program on all three wilderness streams [Buffalo, Hurricane, Richland]. This has included quarterly grab samples on six sites, an upstream and a downstream site for each stream.

In 1992, in coordination with the state wide efforts for Water Education Teams (WET), the Forest purchased water monitoring equipment for the Jasper High School WET-team. Jasper High School is monitoring the Little Buffalo River at two sites near the school. And the Forest is monitoring two sites on the Buffalo using the same sampling protocols. Currently Arkansas Department of Pollution Control and Ecology and the Resource Management Division of the Buffalo National River assist in forwarding this area stream monitoring.

On the Buffalo, the two sample sites are located at Dixon Ford and just downstream from the Upper Buffalo Wilderness Unit boundary within Buffalo National River. The upper site ranged in pH from 5.9-7 and the lower 6.9-7.2 at the upper site. Alkalinity ranged from 4-18 (mg/L as CaCO3) at the upper site, and 8-93 (mg/l as CaCO3) at the lower site.

Parameters monitored include suspended sediment, turbidity, phosphorus, nitrogen, sulfate, alkalinity, pH, and benthic macroinvertebrates. From 1/90 - 9/92 grab samples were analyzed by Berea Lab, KY. From 10/92-9/93 grab samples were analyzed by U.S.G.S Lab, FL. From 10/93 - 1996 grab samples were analyzed by the Water Resource Lab at the University of Arkansas. Benthic identification has been done by contract with Arkansas State University at Jonesboro.

#### LAC INDICATORS

Turbidity values taken over the five year period were not in comparable units. Beginning in 1993, through 1996, turbidity was measured in FTUs. This field data collected in 1993 - 1996 shows average turbidity values for the upper site are 12 FTUs and 7 FTUs for the lower site. The FTU unit of measure will be employed to monitor LAC standards.

For a three year period, the fecal coliform count for the upper sample site at Dixon Ford showed a geometric mean of 4 colonies/100mL with a standard deviation of 222 [9 samples, 1/90 - 12/93]. The large standard deviation reflects one high FC count recorded in the month of July. The lower sample site had a geometric mean of 2 colonies/100mL with a standard deviation of 6 [8 samples, 1/90 - 12/93]. The arithmetic mean for this five year period is 27 col/100mL for the lower sample site and 71 col/mL for the upper sample site near Dixon Ford. The state standard for drinking water is 200 col/100 ml and 400 col/100 ml for body contact waters. Fecal coliform is merely an indicator for other pathogens which could be present and potentially harmful as disease carriers.

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## APPENDIX F

# **WILDERNESS**MINIMUM TOOL DECISION QUESTIONNAIRE

If this action is covered in an approved planning document, do not complete this form.

PROPOSED ACTION
[When considering Wilderness values/resources, address: natural and cultural resources, solitude, primitive character, visitor experience, research effects, and recreation resources.
1. What are the alternatives to the proposed action?
2. What long and short term impacts to Wilderness values are associated with each alternative?
3. What mitigating measures can be taken in association with each alternative?
4. How will the proposed action (if non-emergency) contribute to the management of Wildernes resources?
Comments:
Action Approved:
Action Denied:
DISTRICT RANGER or (Date)

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#### APPENDIX G

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#### APPENDIX H

# STANDARD OPERATING PROCEDURES FOR SEARCH AND RESCUE INCIDENTS ON THE OZARK NATIONAL FOREST

**PURPOSE:** To provide standard procedures and guides for U. S. Forest Service personnel in responding to a search and/or rescue.

**RESPONSIBILITY:** It is the responsibility for all OZARK NATIONAL FOREST Employee's to become familiar with contents of this operating plan and be able to implement this plan should the need arise. Insure all Forest Service personnel involved in wilderness SAR operations are trained in Forest Service and external agency SAR protocols, wilderness management policy, and delegations of authority.

AREAS OF RESPONSIBILITY: The appropriate county sheriff's department has overall responsibility for conducting search and rescues in the state of ARKANSAS. The U. S. Forest Service will act as advisors and provide technical assistance for search and rescues within the boundaries of the Forest. Requests for additional resources may be provided with the approval of the District Ranger.

**REQUEST FOR SEARCH AND/OR RESCUE:** Timely response to requests for search and/or rescue is vital. It is of equal importance to obtain the necessary information that would be critical for responding resources (e.g., information that will enable them to organize and effect a timely and professional search and/or rescue.)

Note: Most First Responders are not trained for backcountry rescue. It is imperative that we not put rescuers at risk. Often times we get in the 911 mentality and think it's best to do SOME-THING quickly. It may be more prudent to wait and get the RIGHT people first (e.g., a SAR unit trained in backcountry rescue).

#### A. Background

The following is a philosophical background paper that may be used to help explain and/or support decisions concerning search and rescue operations in Wilderness.

The Wilderness Act of 1964, amended in 1978 (16 U.S.C. 1131-1136), specifies congressional policy to secure for the American people an enduring resource of wilderness for the enjoyment of present and future generations. Wilderness "in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." This definition is important as it establishes the basis for all USDA Forest Service management actions in classified Wildernesses. With certain exceptions, the Act prohibits motorized equipment, roads, and mechanical transport. Parts 293, 261, 219 and 228 in Title 36 of the Code of Federal Regulations apply to wilderness management.

At all times, Wilderness is to be managed to prevent degradation. The nondegradation principle seeks to maintain each Wilderness in at least as wild a condition as it was at the time of classification. The nondegradation policy assures appropriate diversity and Wilderness character are maintained.

Wilderness is managed to protect the values associated with it, specifically, the user's experience, natural ecological process, spiritual meaningfulness, and scientific research. Frequently, this means we must manage the people, including users and other agencies that traverse, study, and use the wilderness resource. Ninety nine (99) percent of the problems associated with impacts on the wilderness resource can be tied to inappropriate use. For this reason, the Forest Service has standards and guidelines that are used to manage wilderness. Unless changed by the Forest's Plan, these standards are in place, and are listed by wilderness resource spectrum ranging from transition to pristine classifications (Forest Service Manual 2320).

Forest Service policy is to encourage and support strong local and State leadership in Search and Rescue operations. Field personnel must continue to be responsive to the public needs, particularly as they relate to the protection of life and property.

As stated in FSM 2326.1, the Forest Supervisor may approve the use of motorized equipment or mechanical transport in Wilderness for emergencies "where the situation involves an inescapable urgency and temporary need for speed beyond that available by primitive means." Normally, the District Ranger and/or a representative approved by the Forest Supervisor has the authority to authorize motorized equipment or mechanical transport in Wilderness where a "life-threatening" emergency or a death exists.

These guidelines will help the local manager make the appropriate decision. However, the local manager rarely has all the facts at hand when the decision must be made, and it is better to err on the side of safety than to risk further injury or a life. Also, life-threatening criteria can be applied to rescuers themselves as in the case where the use of a helicopter is the only "safe" way to carry out the rescue. There may also be embarrassing public relations problems associated with a bureaucratic approach to securing approvals in emergencies. The most important factor is communication; the Forest Service needs to communicate internally and externally what Wilderness is and how it should be utilized and all parties need to communicate early and often during a search and/or rescue operation.

Technically, the Sheriff's Department is in charge of all Search and Rescue; however, the Forest Service's job is to make sure the search and rescue organization is familiar with the terrain and its land allocations in which the Search and Rescue is occurring. When the local Forest officer makes a decision to use motorized equipment in the Wilderness for an emergency Search and Rescue situation, a brief narrative should be prepared documenting the situation in which they granted approval. This should be sent to the Forest Supervisor as soon as possible.

We do not want to cause undue stress to family members of an individual that is facing life-threatening conditions, or who is deceased. While death diminishes the urgency, in some ways it increases the urgency so the family may finally come to grips with the outcome and deal with it accordingly.

# B. Approval Guidelines for Use of Motorized and Mechanical Equipment for Search and Rescue Within Wilderness

### **RESCUE**

### Always Approve

- 1. Removal of deceased persons.
- 2. Removal of people with obvious life-threatening injuries; e.g., heart attack, stroke, serious bleeding, fractured skull.
- 3. Whenever there is real doubt as to whether or not the injury is life-threatening.

### Usually Approve

- 1. Injury is not life-threatening, but delay in rescue or rescue transportation by hand litter or stock may result in additional injury or serious complications resulting from initial injury; e.g., broken leg where the pain resulting from the primitive transportation would put the person into shock, serious cut from a source with high potential for infection to a person that is several days travel from a trail head.
- 2. Injury is not life-threatening but it is serious and the present and/or predicted weather would likely cause delays in travel that would make the injury life-threatening.
- 3. Where the topography or footing is so hazardous that it will expose the injured person or the rescue team to a very high probability of additional or new serious injury (approval here might depend on the skill or experience of the rescue team). Normally refers to use of aircraft.

## Never Approve

1. When the injury is not life-threatening and the person can transport him or herself or be transported by non-motorized or non-mechanical means to the nearest logical point of rescue; e.g., simple fracture of arm, sprained ankle.

#### **SEARCH**

This pertains only to those items requiring Forest Service approval; i.e., air drops, landing of aircraft in wilderness or the use of motorized or mechanical equipment in the wilderness. (Overflights are not an approved item, but we should advise potential violators of the FAA 2,000 feet advisory that overflight criteria should be essentially the same as landing criteria.)

## Always Approve

- 1. There is good reason to believe that the person being searched for has a life-threatening injury; e.g., age, health condition, mental condition.
- 2. There is good reason to believe the lost person will be placed in a life-threatening situation such as a result of a predicted adverse change in the weather; e.g., person was lightly-dressed and snow storm is predicted.

- 3. The <u>only</u> potential rescuers are not physically capable of accomplishing the search without motorized or mechanical equipment.
- 4. When there is an external situation requiring immediate location of a person within the wilderness; e.g., immediate relative is in critical medical situation.
- 5. When there is serious doubt concerning whether or not the situation is life-threatening.

## Usually Approve

A close relative has died and the family has requested the person be located so they can perform a necessary function within uncontrollable time constraints.

## Never Approve

- 1. There does not appear to be any real indications that the person is in a life-threatening situation; e.g., person in good health, dressed for the situation is slightly overdue.
- 2. Outside request is made to locate a person for noncritical external reasons; e.g., attend funeral of a friend, to make financial decisions, to see if person is okay.
- 3. The specific requested method will result in physical impact to the wilderness and there are alternate methods that accomplish the objectives of the search without the impacts.

# C. SEARCH AND RESCUE GUIDELINES OVERVIEW

Group Size: Where possible, **maximum party size** should be <u>six</u> people in pristine wilderness resource settings. Primitive, SEMI-PRIMITIVE, and transition settings can accommodate up to 6 or 12 people. Livestock limits should be based on NEED...MINIMUM TOOL CONCEPT APPLIES TO MINIMUM NUMBER OF PEOPLE AND HORSES TOO.

(Note: Realize that it takes approximately <u>six persons per mile</u> to carry out an injured person, the party should be limited to only what is necessary.)

**Equipment**: As a rule, no mechanized or motorized equipment is allowed in wilderness. Exceptions are made for life-threatening injuries or death. These are determined on a case-by-case basis by the Forest Supervisor or the District Ranger responsible for the area. Where motorized equipment must be used, attention must be paid to access points, timing of landings or of use of noisy equipment or both, interactions with other users, impacts to vegetation and wildlife, and determine how they fit into the desired managed wilderness experience.

<u>Dogs</u>: Assess this need early on as tracking is based on human scent. It may only add to the chaos if used as a last resort. Ask if this is the minimum tool needed.

Method of Travel: In all cases, the preferred mode of travel is by foot or by horseback.

Managerial Standards - Evidences of Search and Rescue Operations: In all cases, the search and rescue operation should be as unobtrusive as possible in how the wilderness resource and visitor's experience might be affected. All efforts should be made to minimize any potential degradation of the resource or of the visitor's experience or both.

In some cases, it may be useful for the District Ranger to place a Forest Service person on-the-ground, in the field of operation, to inform the general public as to the situation and why non-Wilderness methods are being used.

**D. REQUEST FOR SEARCH AND/OR RESCUE:** Timely response to requests for search and/or rescue is vital. It is of equal importance to obtain the necessary information that would be critical for responding resources. Information that will enable them to organize and effect a timely and professional search and/or rescue.

### **OBTAIN THE FOLLOWING INFORMATION:**

- 1. Name, alias or nickname of person.
- 2. Address
- 3. Race Sex Age Height Weight Color Hair Color Eyes Build (other descriptive information (scars, beard, limp, glasses, etc.)

Description(include color, type material, etc.)

- 4. Shirt/Blouse
- 5. Pants/Dress/Skirt
- 6. Coat/Suit
- 7. Tie and/or Hat
- 8. Socks/Hose
- 9. Shoes/Boots-Sole Pattern
- 10. Point Last Seen-Time: AM/PM
- 11. Direction of Travel-Method of Travel
- 12. Knowledge of Area
- 13. Backcountry Experience
- 14. If Land Search-Carrying a Pack, Description and Contents
- 15. Name of Person Reporting
- 16. Relation to Missing Person
- 17. Present Location and Telephone No.
- 18. Other Locations and Telephone Nos.
- 19. Other witnesses.

## E. NOTICATION: (During Normal Duty Hours)

1. Notify the District Ranger or lead Forest Service Officer.

2. Determine the county jurisdiction and notify the appropriate county sheriff's office. The following is a list of county sheriff's and rescue agencies:

SPECIFY THAT THIS WILL BE A BACKCOUNTRY RESCUE [i.e., not volunteer fire department or First Responders/SAR UNIT IS NEEDED]

#### **BAXTER COUNTY**

Sheriff's Office - (501) 425-2400

### **CONWAY COUNTY**

Sheriff's Office - (501) 354-2411

## **JOHNSON COUNTY**

Sheriff's Department - (501) 754-2200

Johnson County Search and Rescue Team: 1-800-538-7243, after tone dial 6227, enter your return

telephone number after the second tone.

Contact: Kevin Caldwell, Team leader (501)754-6304

Office of Emergency Services - (501) 754-6383

### **MADISON COUNTY**

Sheriff's Office (501) 738-2320

Madison County SAR\*

Contact: Mike Bowles (501) 677-2765

\*several team members are certified on the national level in cave rescue and whitewater rescue.

#### MARION COUNTY

Sheriff's Office (501) 449-4236 Buffalo Point Ranger Station, NPS, Buffalo National River (501) 449-4311

### **NEWTON COUNTY**

Sheriff's Office (501) 446-5124 Emergency-446-2002

Office of Emergency Services (501) 294-5227

Contacts: Skip Krumwiede

Buffalo National River SAR - Searcy County Dispatch\*(501-448-2340)

\*they have radio contact with BNR

Contacts: Carl Hinrichs, Chief Ranger(501)741-5443#111

PRUITT RANGER STATION 446-5373

UPPER DISTRICT RANGER 446-5477 (home)

Gary Kiramidjian

### **POPE COUNTY**

Sheriff's Department- (501) 968-2558 Office of Emergency Services - (501) 890-6914 Northern Pope County for Search and Rescue - (501) 284-2291 contact Jerry Brock

### **SEARCY COUNTY**

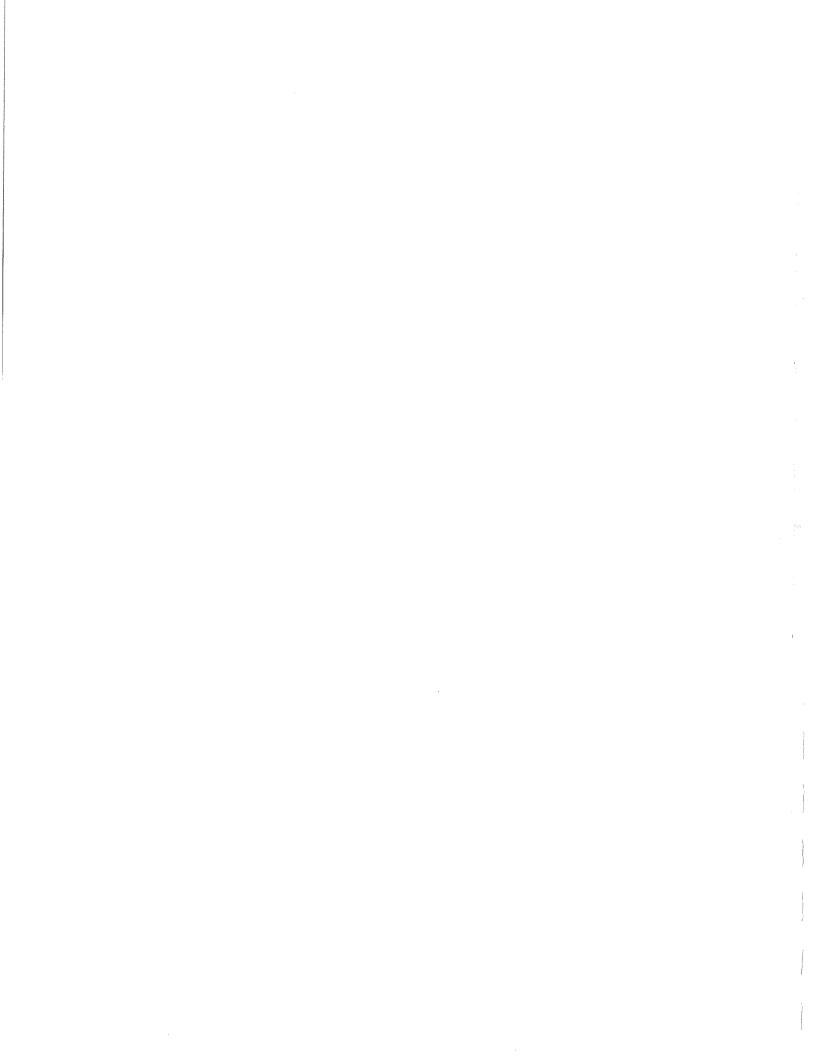
Sheriff's Department-Phone (501)448-2340 \*BNR contact for SAR unit EMS or Fire (501)448-2525 Witt Springs EMS (501)496-2495 [Gerald "Skip" Warner] note: these are First Responders, not a SAR unit.

### **VAN BUREN COUNTY**

Sheriff's Office - (501) 745-2112 Van Buren County Rescue, Leslie AR. (501) 745-2495, contact Steve Myers

#### **OTHER CONTACTS**

Susan Peters (Search and Rescue Dogs) Ozone, AR (501) 292-3292 Explorer Search and Rescue Post 393 (501) 982-4256, 24hr Pager 660-7337 contact Allen Lawrence Carrol Stuchell (Search and Rescue Dogs) (501) 988-5141



#### APPENDIX I

### 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 pratices, 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.

Limits of Acceptable Change (LAC) System - A framework for establishing acceptable and appropriate resource and social conditions in recreation settings. A system of management planning. Refer to USDA Forest Service General Technical Report INT-176, January 1985, Intermountain Forest and Range Experiment Station, Ogden Utah.

**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.

**Minimum tool rule** - Apply only the minimum impact policy, device, force, regulation, instrument or practice to bring about a desired result. Achieve results using the most "light-handed" approach.

**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.

**Nondegradation** - A concept that calls for the maintenance of existing environmental conditions if they equal or exceed minimum standards, and for the restoration of conditions below minimum levels.

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, SEMI-PRIMITIVE Non-motorized, SEMI-PRIMITIVE Motorized, Roaded Modified, Roaded Natural, Rural and Urban.

1. <u>Primitive</u> - 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. <u>Semi-Primitive Non-motorized</u> 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 my be present on a limited basis. Rustic and rudimentary facilities primarily for site protection. No evidence of synthetic materials; use native materials.
- 3. <u>Semi-Primitive Motorized</u> 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 native materials.
- 4. <u>Roaded Natural</u> 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 user as well as site protection. Use native materials but with more refinement in design. Synthetic materials should not be evident.
- 5. <u>Rural</u> 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. <u>Urban</u> 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** - An area of trees and other vegetation located in areas adjoining and upgradiant from surface water bodies and designed to intercept surface runoff, wastewater, subsurface flow and deeper groundwater flows from upland sources for the purpose of removing or buffering the effects of associated nutrients, sediment, organic matter, pesticides or other pollutants prior to entry into surface waters and ground water recharge areas.

**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.

# WILD & SCENIC RIVERS ACT

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## WILD AND SCENIC RIVERS ACT

#### <sup>1</sup>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).

<sup>&</sup>lt;sup>1</sup> 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 such river 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 each 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 such 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 therefor, 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 (here-inafter 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 noncommercial 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, developments 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 appropriations 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 the Land and Water Conservation Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).
- 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 provision 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:
  - (A) For activities on federally owned land, the Volunteers in the Parks Act of 1969 (16 U.S.C. 18g-j) and the Volunteers in the Forest Act of 1972 (16 U.S.C. 558a-558d).
  - (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 aqcuisition 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

## APPENDIX K

## **OUTFITTERS DIRECTORY**

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Big Piney Creek				
Moore Outdoors	•	•		• •
Paulette Helton		•		
Upper Buffalo River		Maria		
Buffalo Outdoor Center, Ponca	•		•	•
David's Canoe Rental	•	•		
Gordon Motel & Canoe Rental	•	•	•	
Houston Canoe Rental	•	•		*•
Lost Valley Canoe Service	•	•	•	• •
Razorback Canoe Rental	•	•		•
Riverview Motel Canoe Rental	•	•	•	
Middle Buffalo River				
Buffalo Camping & Canoeing	• •	•	•	• •
Buffalo Outdoor Center, Silver Hill	• • •		• •	•
Marshall Canoe Rental	•	•		
Silver Hill Canoe Rental	• •	•		• •
Tomahawk Canoe Rental	• •	•		
Lower Buffalo River				
Barnes Canoe Rental	• •	•	•	•
Bennett's Canoe Rental	•	•	•	•
Buffalo Point Canoe Rental, Inc.	• •	•		•
Buffalo River Fishing Resort	•	•	•	•
Cotter Trout Dock	•	•	,	•
Dirst Canoe Rental	• •	•	•	•
Dodd's Float Service & Canoe Rental	• •			•
Newland Float Trips	•	•	•	•
Pace Fishing Service	•	•		
Sportsman's Resort & Trout Dock	•	•	•	• •
Woodsman's Sport Shop & Cabins	•	•	• •	•
Caddo River				
The Shed Out Back				•
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The Shed Out Back				•	•	
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Middle Fork Canoe Rental		•	•		•	
Little Red River Below	Gre	er's Fe	rry			
Big G Resort				•	•	
Dripping Springs		•		•	• •	
Lindsey's Rainbow Resort		• •		• •	• •	•
Little Red River Trout Dock		•		• •	• •	
Lobo Landing		•		• •	• •	
Swinging Bridge Trout Dock & Campground						
Mulberry River						
Byrd's Mulberry River						
Canoe Rental		•			• •	
Turner Bend Canoe Rental		•	•		• •	
Wayfarer of the Ozarks		•			•	
Ouachita River						
Ouachita Joë's Canoe Rental		•	• •	•	•	
Ouachita & Rocky Shoals Canoe Rentals						
Wheeler's Canoe Rental						$\dashv$
Spring River						
Mammoth Spring Canoe Rental						
Many Islands Camp		•	• •			$\dashv$
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Southfork Canoe Rental	+					$\dashv$
Spring River Beach Club	$\dashv$	•				$\dashv$
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Spring River Oaks Camp						-
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Riverside Motel & RV Park

## **OUTFITTERS DIRECTORY**



### **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

# UPPER BUFFALO RIVER

Buffalo Outdoor Center, Ponca P.O. Box 1 Ponca, Arkansas 72670 (501) 861-5514

David's Canoe Rental P.O. Box 414 Jasper, Arkansas 72641 (501) 446-5406

Gordon Motel and Canoe Rental P.O. Box 60 Jasper, Arkansas 72641 (501) 446-5252 or 446-2399

Houston Canoe Rental Dogpatch, Arkansas 72648 (501) 446-2644

Lost Valley Canoe Service Ponca, Arkansas 72670 (501) 861-5522

Razorback Canoe Rental Route 1, Box 185 Dogpatch, Arkansas 72648 (501) 446-2255

Riverview Motel Canoe Rental P.O. Box 352 Jasper, Arkansas 72641 (501) 446-2616 or 446-5581

# 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 56 Highway 65 South St. Joe, Arkansas 72675 (501) 439-2244

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 Buffalo River Fishing Resort HCR No. 66, Box 379 Yellville, Arkansas 72687 (501) 449-5656 or 449-6568

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

Dirst Canoe Rental HCR No. 66, Box 385 Yellville, Arkansas 72687 (501) 449-6636

Dodd's Float Service & Canoe Rental HCR No. 66, Box 365 Yellville, Arkansas 72687 (501) 449-6619 or 449-6297

Newland Float Trips Route 1, Box 236 Lakeview, Arkansas 72642 (501) 431-5678 or 431-5604

Pace Fishing Service Route A, Box 131 Flippin, Arkansas 72634 (501) 453-2667

Sportsman's Resort and Trout Dock HCR 62, Box 96 Flippin, Arkansas 72634 (501) 453-2424

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

## **CADDO RIVER**

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

## **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

Swinging 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) 856-2386 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.Ö. 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 Cotter, Arkansas 72626 (501) 253-7801

White-Buffalo Resort Route 2, Box 163B Mountain Home, Arkansas 72653 Norfork, Arkansas 72658 (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 (501) 435-6414

Norfork Trout Dock P.O. Box 129 (501) 499-5500

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

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, Arkansás 72201.