

development concept plan

december 1983

BUFFALO STEEL CREEK-LOST VALLEY

NATIONAL RIVER / ARKANSAS



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DEVELOPMENT CONCEPT PLAN

STEEL CREEK-LOST VALLEY

BUFFALO NATIONAL RIVER
ARKANSAS

Denver Service Center
National Park Service
U.S. Department of the Interior

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INTRODUCTION

The act establishing Buffalo National River (PL 92-237) was approved by the president on March 1, 1972. On October 1, 1973, Buffalo River and Lost Valley state parks were turned over to the National Park Service. During 1974 and 1975 these were the only areas in the national river that had operating facilities.

In 1975 a conceptual plan entitled Master Plan, Buffalo National River was approved by National Park Service management. As described in the Master Plan, three major development sites are planned along the national river--Pruitt, Tyler Bend, and Buffalo Point (formerly Buffalo River State Park). Pruitt, located where Arkansas 7 crosses the Buffalo River, is the closest major site to the Steel Creek-Lost Valley area, even though it is 19 road miles away. It will be the district headquarters for the upper one-third of the national river, including Ponca, Steel Creek, and Lost Valley. (The national river headquarters is at Harrison.)

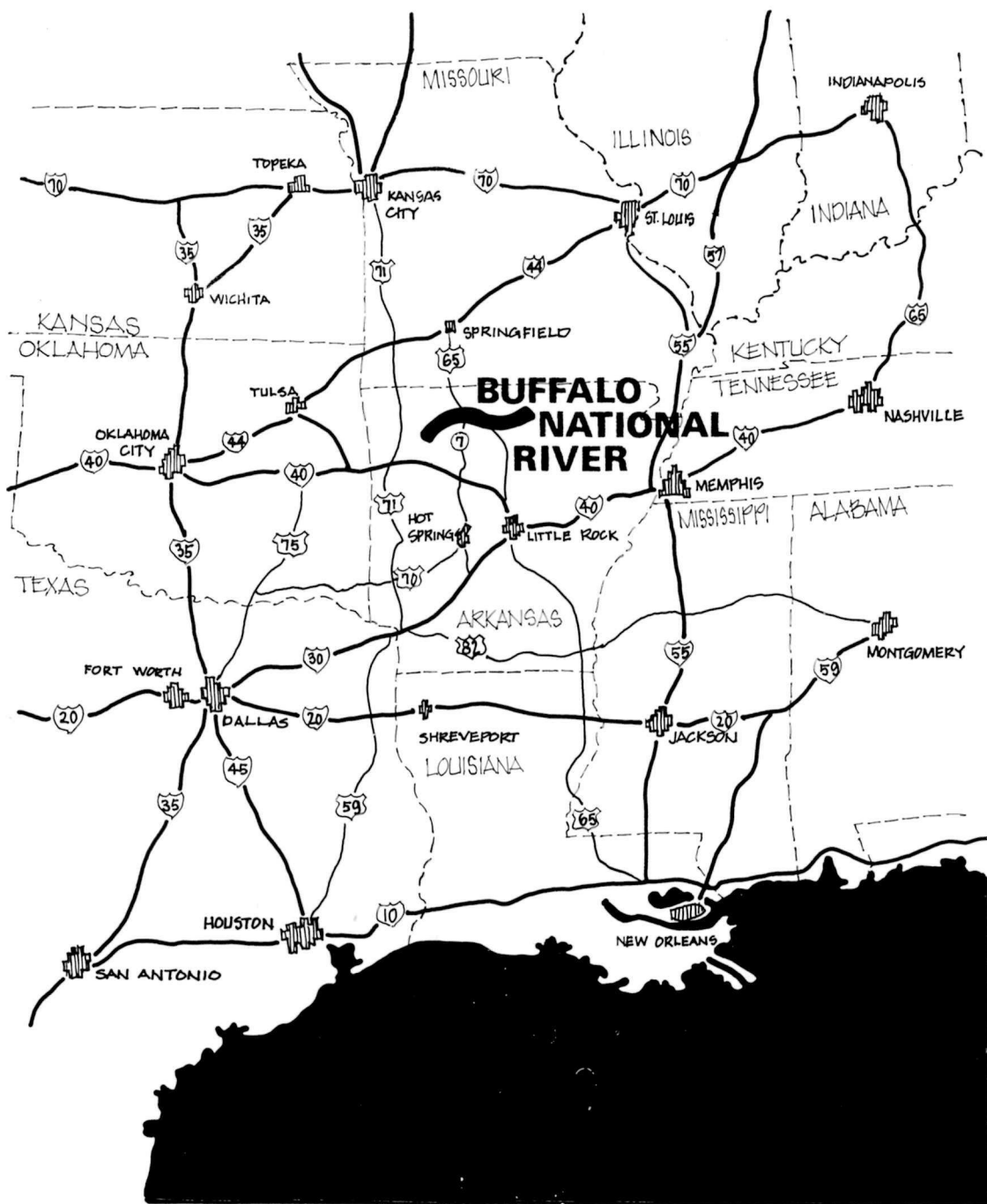
The Master Plan for Buffalo National River designates Steel Creek-Lost Valley (referred to as Ponca-Lost Valley in that plan) as a minor site for use and operations in the Pruitt district. Plan guidelines for this site indicate that local businesses outside the boundary will be encouraged to serve visitor needs; a foot trail will be developed to parallel much of the river; and access to the river will be provided in the vicinity of Steel Creek.

This Development Concept Plan, Steel Creek-Lost Valley addresses design and development for the Steel Creek, Ponca, Lost Valley, and Boxley sites. These sites, located within a 3-mile area, are treated as a single development because their use patterns are closely related. Based on concepts in the Master Plan, general criteria have been established for planning the sites: (1) development should afford the most efficient management arrangement and the most beneficial visitor use program for this section of the national river; (2) needed facilities should be located as much as possible out of the 100-year flood zone; and (3) new facilities should be compatible with present and future road alignments and bridge locations and should utilize a minimal amount of developable terrain. In addition, because a major asset of the Buffalo River is the purity of its water, development should be planned to ensure minimal pollution from erosion during construction, and sewage should be handled so that river water quality is not adversely affected.

Concerning specific sites within the development area, the following additional factors have been reflected.

LOST VALLEY

Lost Valley's year-round visitor use is largely associated with the surrounding natural features. Visitors engage in camping, picnicking, and hiking. The general area is also conducive to scenic driving, fishing, and hunting--although hunting is not permitted within the development area.



REGION

Buffalo National River, Arkansas

United States Department of the Interior / National Park Service



173	40,062
DSC	JUL 78

Problems currently stem from inadequate facilities to protect the environment from the impacts of visitor use in an area with limited terrain suitable for development. Sites at the mouth of Lost Valley and Steel Creek are better suited than other potential development areas because more land is available to provide for visitor needs.

PONCA

The Ponca low-water bridge has been the launching site for spring canoeing, primarily because there is public river access. In past springs, the site has experienced intensive use by floaters parking autos, unloading gear from autos, loading gear into canoes, and launching canoes. This activity has taken place on or immediately adjacent to Arkansas 74 and the single-lane bridge, and congested conditions and visitor safety have been primary concerns in the area.

Acquisition of the Steel Creek site has allowed all activities that formerly took place at Ponca to be better accommodated there. Management has already reduced congestion at Ponca by encouraging floaters and outfitters to launch at Steel Creek.

Facilities at Ponca will provide for a low level of river access and otherwise will be limited to serving visitors' enjoyment of the historical farmsteads and their exploration of the Leatherwood Creek area.

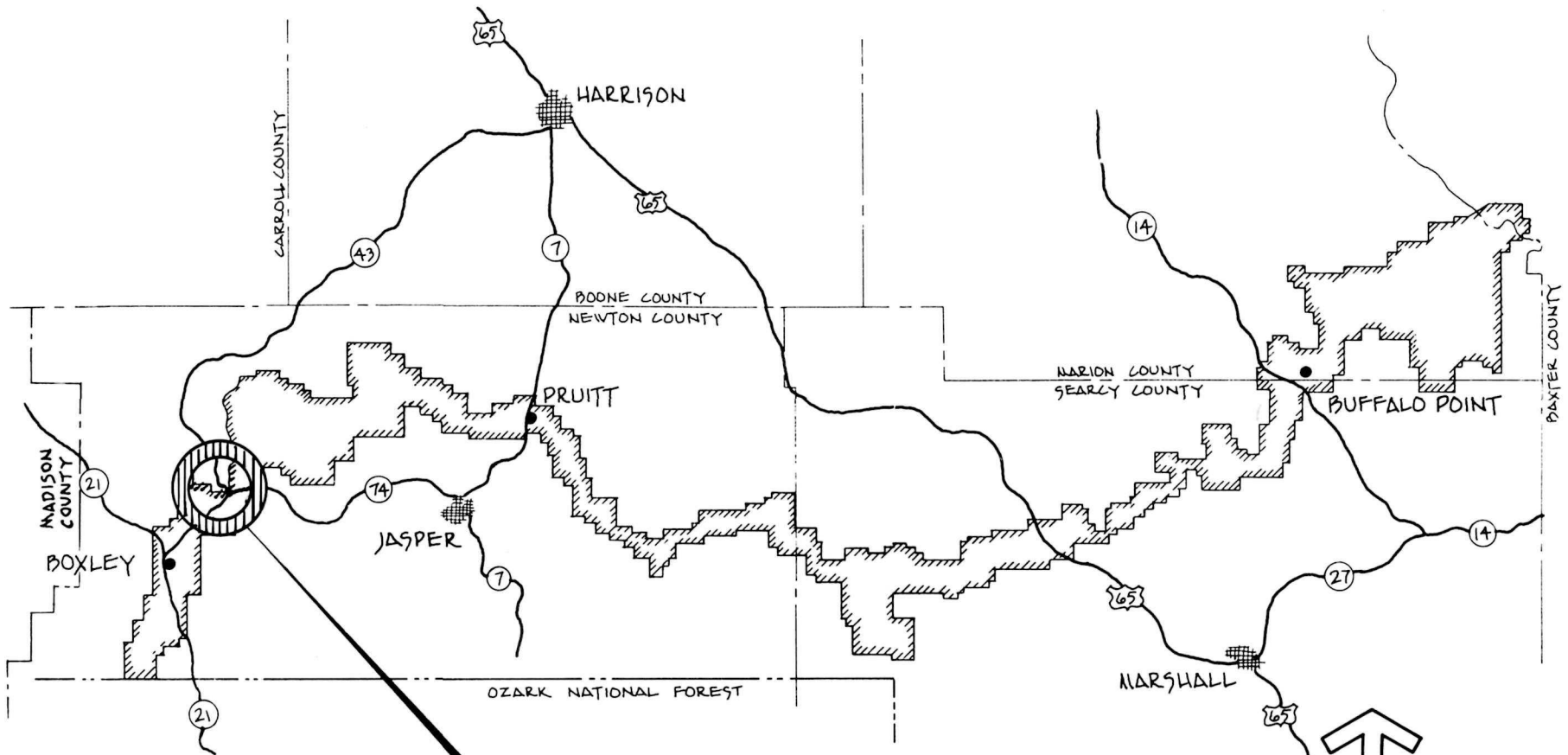
STEEL CREEK

Facilities at Steel Creek include a ranger office, a ranger residence, a cooperative research laboratory, and storage buildings. Visitors currently use the site for canoe launching and camping.

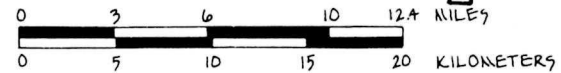
Steel Creek, adjacent to the river bank, is ideally situated to support river users, and it also has sufficient space for development of associated facilities above the floodplain. The Ponca Wilderness Area, covering 11,300 acres, surrounds the Steel Creek site on three sides; therefore, Steel Creek also has potential for use as a trailhead.

BOXLEY GRIST MILL

The Boxley grist mill is not located in the main development area, but it is an important nearby resource that has potential as a visitor attraction. It is listed on the National Register of Historic Places as being of regional significance. The structure is still in private ownership and not open to the public. When it is acquired, the National Park Service will assume responsibility for maintaining the historic mill, mill pond, and millrace. Exhibits and/or guided tours will be provided to interpret the story of the mill and the farming community it served.



**STEEL CREEK -
LOST VALLEY**



LOCATION

BUFFALO NATIONAL RIVER

173	40,046A
DSC	8/77

DESCRIPTION OF THE ENVIRONMENT

STEEL CREEK-LOST VALLEY

Lost Valley, Ponca, and Steel Creek are located in the upper end of Buffalo National River in the Ozark Mountains of northwestern Arkansas. The site, which lies in Newton County, is about 26 miles southwest of the town of Harrison.

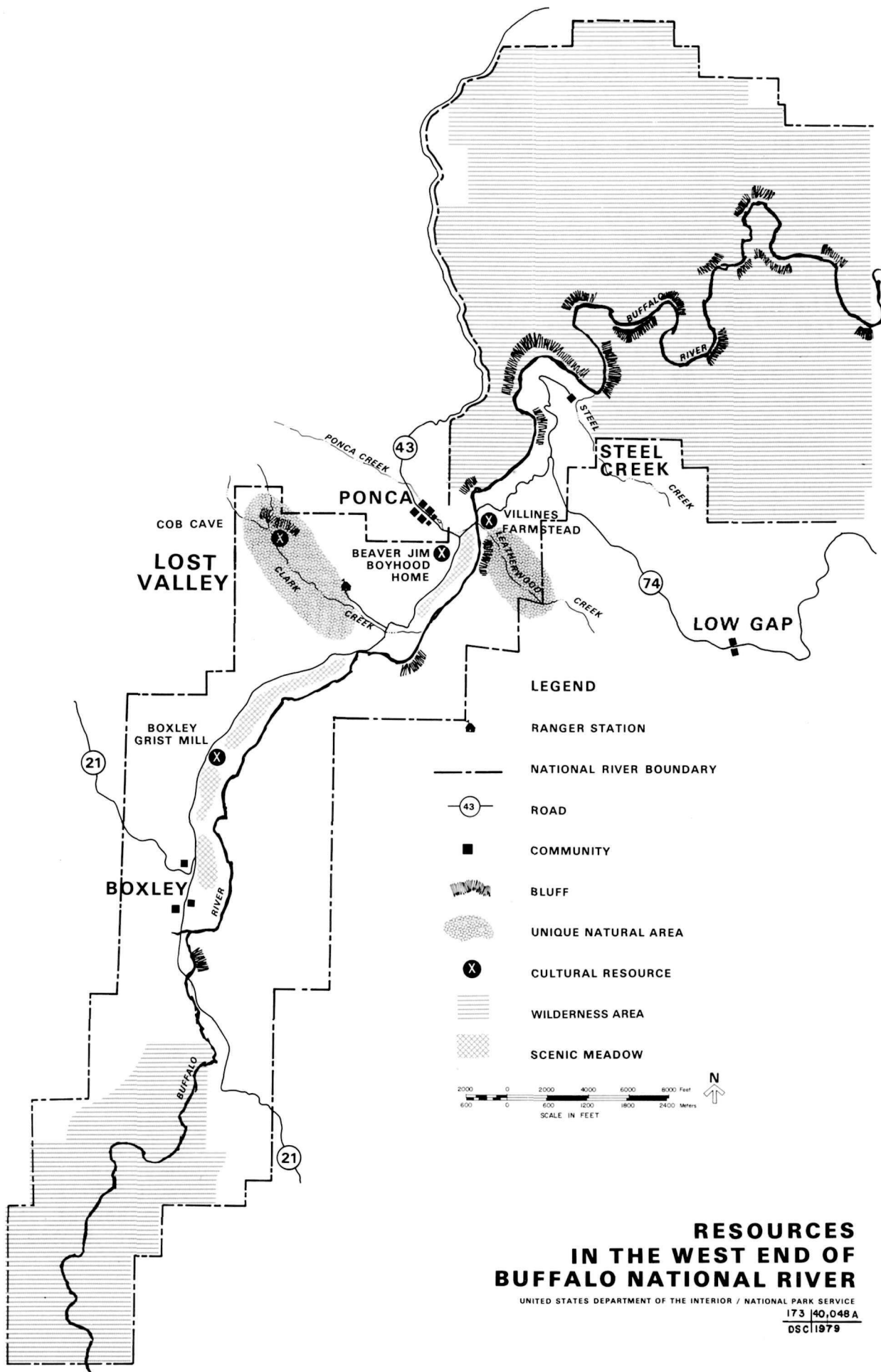
The Buffalo River begins in Ozark National Forest at an elevation of 2,561 feet. At its headwaters the river is small, with a steep gradient; it drops 1,300 vertical feet in 16 miles before it enters the national river boundary. As the river flows from the boundary to the Boxley bridge (5 miles), it drops approximately 23 feet per mile and is so small and rocky that only very experienced canoeists can safely float the area. This uppermost section of the national river is mostly forested and very hilly. From the Boxley bridge to the Ponca bridge within the Steel Creek-Lost Valley area, the gradient is 16 feet per mile; this portion of the river (6 miles) is occasionally floated in spring. The Boxley valley on the main river is mostly pastoral land. It has been designated in the Master Plan as a private use zone where the agricultural scene will be preserved.

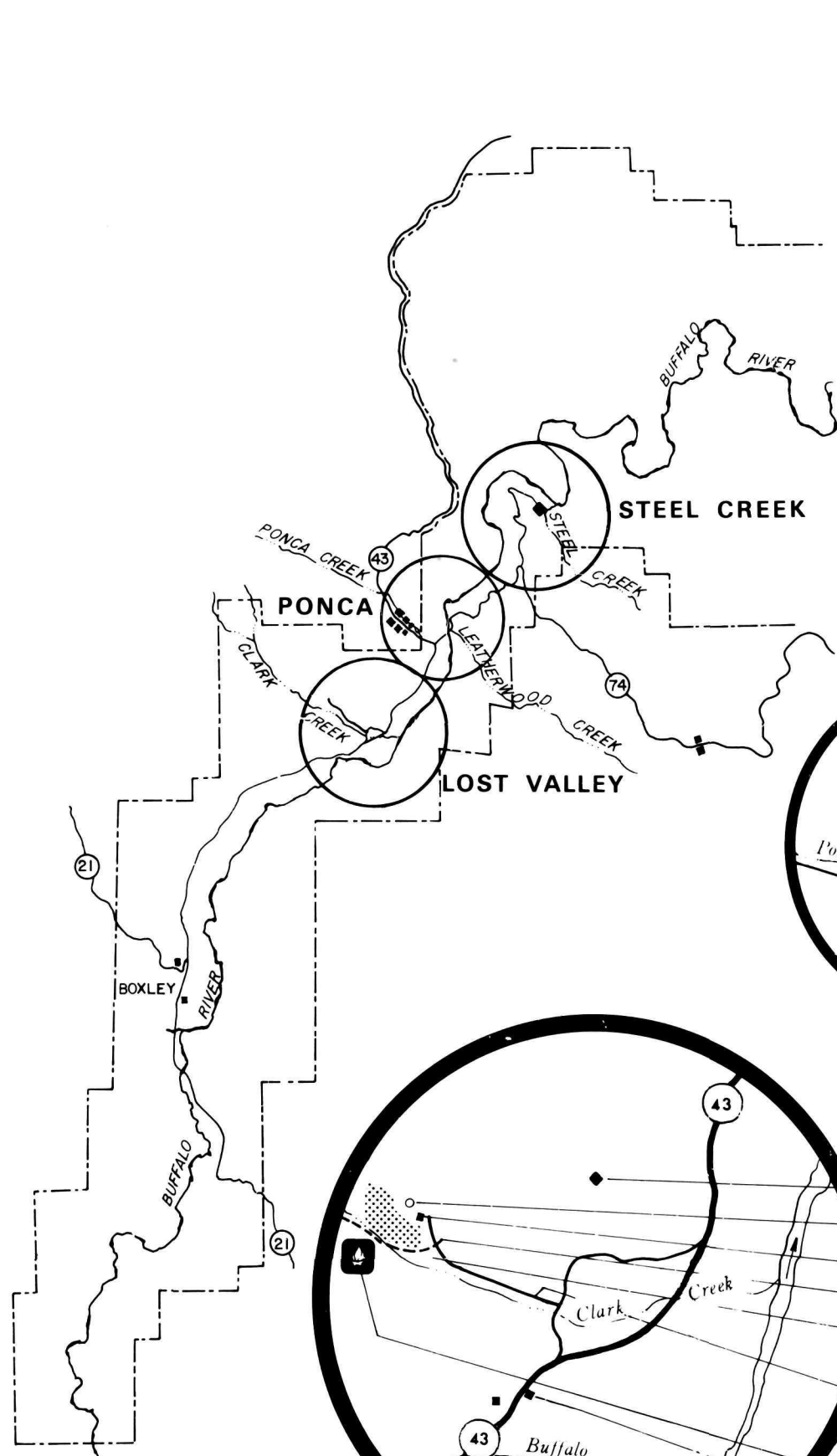
Existing Resources

The westernmost (upstream) feature in the Steel Creek-Lost Valley area is the historic Boxley grist mill, located about a mile downstream from the town of Boxley. This mill has not been operated since 1950, but prior to that time it was used for 80 years to grind grain for the local community. The building is in relatively good condition, is the only grist mill still standing in the northwest section of Arkansas, and is listed on the National Register of Historic Places.

Clark Creek is a small tributary that enters the Buffalo River a mile below the Boxley grist mill. Lost Valley lies along this tributary. The valley has significant natural and scenic values. It is quite narrow and is forested except for the vertical cliffs that edge it, the highest of which rises approximately 400 feet above the streambed. The mouth of the valley is a broad, gently sloping area with meadows interrupted by occasional rows of trees.

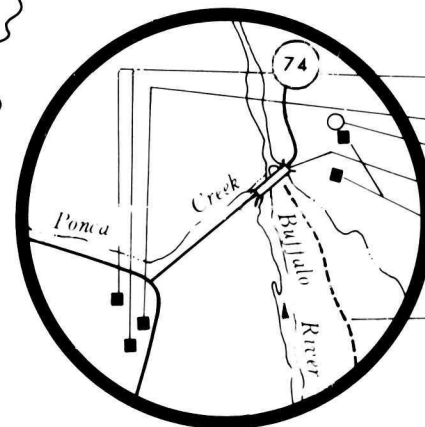
Access to Lost Valley is along Arkansas 43 paralleling the Buffalo River and then along a $\frac{1}{4}$ -mile graded road into the site. The developable area, situated at the mouth of the valley between an existing ranger station and the Buffalo River 100-year flood line, is approximately 43 acres. Six acres currently support park facilities, farm buildings, and roads; 22 acres are cleared for agricultural use; and the remaining 15 acres are in natural vegetation. Facilities (in the former Lost Valley State Park) include a campground, a picnic area, a parking area, vault toilets, well water, a hiking trail, and the ranger station, which also serves as a residence. The Beechwood community center and cemetery are located on the north side of the mouth of the valley.





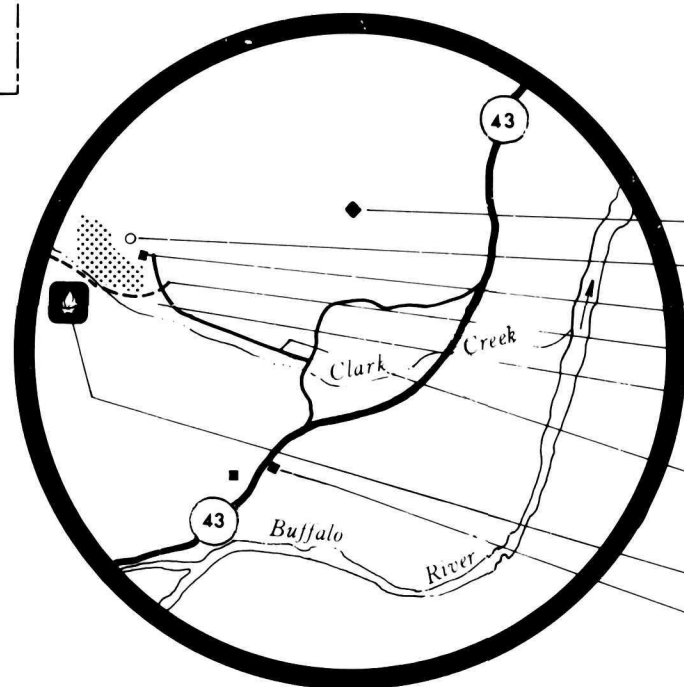
STEEL CREEK

- FLOATER CAMPING
- CANOE LAUNCHING
- WELLS
- 2 RESIDENCES
- WORKSHOPS
- GARAGE
- STABLES & OFFICE
- EXISTING POWER & TELEPHONE SERVICE
- GRAVEL ACCESS ROAD



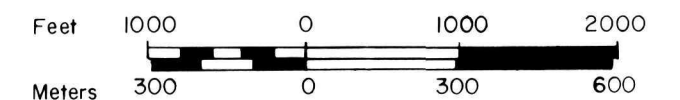
PONCA

- RESIDENCE & FARM BUILDINGS
- BEAVER JIM BOYHOOD HOME (HISTORIC)
- WELL
- LOW-WATER BRIDGE
- VILLINES FARMSTEAD (HISTORIC)
- HIKING TRAIL (OLD JEEP ROAD)



LOST VALLEY

- BEECHWOOD COMMUNITY CENTER & CEMETERY
- WELL
- RANGER STATION/RESIDENCE
- HIKING TRAIL
- CAMPGROUND: 15 SITES WITH TABLES, PARKING AREA, PIT TOILETS & WATER SUPPLY
- GRAVEL ACCESS ROAD
- EXISTING POWER & TELEPHONE SERVICE
- CAMPFIRE CIRCLE
- RESIDENCE & FARM BUILDINGS (PRIVATE OWNERSHIP)



existing conditions

STEEL CREEK — PONCA — LOST VALLEY

BUFFALO NATIONAL RIVER

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

The Ponca area is $1\frac{1}{2}$ miles downstream from Lost Valley. Because of its easy accessibility, it has traditionally been a popular canoe-launching site in the spring. Two tributary streams enter the Buffalo near Ponca: Ponca Creek, which flows through the community of Ponca, enters from the west; Leatherwood Creek, which drains a steep-sided north-facing valley that has an excellent display of unusual flora, enters from the southeast.

Facilities in the Ponca area consist of the paved road and low-water bridge. The historic Villines farmstead is located just beyond the east end of the bridge, and the Beaver Jim boyhood home is located $\frac{1}{4}$ mile west of the bridge near the junction of Arkansas 74 and 43. Another 1,000 feet west is the boundary of the national river.

The community of Ponca, just west of the national river boundary, is an unincorporated town with no common water or sewer systems. It includes a small grocery store, several canoe rental businesses, a restaurant, and a lodge. These establishments are small, are open seasonally, and serve the local community as well as tourists.

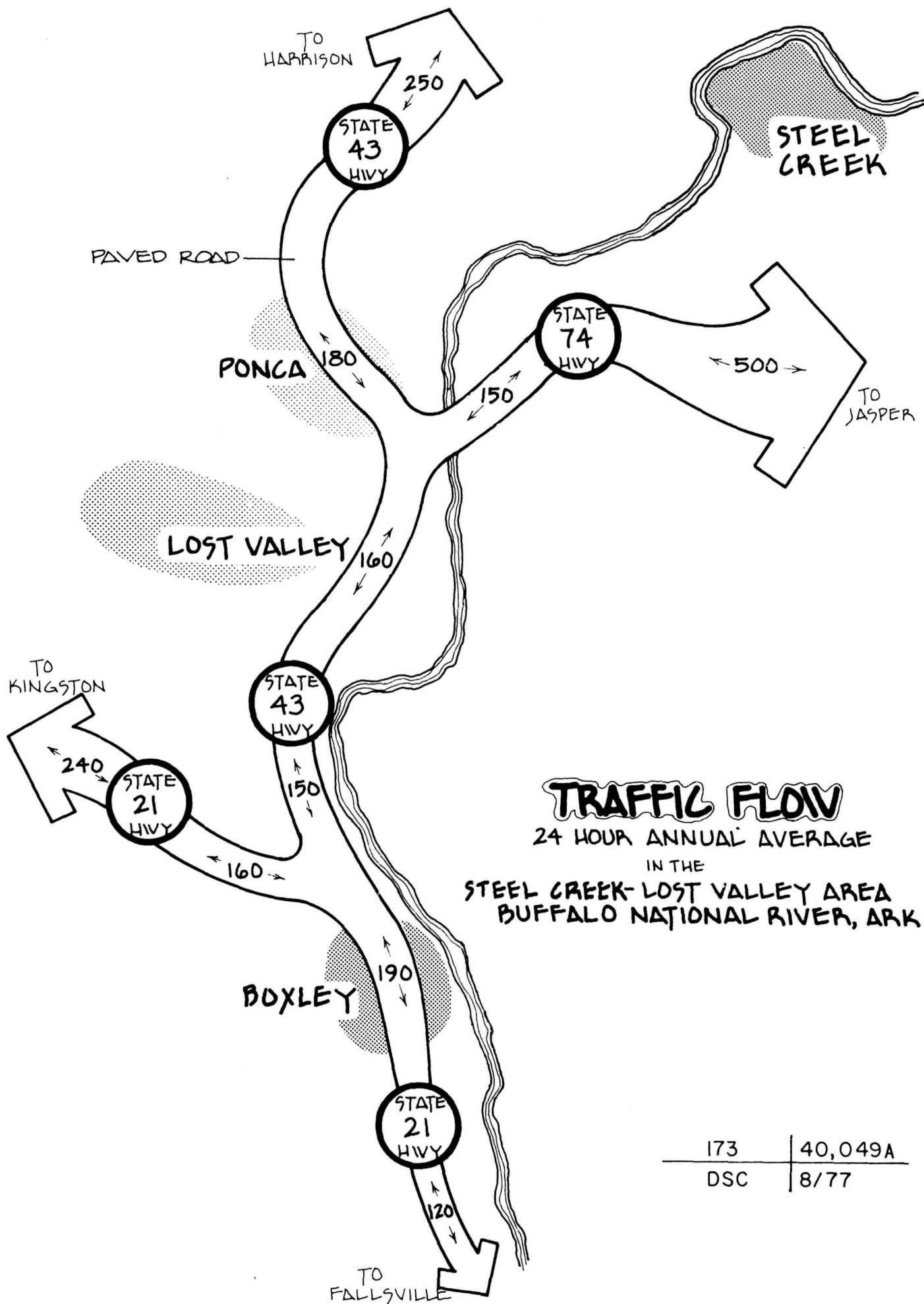
Downstream from the Ponca bridge, the Buffalo River valley narrows and there are frequent spectacular vertical bluffs. From Steel Creek to Kyle's Landing, a distance of 9 miles, the gradient is $12\frac{1}{2}$ feet per mile.

Steel Creek, a former horse ranch, is located $1\frac{1}{2}$ miles downstream from the Ponca bridge (3 miles by road). The ranch is located in a meadow on the south side of the river; the opposite bank is a vertical bluff 300 feet high. Beginning $\frac{1}{4}$ mile downstream from the Ponca bridge, the north side of the river is designated the Ponca Wilderness Area (11,300 acres). This section of the Buffalo is noted for its white-water canoeing. Its hazards and challenges are especially enticing to college-age people. One of the challenging spots, called "wrecking rock," is located between the two canoe-launching sites at Steel Creek.

Steel Creek development consists of a residence, a ranger office, a cooperative research center, a garage, a storage shed, a stable, and two machine shops. These buildings stand above the 100-year floodplain.

Sewage at Lost Valley and Steel Creek is handled by septic tanks and vault toilets. These methods are only marginally acceptable during heavy use periods and will be inadequate if use increases. Solid waste is disposed of under contract in approved landfills. Electricity is provided by Carroll Electric Cooperative, Inc. Wells at Steel Creek will accommodate future needs, but the well at Lost Valley will not be adequate if there are any increases in use.

Arkansas 43 and 74 are paved highways providing access to the Steel Creek-Lost Valley area. Arkansas 74 crosses the Buffalo River in the Ponca area on a two-lane high bridge. The bridge level allows continued use even in flood stage, since it is above the water level of the 100-year flood. The former Arkansas 74 crossing, the single lane low-water bridge, provides access to river users. This low-water bridge is often inundated during times of high water. Arkansas 43 and 21 (in the upper Buffalo River valley) afford visitors one of the few scenic drives along the valley bottom parallel to the river.



The Arkansas Highway Commission has improved Arkansas 43 from Ponca to Boxley--including paving, some realigning, and adding fill in certain locations to bring the roadbed above the 100-year flood level.

Visitor Use

No public transportation serves the Steel Creek-Lost Valley area. All visitors currently arrive in private vehicles, and this situation is expected to continue. Traffic flow is light. On an annual basis, average 24-hour use varies from 190 vehicles at Boxley to 150 vehicles at the Ponca bridge, as shown in the Traffic Flow diagram. The paving of Arkansas 43 and 74 will probably encourage increased traffic in the area.

Camping, picnicking, and hiking are currently the most popular activities at Lost Valley. Use is moderate in the spring and summer and lighter the rest of the year. Spring use is particularly heavy on weekends because river floaters frequently camp for one night before starting on a float trip.

Canoeing is the primary activity in the Steel Creek and Ponca areas. There is little canoeing during the winter months, but beginning in March, a great increase in this activity takes place and continues through April and May, the heaviest use months. June is a busy month in wet years; however, in most years use decreases in June and becomes minimal by July. Canoeing use is light from July to February. A factor important in planning is that the use patterns of floaters are such that either their cars need to be shuttled to their trip destination or they need to be shuttled back to their cars.

Few pools are deep enough for swimming in the summer; however, local residents frequently swim in the Ponca and Steel Creek areas. Fishing is also quite popular.

Annual visits to the Steel Creek-Lost Valley area have been increasing. The Lost Valley State Park was transferred to the National Park Service in 1973, and Steel Creek has been under National Park Service operation since 1976. The heaviest use periods are spring and summer. The figures in table 1 indicate monthly and annual visits to all sites within the Pruitt district, but they primarily reflect use in the Steel Creek-Lost Valley area.

Table 1. Monthly/Annual Visits - Pruitt District

	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
Annual Total	<u> </u>	<u>74,387</u>	<u>79,409</u>	<u>80,718</u>	<u>147,632</u>	<u>143,139</u>
January	--	505	967	422	1,566	1,725
February	--	1,071	918	950	1,175	1,929
March	--	6,282	7,500	8,340	15,925	23,291
April	--	12,719	12,648	13,100	24,030	22,683
May	--	6,367	13,139	14,121	32,540	28,894
June	5,219*	8,247	9,013	9,346	12,938	16,775
July	4,917*	12,500	10,650	10,780	19,367	10,258
August	5,026*	9,614	6,010	7,275	11,070	11,263
September	4,250	3,469	5,000	5,490	8,329	8,070
October	6,371	7,708	7,829	6,371	10,408	5,921
November	3,493	4,257	3,639	2,443	7,402	8,016
December	1,250	1,648	2,066	2,080	2,882	4,315

*Lost Valley only

Over 100 million people live within a 250-mile radius of Buffalo National River. Visitation trends will continue to be directly affected by gasoline availability and general economic stability, since travel patterns here are closely related to use of the private automobile.

NATURAL ENVIRONMENT

Climate

The climate of Buffalo River is pleasant and temperate. The average annual temperature is about 58 degrees Fahrenheit, and the average day/night temperature differential is 29 degrees. Summers are long and warm, with July temperatures averaging about 80 degrees. The frost-free season averages 199 days. Severe winter temperatures are rare, although freezing may occur from late October to late March. January temperatures average about 40 degrees. Temperature extremes of 114 degrees to -23 degrees have been recorded within the basin. Winter and summer are separated by distinct spring and fall seasons.

The area is semihumid. Average annual precipitation is 49 inches; it is distributed relatively uniformly throughout the year, although the spring months receive slightly more. Records dating back to 1900 show that the greatest annual precipitation was 82 inches in 1927, and the least was 30 inches in 1901. Snowfall averages 12 inches a year and may occur from November through March.

Prevailing winds are moderate and come from the south and southwest. Drought conditions, common in the Great Plains to the west of the Ozarks, frequently extend into the basin and affect streamflow and plant life. The Buffalo River basin lies in a region characterized by the occurrence of moderately intense local storms and general storms that have somewhat heavier rainfall and last several days. The larger storms occur most frequently in spring; however, records show that they can happen any time of the year. Tornadoic winds occur frequently in spring and less frequently in summer and fall.

Geology/Topography/Soils

The river's geologic features illustrate the complicated story of the building and erosion of the Ozark dome. The area exposes many types of rocks in horizontal layers, innumerable fossils, ancient peneplains, prominent escarpments, caves, arches and sinks, canyons, and solution valleys. The main river bed is relatively stable, although the channel does vary within gravel and boulder deposits that overlie the solid rock floor.

The principal mineral deposits are lead and zinc. Other minerals in the four national river counties (Newton, Searcy, Marion, and Baxter) include tripoli, manganese, pyrite, uranium, marble, copper, fuller's earth, and phosphate rock. Ore deposits are related to the underlying igneous intrusions. Lead and zinc occur primarily in zones of shattering near faults, notably grabens.

Limestone and sandstone are widely distributed. Long-term mining operations appear to have been limited to limestone, aggregate, sand and gravel, lead and zinc, and crushed stone. The lead mines near Ponca ceased operation years ago. Lands within the boundary were withdrawn from mining when Buffalo National River was established in March 1972. There is no current mining or exploration activity.

Slope analyses for Ponca and Lost Valley are shown on the following maps. Slopes of 0 to 2 percent are most suitable for development, but design must take into consideration the possibility of some poor drainage areas. Slopes of 2 to 7 percent are also suitable for building permanent structures, given the same potential constraints. Slopes of 7 to 15 percent can be adapted for development, although impacts such as larger cuts and fills are generally greater. Slopes over 15 percent present severe difficulties for permanent development.

Soil limitations for development in the general river valley are classified as severe. In general, these limitations include slope, depth of soil, drainage characteristics, and other relevant factors. The general soil association is Clarksville-Nixa-Baxter, which is a deep to moderately deep, medium-textured cherty soil. All formations are of sedimentary origin and consist mainly of limestones and dolomites with occasional beds of shale, sandstone, and chert. Most soils are well drained.

Vegetation

Diverse vegetation grows along the Buffalo River within the dominant oak/hickory forest association. Topography varies from streambanks to bluffs, providing different exposure, soils, and microclimates for 1,500 species of plants.

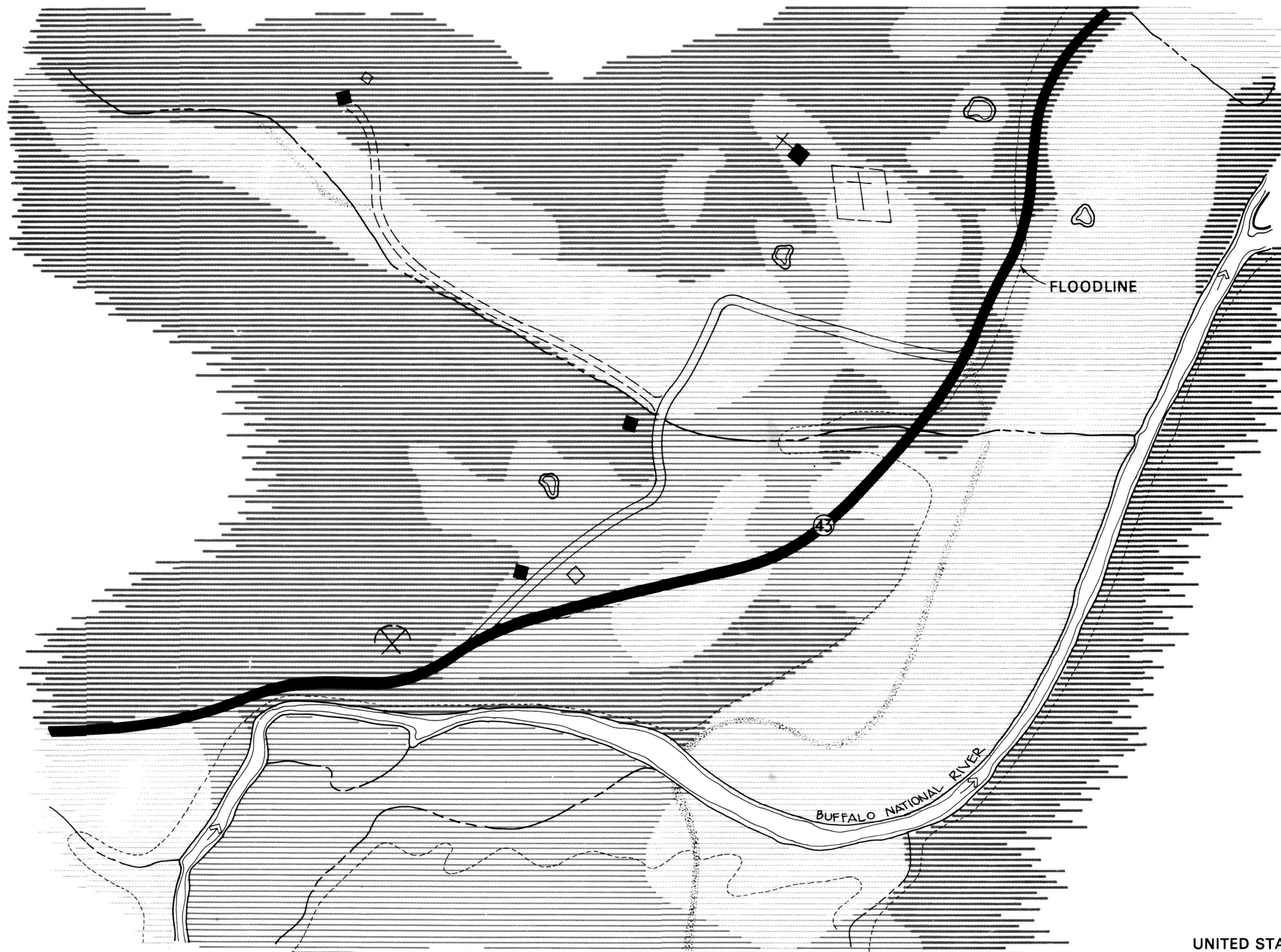
Six species of oak and three species of hickory predominate in the Buffalo watershed. White, black, blackjack, chinkapin, post, and northern red oaks are abundant, and mockernut, black, and shagbark hickories are well represented. Also present are such trees as winged elm, red maple, sassafras, sycamore, persimmon, walnut, hackberry, black gum, shortleaf pine, red cedar, and sweetgum. The upper part of Lost Valley contains a rich oak/hickory/beech forest. There are over 40 woody species in the Lost Valley, Steel Creek, and Ponca areas.

The great variety of microenvironments in the Ozarks has encouraged the survival of many relict species from times when different local climates prevailed. Several trees are considered unique, and two are considered rare in the Buffalo National River area. The two rare trees are Ashe's juniper (Juniperus ashei) and American smoke tree (Cotinus obovatus). The unique tree species are yellowwood (Cladrastis lutea)--relatively uncommon; cucumber magnolia (Magnolia acuminata) and white oak (Quercus alba)--at the western extremity of their native ranges; witch hazel (Hammamelis vernalis)--endemic to the Ozarks and found near the river at Ponca; and speckled alder (Alnus rugosa)--at the southern extremity of its range. There are no known endangered tree species in the development area.

The Arkansas alum-root (Heuchera villosa) is endemic to the Arkansas Ozarks, and one of its local sites is in the streambed of Clark Creek about $\frac{1}{4}$ mile upstream from the Lost Valley campground. A few other herbaceous species that are endemic or are at the extremities of their ranges have been located in the upper Buffalo River; these are listed in appendix B. The University of Arkansas has studied the national river area and has identified several species deserving special protection. Of these, Carex careyana and Carex jamesii are found on Leatherwood Creek, approximately 1 mile from Arkansas 74, and Phlox bifida var. bifida and Lithospermum latifolium are found in Lost Valley. None of these plants is near the proposed development sites.

Azalea, redbud, serviceberry, and dogwood are spectacular in spring and early summer, as is the deciduous forest during fall color. So-called "fern falls" occur on the cooler, moister north-facing slopes. These cascades of ferns blanketing a precipitous, treeless incline appear from a distance to be a green-tinted waterfall.

The Wooded Area maps for the Lost Valley, Ponca, and Steel Creek sites indicate forested lands by gray-shaded areas. Most of the cleared areas were opened historically for agricultural purposes and have been maintained in that condition.



LEGEND

	NONMAINTAINED PATH
	MAINTAINED GRAVEL ROAD
	PAVED ROAD
	2-7% SLOPE
	7-15% SLOPE
	15%-UP SLOPE



0 200 400 600 800
SCALE IN FEET

SLOPE ANALYSIS

LOST VALLEY

BUFFALO NATIONAL RIVER, ARKANSAS

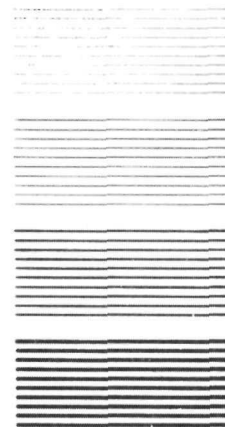
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

slope analysis

ponca

Buffalo National River, Arkansas

LEGEND



0% - 2%

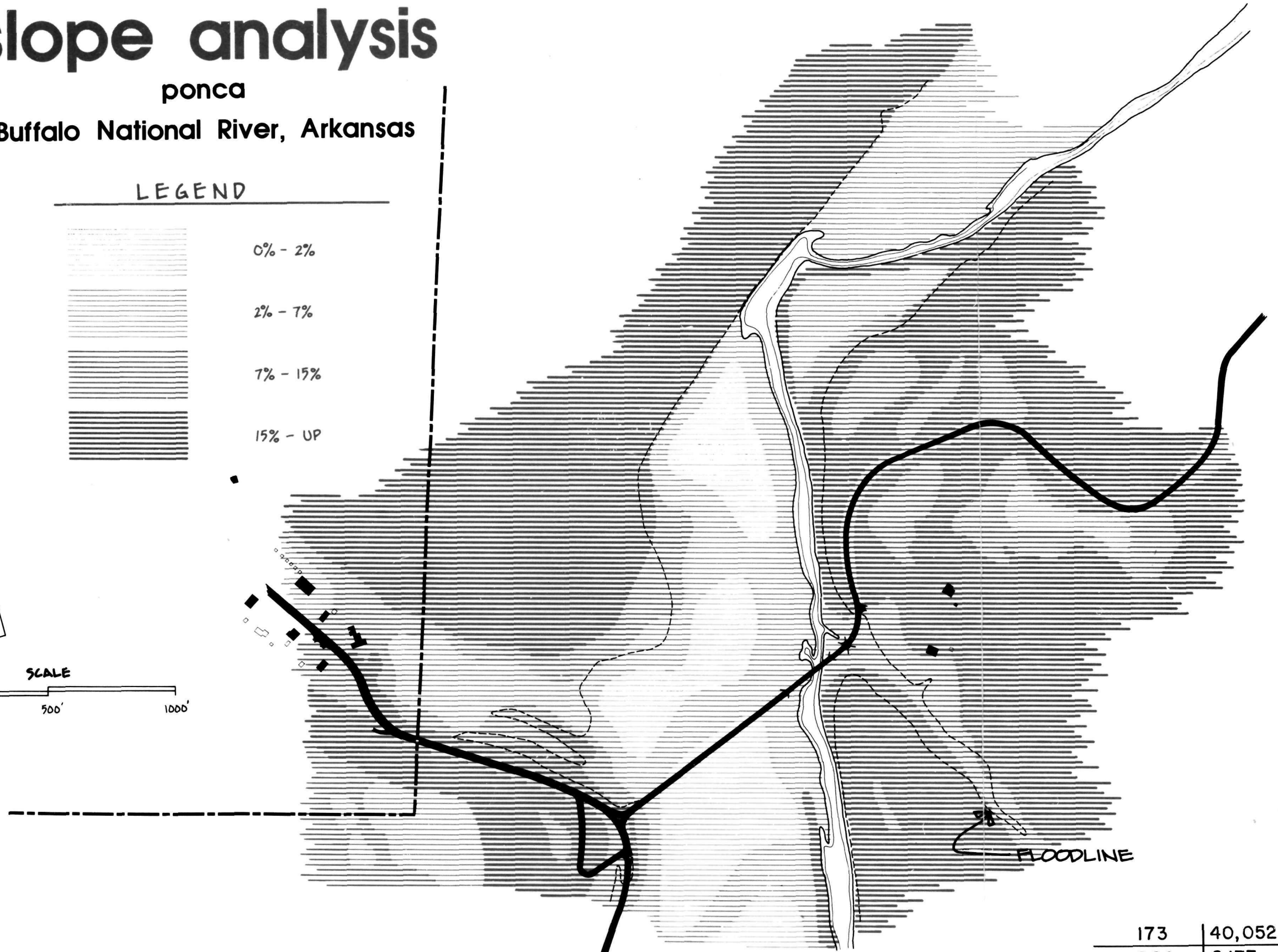
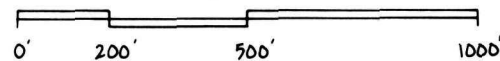
2% - 7%

7% - 15%

15% - UP

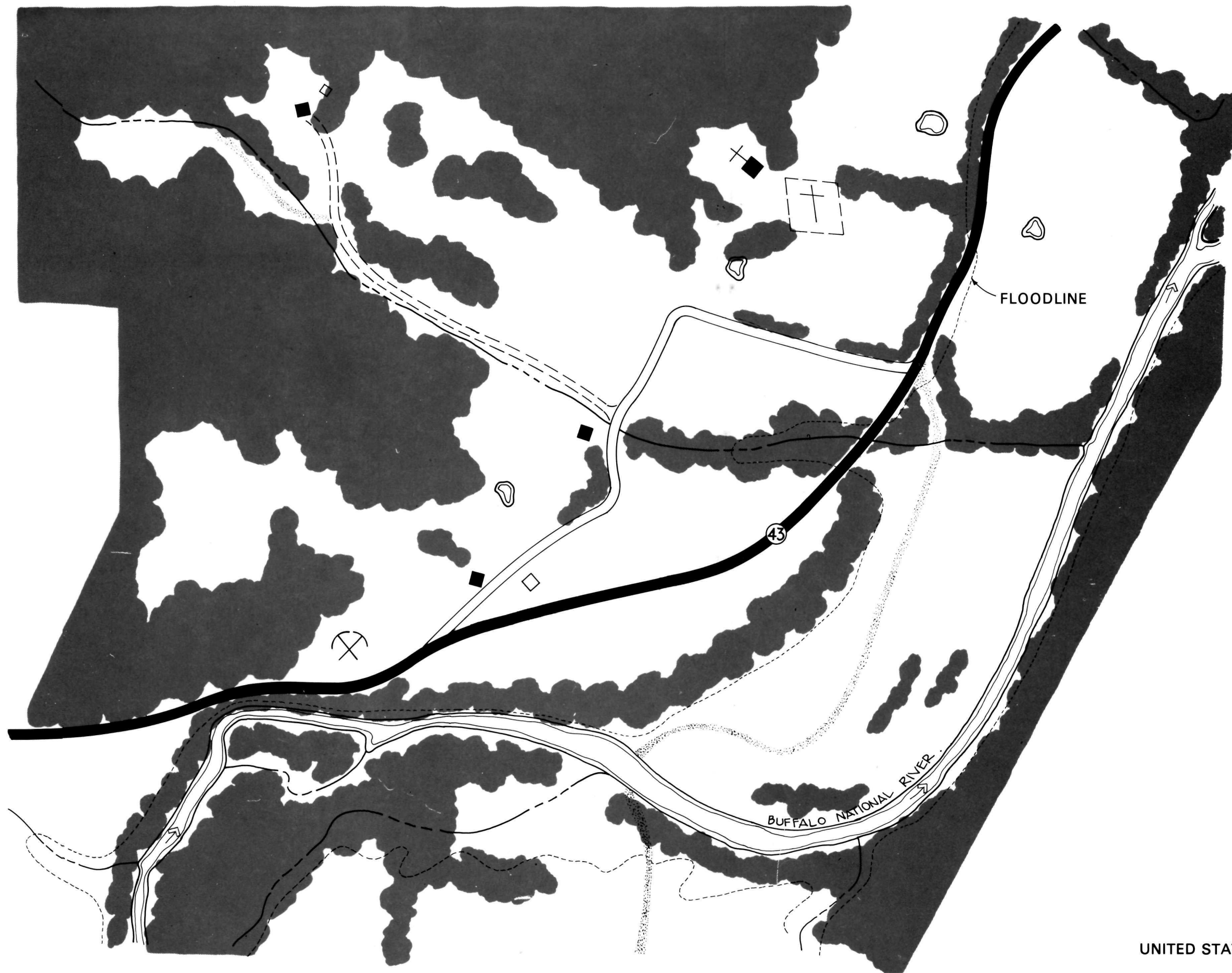


SCALE



FLOODLINE

173	40,052
DSC	8/77



LEGEND

- NONMAINTAINED PATH
- MAINTAINED GRAVEL ROAD
- PAVED ROAD
- WOODED AREA

FLOODLINE

43

BUFFALO NATIONAL RIVER



0 200 400 600 800
SCALE IN FEET

WOODED AREA

LOST VALLEY

BUFFALO NATIONAL RIVER, ARKANSAS

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

wooded area

ponca

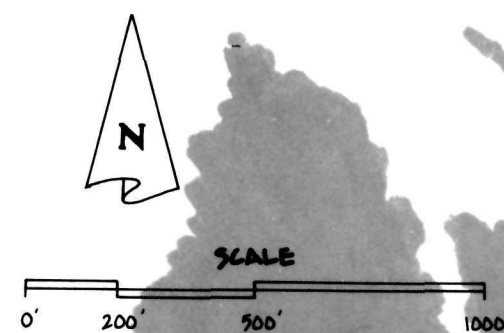
Buffalo National River, Arkansas

UNITED STATES DEPARTMENT OF THE INTERIOR

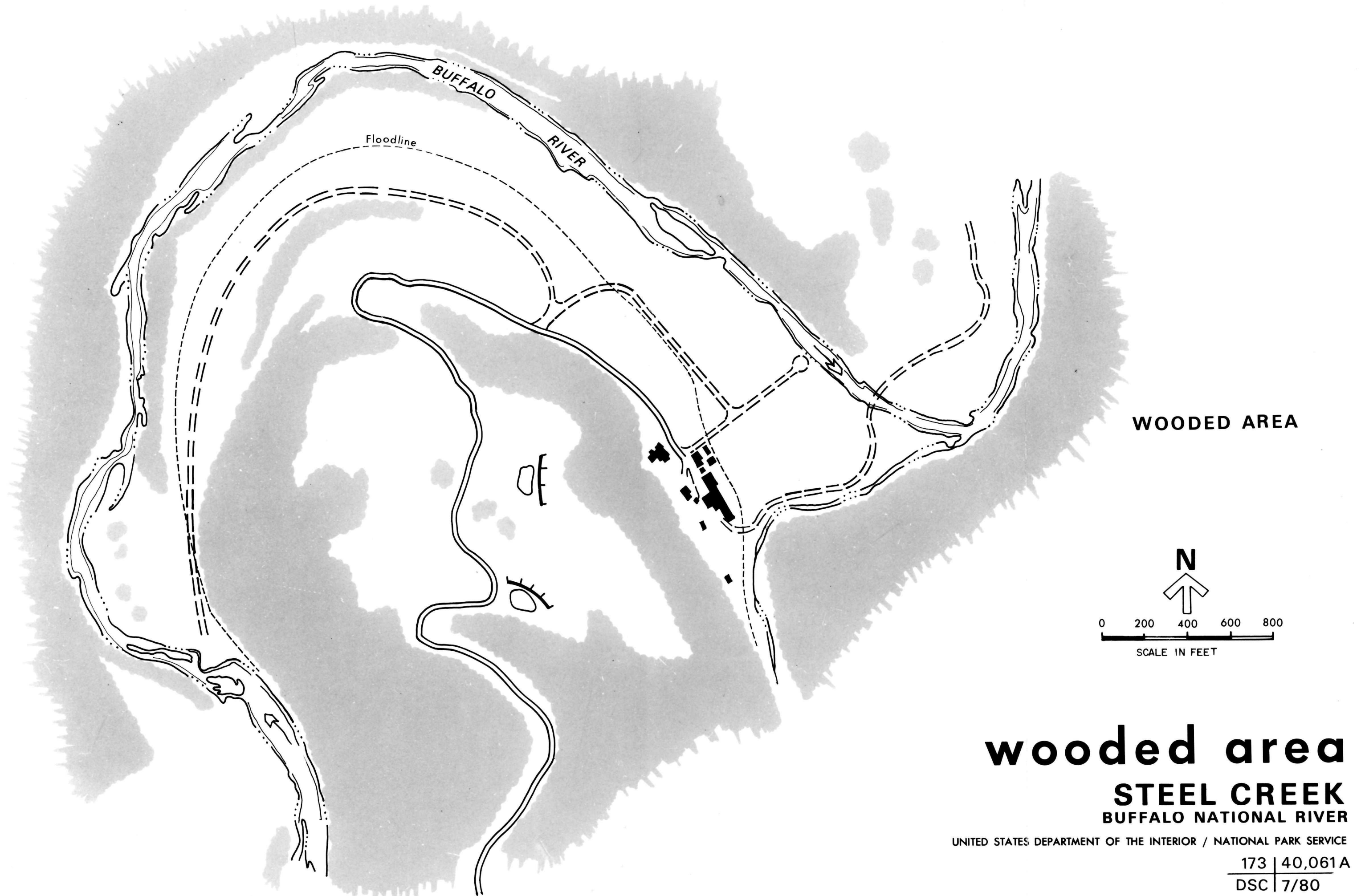
NATIONAL PARK SERVICE

LEGEND

WOODED AREA



(FLOODLINE



Wildlife

Animal life in the Arkansas Ozarks is representative of the deciduous forest biome and its rivers, but it is more diversified because of the presence of endemic species and western faunal elements. Some animals have been extirpated from the region, such as the timber wolf, elk, and bison. The status of the red wolf is unclear, but it is probably absent from the Buffalo River area. It is classified as threatened in the 1973 publication "Threatened Wildlife of the United States" of the Bureau of Sport Fisheries and Wildlife (now the U.S. Fish and Wildlife Service). The statuses of several rare species (such as the long-nose darter, blue-striped darter, and grotto salamander) are unknown.

In 1978, it was reported that a colony of gray bats, Myotis grisescens, had been seen in Eden Falls Cave in Lost Valley. An extensive study has been carried out over the last four years to ascertain which caves are being used by endangered bat species. Numerous visits to the cave since the reported sighting have not produced any evidence of gray bat use.

With the disappearance of the red wolf when the deciduous forest was cleared for open farming, the coyote increased and extended its range. Coyotes, along with white-tailed deer and bobcats, are the largest native animals seen frequently in the area today. The mountain lion and black bear may also be present in small numbers. Black bear, transplanted in the early 1960s from Minnesota and Manitoba to the Ozark National Forest, have now been reported along the upper Buffalo River. Aquatic fur-bearing animals--beaver, otter, mink, and muskrat--are found along the entire river.

Ornithologists have reported over 250 species of birds, many of them common throughout the year. Pileated woodpeckers are fairly common and bald eagles are occasionally seen. Wild turkeys have been reintroduced into the area. Many species of water birds are seen on the river during spring and fall migrations.

The Buffalo River's principal game fish is the smallmouth bass. Also present are largemouth bass, spotted black bass, rock bass, bluegill, suckers, several species of catfish, and sunfish. In a species survey from 1965 to 1973, there were 59 species of fish recorded in the Buffalo River, including chestnut lamprey, darters, and gar.

Air Quality

Air quality in scenic areas is judged not so much by its chemical aspects as by its clarity, because clarity affects the visual experience. Because the Buffalo River drains a rural region with few city or industrial sources of pollutants, and because frequent rains clear the sky, the air remains generally clear. Motor vehicles on the roads introduce minor amounts of air pollution. Landowners practice occasional burning to maintain and clear agricultural areas. Campfires from the Lost Valley campground occasionally add heavy smoke to the air.

Hydrology and Water Quality

Floods are frequent on the Buffalo River and can happen any time of the year. In this upper stretch of the river, the 100-year flood line is approximately 25 feet above normal river level. The floodplain covers most of the level valley bottom. Storms that produced major floods in the basin occurred in August 1915; April, June, and December 1927; February, March, April, and June 1945; and November 1973.

Late summer and early fall are characterized by greatly reduced streamflows. This pattern is common in all years, but it is more pronounced during drought years. The upper half of the Buffalo River cannot be floated at such times. Generally, the entire river is floatable from October until the end of May or early June. Except for extremely dry periods, the lower half of the river can be floated almost any time.

During dry periods the stream may disappear in some locations into a bed of gravel and reappear downstream; therefore, the river appears to be dry in some areas when substantial subsurface flow is actually present.

Based on water quality analyses during the period from 1973 to 1977, the Buffalo River was considered unpolluted, except by silt during periods of heavy runoff. Water quality was good, but it was not completely pure. Analyses in recent years indicate very little significant change in water quality. Although surrounding agricultural lands are annually fertilized with nitrogen, phosphorus, and potassium in approximately a 10-20-10 ratio, nutrient concentrations remain relatively low.

Waterflow from wells at potential development sites varies but is generally adequate for supplying the expected demand. All sites that were drilled showed the quality to be excellent. The approximate producing flow based on blowout capacities for specific sites is as follows:

- Lost Valley - 10 gal/min
- Villines farmstead - 40 gal/min
- Steel Creek, near bottom of hill and near entrance road - 35 gal/min
- Steel Creek, residence - 30 gal/min

Analyses of the driller's log suggest that water is entering the wells through secondary openings (fractures, joints, or solution channels) intercepted by the well. In all cases, the static water level measured was above the first reported zone, which classifies the wells as nonflowing artesian types.

Field work completed by representatives of the National Park Service in October 1977 and August 1980, including production tests of the wells, shows the aquifers are limited (time-drawdown analysis), with the estimated characteristics listed in table 2.

Table 2. Aquifer Characteristics

<u>Area</u>	<u>Specific Capacitance</u>	<u>Transmissivity</u>
Lost Valley	0.09	46.4
Villines farmstead	0.43	286
Steel Creek X	0.40	500
Steel Creek (residence)	0.33	150 (?)

Recovery (residual-drawdown) analyses indicate that recovery rate is fairly rapid, suggesting that all wells will be capable of delivering the total quantity of water needs projected for each development area if each well is equipped with a high and low water cutoff electrical system.

Chemical analyses of waters indicate that minimum water treatment will be required. In accordance with practice, all waters withdrawn from each well will be chlorinated. Bacteriological sampling will be maintained on a continuing basis and at a minimum frequency of once per month. A complete chemical analysis for each water source will be made once every three years.

Some additional physical and aquifer characteristic measurements are included in appendix D.

CULTURAL ENVIRONMENT

Existing Resources

Cob Cave, which is actually a large cliff shelter, is an archeological site about a mile up the Lost Valley trail. It was a dwelling site for Indians before early explorers came into the region. It is so named because the earliest archeological diggings uncovered many small corncobs. Today there are no apparent traces of this past occupation.

At Ponca, the Beaver Jim boyhood home, on the west side of Arkansas 43, and the Villines farmstead (also known as the Beaver Jim, Jr., cabin), just east of the low-water bridge, are historic structures that have been proposed for nomination to the National Register of Historic Places (see appendix C).

The Boxley grist mill (known also as the old Boxley water mill, the Villines mill, and the Whiteley mill) is listed on the National Register of Historic Places (regional significance). The original mill operated from approximately 1840 to 1870 and then was replaced by the existing structure, which operated until about 1950. It is a wood frame building now in a state of disrepair because of lack of use during the last 25 years. This building contained a grist mill, flour mill, cotton gin, sawmill, and hammer mill, and many parts of the machinery are still in place. In its operating days the mill was an important part of the local agricultural community.

Compliance

To comply with Advisory Council on Historic Preservation regulations (36 CFR Part 800) and with Executive Order 11593, the following actions have been taken: (1) the Arkansas state historic preservation officer has been contacted (his reply in appendix C includes a list of cultural resources in the Steel Creek-Lost Valley area); (2) a careful search of the National Register of Historic Places has been made, which revealed that the only site or structure listed for the Steel Creek-Lost Valley area is the "Old Boxley Water Mill"; (3) a memorandum of agreement (December 1974) pertaining to Buffalo National River cultural resources has been prepared and signed by the National Park Service, the state historic preservation officer, and the Advisory Council on Historic Preservation (also included in appendix C); and (4) two surveys (USDI, NPS 1973 and Kitchen 1975) have been prepared, which identify and evaluate a number of extant cultural resources in the Steel Creek-Lost Valley vicinity.

Archeological resources are fairly widespread in the Buffalo National River area. On June 27 and 28, 1979, the National Park Service conducted an archeological survey of the Lost Valley and Steel Creek development areas as required by Executive Order 11593. The purposes of the survey were to determine (1) the locations of all archeological resources in the development areas, (2) whether any archeological sites in the development areas were eligible for inclusion on the National Register of Historic Places, and (3) whether any archeological resources would be impacted by proposed developments.

Three archeological sites, all lithic scatters, were located during the survey. One site, DA-11, is in the south-central portion of the Lost Valley development area; the other two sites are in the Steel Creek development area. One of these, PC-1 (AAS-305), is in the area of the carry-in camp, and the other, AAS-303, is in the vicinity of the residences and canoe launch. There is not sufficient information at this time to support the nomination of any of the three sites to the National Register of Historic Places. However, the National Park Service will treat these sites in accordance with current management policies, activity standards, and cultural resource management guidelines. This treatment will emphasize preservation of the sites through avoidance during any future development. If, for any reason, an unavoidable adverse effect on any of the three sites appears imminent, the National Park Service will further evaluate the sites for potential national register eligibility and institute a program to mitigate any adversity as prescribed by applicable management policies, standards, guidelines, legislation, and regulations.

The Beaver Jim boyhood home and the Villines farmstead are historic structures that are potential sites for nomination to the national register (see appendix C). Prior to implementation of the proposals outlined in this Development Concept Plan, the regional director will secure a determination of eligibility for inclusion of these historic structures on the National Register of Historic Places, as outlined in Executive Order 11593, section 2(b).

SOCIOECONOMIC ENVIRONMENT

The four counties (Newton, Searcy, Baxter, and Marion) in which the Buffalo River lies are rural and sparsely settled. Steel Creek, Ponca, and Lost Valley are in Newton County. Population declined during the 1960-70 period in Newton (-2 percent) and Searcy (-4 percent). According to the 1970 census, the population density per square mile for Newton County is 7.1--the lowest density of any county in Arkansas. The population of Newton County is 5,844.

Population patterns of the four-county area reflect the relative lack of economic opportunity and consequent migration to areas and occupations in which there is the chance for improving income. The high median ages in the four counties result from both out-migration of young persons from farms and small communities and in-migration of retirement-age individuals attracted by favorable regional cost of living, tax structure, and recreational resources.

The components of population change for the 1960-70 decade show net migration as the principal factor in population losses in Newton County (see table 3).

Table 3. Population Changes - Newton County, 1960-70

<u>Births</u>	<u>Deaths</u>	<u>Natural Increases</u>	<u>Net Migration</u>	
			<u>Number</u>	<u>Percent</u>
946	565	381	-500	-8.5

Projections by the U.S. Water Resources Council of regional economic activity for a 29-county water resource area in Arkansas, including Newton County, and adjacent Missouri are presented in table 4.

Table 4. U.S. Water Resources Council Projections
of Economic Activity in Northern Arkansas and
Adjacent Missouri (29 Counties)

	<u>1969</u>	<u>1980</u>	<u>2000</u>	<u>2020</u>
Population, midyear	342,277	352,300	382,700	438,000
Per capita income (1967)	1,816	2,604	5,328	10,363
Per capita income, relative (U.S.=1.00)	.53	.55	.64	.73
Total employment	109,136	116,700	139,000	171,100
Employment/population ratio	.32	.33	.36	.39
Earnings per worker (1967)	3,962	5,724	10,790	19,711
Earnings per worker, relative (U.S.=1.00)	.58	.61	.68	.74

Mountain Home (estimated 1980 population 12,000) in Baxter County and Harrison (estimated 1980 population 10,000) in Boone County are major economic growth centers in the region. Population has increased steadily in these two cities since 1960. Pleasant climate, abundant recreation, available work force, and an improving transportation network have contributed to a steadily increasing population in all of northwestern Arkansas.

Table 5 illustrates the income and employment structure in Newton County.

Table 5. Income and Employment Statistics - Newton County

<u>Per Capita Personal Income</u>		<u>Percent Change in Total Employment</u>		<u>Unemployment Rate</u>	
<u>1960</u>	<u>1970</u>	<u>Agricultural</u>	<u>Nonagricultural</u>	<u>1960</u>	<u>1970</u>
\$610	\$1,649	-35.3	88.9	10.3	11.8

At the present time, the number of economic farm units has decreased through consolidation, and the average size per farm is on the rise. Pasturage is the principal agricultural use. Marginal agricultural land in the area has often been converted to timber production. The Buffalo River study area is generally more forested than the state as a whole. In 1969 Newton and Searcy counties were 82 percent forested and the state was 54 percent forested. The forest resource base is adequately protected because the cutting rate for hardwood sawtimber stock is less than the rate at which stock reaches maturity.

THE PLAN

DEVELOPMENT

Under the proposal, the Steel Creek-Lost Valley area will include minimal new development to support the moderate increases in visitor use which have occurred in the past few years. Most operational facilities necessary to support additional use will be located at Steel Creek.

Lost Valley

Lost Valley, currently providing the only camping not located directly on the river, will retain 15 campsites. The existing level of use will be maintained but not expanded. The present entrance will be obliterated and revegetated, and a new entrance road will be constructed well above the Clark Creek floodplain. A 30-car and 2-bus parking area will be constructed north and east of Clark Creek. The parking area will be designed to direct pedestrian access to the campsites and the trail using one location for crossing Clark Creek. The creek crossing will be accomplished via a footbridge, which will be designed to allow access for maintenance and emergency vehicles. The existing vault toilets should be moved to a location adjacent to the parking area and screened. This location will be convenient for the day users and campers and provide easy maintenance access.

All other existing features, like the campfire circle, informational signs, outdoor information exhibit, and trail, will remain. The Beechwood community center and the cemetery will continue to be used by community residents. Existing power lines will be used wherever possible. Facilities at Lost Valley will cover about 6 acres.

Arkansas 43 has been upgraded and realigned in the vicinity of Lost Valley. This road construction was done by the Arkansas Highway Commission. Sections of the old roadbed may be used for management access and utility roads.

Ponca

To minimize traffic congestion and unsafe parking near the Ponca low-water bridge, most canoe launching has been relocated to Steel Creek. The Arkansas Highway and Transportation Department is currently constructing a new high bridge at Ponca. Once the new bridge is in use, limited river access will remain at the low-water bridge (see alternative 2 of the "Environmental Assessment, River Access - Ponca Area," dated September 1981). Should congestion, safety, or maintenance costs associated with the low-water bridge present problems in the future, the decision to leave the old bridge will be reevaluated, but river access in the Ponca area will nonetheless remain.

The historic Villines farmstead on the east side of the river at Ponca will be preserved, maintained, and interpreted. Since the structure itself is

of primary importance, there will be no restoration of the interior furnishings. Visitors to the farmstead and the Leatherwood Creek trails will park on the hilltop northeast of the historic structures. Cars will enter the parking area at the intersection of Arkansas 74 and a power line clearing. There will be restrooms nearby with chemical toilets or pumpable holding tanks. The parking area and restrooms will not be visible from the historic buildings. A trail will connect the parking area with the Villines farmstead and the Leatherwood Creek trails. The existing access road below the historic house will be closed. Developments at Ponca will cover 2 acres.

The Beaver Jim boyhood home on the west side of the Arkansas 74/43 junction will have a small parking area for people who wish to view this historic house. Interpretive signing will be provided.

Steel Creek

The Steel Creek area will include two launching sites for floaters, an adjacent 80-site carry-in campground, two parking areas above the flood line, two picnic areas, and a swimming beach. The launching sites have already been established, and some tent camping currently takes place.

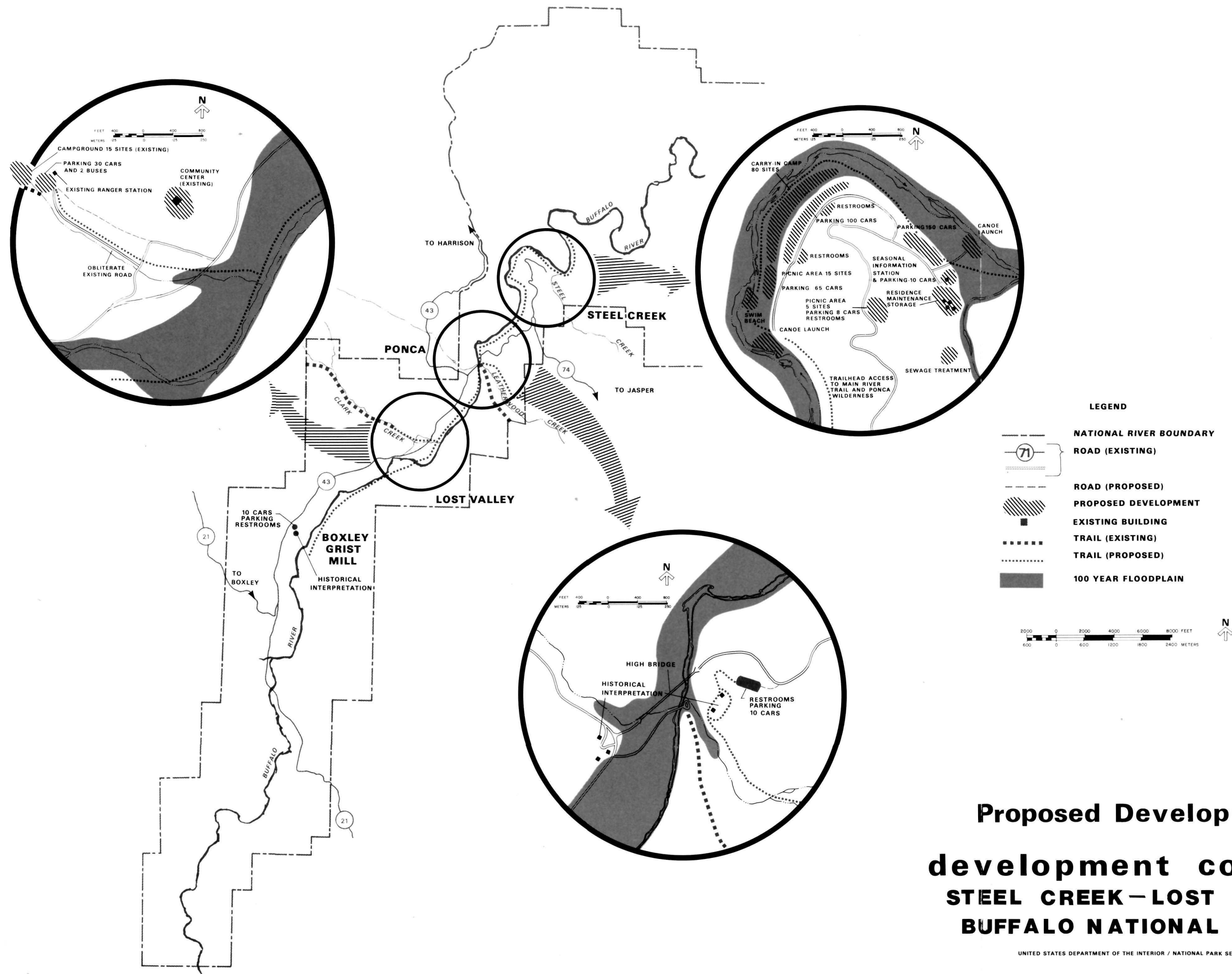
A seasonal contact/information station for floaters and hikers will be provided in the area. One existing residence will continue to be used as a ranger residence, the other as a research laboratory. Other existing buildings will be utilized for maintenance and storage for the entire upper river area. Sewage treatment facilities here will be adequate to handle heavy seasonal use. Facilities providing tertiary treatment capability may be necessary in the future if visitor use continues to grow. Existing power lines will be utilized to service new park development wherever possible.

Steel Creek developments will cover 20 acres above the 100-year flood line and 8 acres below it. Acreage below the 100-year flood line will accommodate the canoe-launching areas, the swimming beach, one picnic area, and part of the carry-in campground.

Boxley

Parking will be provided near the Boxley grist mill, screened by trees. The mill will be interpreted by signs. The structure will be preserved and stabilized but not restored to operable condition.

River access will be provided near the Boxley bridge for upper river users. This access and parking for several vehicles will be gravel surfaced.



Proposed Development

development concept

STEEL CREEK—LOST VALLEY

BUFFALO NATIONAL RIVER

MITIGATING MEASURES

Natural Environment

Proper design and supervision of construction activities will minimize disturbance of existing vegetation. Facilities will be screened by trees to reduce the visual impacts of development. Newly constructed roadbanks and old road scars will be revegetated, thus minimizing the potential for erosion and visual scars.

Cultural Environment

Protective staff and limited interpretive personnel will supervise and monitor visitor use and institute preventive measures to avoid damage to cultural resources wherever possible.

Construction areas will be thoroughly surveyed by a professional archeologist. Any significant archeological sites located in construction areas will be avoided, or mitigating actions will be taken. Any sites determined eligible for listing on the National Register of Historic Places will be nominated to the register, and mitigating actions will be developed in compliance with 36 CFR 800. Salvage excavations will be conducted only if there is no feasible alternative for location of facilities.

The Boxley grist mill is currently listed on the National Register of Historic Places. Before approval of proposals for this site, compliance with section 106 of the National Historic Preservation Act and its implementing procedures (36 CFR 800) will be accomplished.

Socioeconomic Environment

Proper design will reduce the potential for flood damage and additional maintenance in the canoe-launching and picnic areas by ensuring ready portability of movable facilities and erosion resistance of permanent ones.

A rise in the water level, indicating an approaching flood, should provide sufficient warning to permit visitors in the floodplain to reach safety. An audible electronic warning system has been installed to offer additional warning for both protection personnel and visitors.

Mobile protection personnel will periodically make personal contacts with visitors.

DEVELOPMENT SUMMARY

<u>LOST VALLEY</u>	<u>PONCA</u>	<u>STEEL CREEK</u>	<u>BOXLEY</u>
Information exhibit	Historic buildings	Canoe-launching sites (2)	Historic building
Parking (30 cars, 2 buses)	(existing)	Swim beach	(existing)
Primitive campground	Parking (15 cars)	Carry-in campground	Parking (10 cars)
(existing, 15 sites)	Restrooms	(80 sites)	with restrooms
Restrooms (to be relocated)	Trails	Comfort stations (3)	Wayside exhibit
Trails	River access	Picnic areas (2; 20 sites total) with restrooms	Access road
Community center (existing)		Information station	River access
Residence (existing)		Residence (existing)	
Entrance road		Maintenance/storage buildings (existing)	
		Water system	
		Sewage treatment facilities	
		Parking (333 cars)	

COST ESTIMATE

Lost Valley site	
Construct information exhibit	\$ 7,000
Rehabilitate existing campsites	18,000
Construct parking area (32 spaces)	77,000
Move restrooms (vault toilets)	6,000
Rehabilitate utility systems (water and sewage)	60,000
Upgrade trail (1¼ miles)	30,000
Obliterate existing road (½ mile)	28,000
Construct entrance road (½ mile)	210,000
Subtotal	<u>\$ 436,000</u>
Ponca site	
Construct comfort station	\$ 80,000
Construct parking area (10 spaces)	26,000
Provide trail signs	4,000
Rehabilitate Villines farmstead historic area	414,000
Construct parking (5 spaces)	13,000
Construct road to river access (900 lin ft, gravel)	75,000
Subtotal	<u>\$ 610,000</u>
Steel Creek site	
Provide canoe launch signing (2 areas)	\$ 4,000
Establish swim beach	11,000
Construct carry-in campground (80 sites)	106,000
Construct picnic areas (20 sites at 2 areas)	41,000
Construct comfort stations (3)	270,000
Provide information station	84,000
Provide maintenance/storage area (rehabilitation)	60,000
Construct water system	200,000
Construct sewage system	400,000
Construct parking areas (333; 150 floater spaces on grass near launching site)	538,000
Subtotal	<u>\$1,714,000</u>
Boxley Valley sites	
Stabilize mill	\$ 81,000
Construct parking (10 spaces)	26,000
Construct access road (300 lin ft)	35,000
Construct restrooms (vault toilets)	20,000
Construct wayside exhibit	7,000
Boxley bridge canoe access (150 lin ft and approximately 5 parking spaces, gravel)	20,000
Subtotal	<u>\$ 189,000</u>
Total Gross Cost	<u>\$2,876,000</u>

Note: All costs are gross amounts and include actual expenses and design and contract supervision. Certain grounds, trails, and rehabilitative work could be done by government youth or work programs if authorized.

APPENDIX A: MANAGEMENT OBJECTIVES

To preserve the natural river scene and maintain a free-flowing, nonpolluted river and to protect the historical, archeological, and cultural remains from loss through the securing of a land base within the authorized boundaries through acquisition or other means; the implementation of a viable research program; the initiation of programs of stabilization, maintenance, and protection; and, as needed, the modification of management practices and other means of eliminating conditions having adverse effects.

To provide significant recreational opportunities for visitors to the national river by reducing congestion at river put-in and take-out areas during periods of heavy visitation; permitting hunting and fishing (in designated areas in accordance with appropriate laws and consistent with the park's purpose); analyzing and evaluating the three primitive areas nominated for wilderness and encouraging backcountry use therein within yet-to-be-established carrying capacities; and providing a varied and balanced interpretive program, which emphasizes the river and the historical and archeological past and enhances visitor understanding of and interest in the past and present life in the Ozark Highlands and environment, which are still undergoing change.

To coordinate, encourage, and administer a viable research program, emphasizing the inventorying, identifying, and monitoring of the scenic, geologic, historic, hydrological, archeological, and general scientific values, as well as the physiographic and geologic condition of the river; the reintroduction of extirpated species where feasible; the maintenance of open fields where scenic and wildlife habitat will be enhanced; and the promotion of special protection for all rare and endangered species.

To maintain and foster close liaison and cooperation with governmental and nongovernmental entities and individuals who have an interest in the national river and its surroundings in order to achieve the area's purpose through the most harmonious integration possible of activities inside and outside of the national river boundaries.

APPENDIX B: RARE PLANTS OF THE PONCA AREA

<u>Scientific Name</u>	<u>Common Name</u>	<u>Habitat and Location</u>	<u>Status in Buffalo National River*</u>
<u>Carex careyana</u> Torr.	Sedge	In middle area of Leatherwood Creek	E
<u>Carex jamesii</u> Schwein	Sedge	In middle area of Leatherwood Creek	E
<u>Diarrhena americana</u> Beauv		In Hemmed-in-Hollow and Leatherwood Creek	R
<u>Juniperus ashei</u> Buchholz	Ashe's juniper	In cedar glade northwest of camp area in Lost Valley	R
<u>Tradescantia ozarkana</u> Anderson & Woodson	Spiderwort	East-facing slope 1 mile north of Ponca	R
<u>Cypripedium calceolus</u> L. var. <u>parviflorum</u> (Satisb.) Fern.	Small yellow lady's slipper	Northwest of campground in Lost Valley	T
<u>Heuchera villosa</u> Michx. var. <u>villosa</u>	Alum root	Near streams in Lost Valley, Indian Creek, and Leatherwood Creek	R
<u>Cotinus obovatus</u> Raf.	American smoke tree	In Lost Valley and Hemmed-in-Hollow	R
<u>Panax quinquefolium</u> L.	Ginseng	In middle area of Leatherwood Creek	T
<u>Phlox bifida</u> Beck. var. <u>bifida</u>	Sand phlox	In Lost Valley and Indian Creek	E
<u>Lithospermum latifolium</u> Michx.	Gromwell	In Lost Valley and vicinity of Ponca	E
<u>Brickellia grandiflora</u> (Hook.) Nutt	Tassel flower	In Leatherwood Creek, Big Bluff, and Lost Valley	R

Source: R. E. Babcock, "Part IV: Final Report, Buffalo National River Ecosystems" (Arkansas Water Resources Research Center, University of Arkansas, 1978).

*Symbols:

- R: Rare - occurs in small numbers, but not in danger of extinction
- T: Threatened - not in immediate danger of extinction, but in greater jeopardy than rare species; may need protection
- E: Endangered - in danger of extinction in part or all of its range; needs protection

ARKANSAS HISTORIC PRESERVATION PROGRAM

2071

[illegible]

This letter is written in response to your inquiry of July 12, 1974, concerning properties of historic significance located in the Ponca area of the Buffalo National River.

Thos. E. Henderson

40

Advisory Council
On Historic Preservation
1522 K Street N.W. Suite 430
Washington D.C. 20005

---March 19, 1975

Mr. Theodore R. Thompson
Acting Regional Director
Southwest Region
National Park Service
P.O. Box 723
Santa Fe, New Mexico 87501

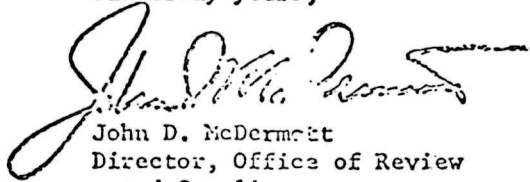
Dear Mr. Thompson:

The Advisory Council is pleased to inform you that the Memorandum of Agreement for the Cultural Resources of Buffalo National River, Arkansas, has been approved by the Chairman of the Council. This completes the Section 106 process and the National Park Service may proceed with the Buffalo National River Master Plan and Wilderness Recommendation.

A copy of the Agreement is enclosed.

The Council appreciates your cooperation in the resolution of this matter and commends your contribution to the preservation of our national heritage.

Sincerely yours,



John D. McDermott
Director, Office of Review
and Compliance

Enclosure

(N) A 20-Adm. Council

(N) D18 Buff

The Council is an independent unit of the Executive Branch of the Federal Government, charged by the Act of October 15, 1966 to advise the President and Congress in the field of Historic Preservation.

Advisory Council
On Historic Preservation
1522 K Street N.W. Suite 430
Washington D.C. 20005

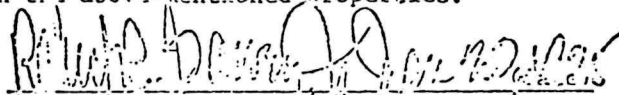
MEMORANDUM OF AGREEMENT

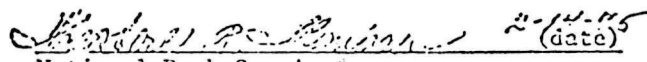
WHEREAS, the Department of the Interior, National Park Service proposes to adopt the Buffalo National River Master Plan and make a Wilderness Recommendation for the Buffalo National River; and,

WHEREAS, the Department of the Interior, National Park Service has determined that these undertakings as proposed could have an adverse effect upon cultural resources that appear to be eligible for inclusion in the National Register of Historic Places, and pursuant to Section 2(b) of Executive Order 11593, has requested the comments of the Advisory Council on Historic Preservation; and,

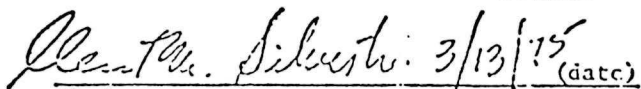
WHEREAS, pursuant to the procedures of the Advisory Council on Historic Preservation (36 C.F.R. Part 800), representatives of the Advisory Council on Historic Preservation, the National Park Service, and the Arkansas State Historic Preservation Officer have consulted and reviewed the undertaking to consider feasible and prudent alternatives to satisfactorily mitigate the potential adverse effects; now,...

THEREFORE: It is mutually agreed that implementation of the undertaking, in accordance with the attached "National Park Service proposal to remove and/or mitigate any adverse effects on cultural resources within the Buffalo National River that might result from the Buffalo River Master Plan and Wilderness Recommendation," submitted by letter dated December 24, 1974 from Theodore M. Thompson, Acting Regional Director, Southwest Region, National Park Service, will satisfactorily mitigate any adverse effect on the above-mentioned properties.


Executive Director
Advisory Council on Historic Preservation

 2-14-75 (date)
National Park Service
Department of the Interior

 2-25-75 (date)
Arkansas State Historic Preservation
Officer

 3/13/75 (date)
Chairman
Advisory Council on Historic Preservation

APPENDIX D: WELL PHYSICAL DATA AND CHARACTERISTICS

Table D-1. Physical Data of Selected Wells

	<u>Total Depth (ft) BSL</u>	<u>Diameter (in)</u>	<u>Length casing (ft)</u>	<u>Length grout (ft)</u>
Lost Valley	?	6	?	?
Villines farmstead	475	6	90	88
Steel Creek X	610	6	102	100
Steel Creek (residence)	477	6	108	106

Table D-2. Aquifer Characteristics of Selected Wells

	Total Depth (ft) BSC	<u>Static Water Level Depth</u>		Land Surface Elevation (ft above msl)*	Log on File**	Analysis on File***	Water Bearing Formation	Date of Production Test**
		BTC (ft)	Date Measured					
Lost Valley	?	58.51 73.02	10/12/77 8/02/80	1140	-	X	Boone fm. (Mississippian)	10/12/77 8/02/80
Villines farmstead	475	93.06	8/05/80	1100	X	X	St. Peter SS, Everton fm. (Ordovician)	8/05/80
Steel Creek X	610	104.21	8/07/80	1140	X	X	St. Peter SS, Everton fm. (Ordovician)	8/07/80
Steel Creek (residence)	600	14.13	10/07/77	1010	X	X	St. Peter SS, Everton fm. (Ordovician)	10/07/77

*Estimated from U.S. Geological Survey, PONCA quadrangle topographic map.

**On file in Water Resources, National Park Service, Southwest Regional Office, Santa Fe, New Mexico.

***Determined from preliminary geologic map by Bush.

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As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, and parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. Administration.

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