trail plan
environmental assessment

BUFFALO

NATIONAL RIVER / ARKANSAS

TRAIL PLAN
ENVIRONMENTAL ASSESSMENT

BUFFALO NATIONAL RIVER
Arkansas

Draft
April 1986

U.S. Department of the Interior / National Park Service

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INTRODUCTION

BACKGROUND

In 1972 Congress established Buffalo National River to conserve and interpret an area that contains unique scenic and scientific features and to preserve as a free-flowing stream an important segment of the Buffalo River in Arkansas. This would be done for the benefit and enjoyment of present and future generations (Public Law 92-237).

Buffalo National River is in the Ozark highlands of northwestern Arkansas. The Buffalo River flows generally west to east and drains an elongated basin that is roughly 20 miles wide by 70 miles long. Flowing from the Boston Mountains to the White River, the Buffalo River follows a winding, 148-mile course. The river basin is replete with streams, caves, natural arches, springs, waterfalls, forests, and agricultural lands. The 94,000 acres of land and water in Buffalo National River comprise only 11 percent of the Buffalo River basin. The first 16 miles of the river are within the Ozark National Forest. The remaining 132 miles are within the national river boundary.

The Final Master Plan (NPS 1975) for Buffalo River includes the following statements on trails:

> Hiking - Hiking is another good way to see the Buffalo River. During times of low water in certain sections, it is the only way. Although the summers are hot and humid, hiking is becoming increasingly popular. Trails will be constructed to provide opportunities for hiking the entire length of the river and to link the various primitive camps and hostels that will also serve the river floater. Short trails to outstanding scenic features and loop trails near heavy-use areas will be developed. Trail vehicles will be prohibited because their use is incompatible with the tranquil setting that is being sought. The overnight hiker will be able to camp in certain areas where the boundaries extend some distance from the rivershore. Connecting links with existing or proposed trails in Ozark National Forest will be sought.

Horseback riding - Trails for both hikers and horseback riders will be developed in little-used areas, but in heavily used areas, these trails will be separate to avoid conflict. Most horse use is by private owners and stables outside the boundary. If additional facilities are not developed outside the boundaries, then horse concessions will be considered for the developed areas.*

Bicycling - A trail for non-motorized bicycling is proposed along the river in the Tyler Bend area. Other possibilities exist in Boxley valley and on the abandoned railroad grade between Gilbert and Brush Creek depending on the response to the Tyler Bend Trail.

The 1985 Statewide Comprehensive Outdoor Recreation Plan (ADPT 1984) projects a need for 1,106 miles of additional trails in the state by 1990. A 1984 survey of state residents showed that hiking/nature trails were the type most likely to be used by respondents. Other types, listed in order of likely use, were jogging, bicycling, horseback riding, off-road vehicle (ORV) use, and for handicap and overnight trail use The plan states that hikers "expressed a need for more one- and two-day loop trails," and that they were especially interested in loops that tie into long-distance trails, such as the Ozark Highlands Trail (see "Ozark Trail Connections" section). The plan raises the idea of "developing river trails for hiking along certain rivers and creeks." The plan also states that "horse trails have been almost totally overlooked" and "in some parts of the state, riders are nearly begging for public places to take their horses."

The need for a state trails plan was identified and is currently in preparation.

PURPOSE

The purpose of this trail plan is to provide greater detail to the proposals in the master plan and to bring the concepts up-to-date with current management objectives and public input. This document is still a conceptual plan in that only general trail corridors are identified. The plan was

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*The General Development Plan map in the Final Environmental Statement for the Master Plan (NPS 1976) shows horse concessions in the Tyler Bend area and the Buffalo Point/Highway 14 area.

developed using available resource data, park staff knowledge, and limited field reconnaissance. Specific trail alignments will be laid out when construction funds become available or when volunteers are available to build individual trail segments. This plan proposes corridors for the river-long trail and other major loops and spur trails. Minor trails within developed areas will be addressed in design documents.

In compliance with the National Environmental Policy Act, this document includes an environmental assessment, which analyzes the impacts of the proposal and an alternative. The document is also intended to serve other legal compliance requirements for endangered species, floodplains, and cultural resources.

ISSUES

Designated trails at Buffalo National River currently total less than 15 miles, half of which are in the Buffalo Point area. The Final Master Plan proposes an extensive system, including a river-long trail and other significant trails far beyond the existing system. Information on the specific location of trails is currently lacking. As funding becomes available, or when volunteer groups come forward, an action plan will be needed to guide trail layout and other more detailed management decisions. This trail plan identifies approximate alignments for the primary trail, major loops, and spur trails. It also provides general guidelines for detailed trail location in the field.

Related to the issue of where trails will be located is the problem of river crossings. The Buffalo River fluctuates between extremely low or no-flow conditions to major floods. Pedestrian bridges may be desired for safety but are very expensive to build to withstand the high flows.

Another major issue is what use should be accommodated on given segments of the trail system (e.g., hiking, horseback riding, backpacking, or bicycling). Some uses can cause adverse impacts on park resources. This plan proposes policies on what facilities should be developed for horses and how overnight use in the backcountry should be managed.

Lack of planning may result in facilities such as parking areas being placed in inappropriate locations. A strategy for trail support facilities is needed in coordination with other development plans for the park. Existing trailheads are inadequate to serve the trail system contemplated in the

master plan. This trail plan addresses the issue of where trailheads should be located and what types of trailhead facilities are needed (e.g., parking). Without specific guidelines, trails may be inconsistently developed or maintained. Certain areas, such as the wilderness units, deserve special consideration. Wilderness management policies must be considered in developing trail proposals. The trail plan determines what standards are appropriate for different classes at Buffalo National River and what special guidelines are needed for trails in the designated wilderness areas.

This document proposes a long-range, extensive trail system network for Buffalo National River. Because implementation of the trail plan may take 25 years or more, priorities must be identified to ensure that the most needed trail segments are developed first. This trail plan addresses the issue of what priority should be given to the different trail system segments.

MANAGEMENT OBJECTIVES

To achieve the goals of the master plan and provide a comprehensive trail development program for the park, this plan proposes the following objectives:

Offer a variety of trail-oriented experiences.

Provide for long and short trail opportunities.

Maximize aesthetic potential and provide access to key resource features, including numerous points overlooking the Buffalo River.

Make portions of the trail system accessible by physically disabled and elderly persons.

Provide adequate support facilities necessary to accommodate the user.

Use historic roads and trails where appropriate, such as in historic areas or private-use zones

Preserve natural and cultural resources.

Avoid sensitive, fragile, and hazardous resources such as archeological sites, caves, and mine openings.

Protect water quality in the Buffalo River and its tributaries.

Minimize conflicts among user groups and between visitors and private landowners in the area.

Cooperate with the U.S. Forest Service, the Arkansas Game and Fish Commission, and the Ozark Highlands Trail Association for trail connections on adjacent lands.

Expand volunteer agreements in effect with organizations such as the Ozark Society, the Student Conservation Association, and the American Hiking Society, and encourage other private-sector assistance in developing and maintaining the trail system.

NATURAL RESOURCES

The major resource of the Buffalo National River is, of course, the river. Its national significance stems from its undeveloped free-flowing, character and relatively unpolluted water. The water is usually a transparent emerald green except after storms when it turns muddy from runoff. River flow varies by season, generally high in the spring and low in the summer. However, storms may bring the river up at any time. Floods occur annually--most frequently in the spring but potentially any month. They flow over various floodplain areas within the valley depending on the volume discharged. Because runoff from the basin is swift, river levels can rise quickly.

Over the years the Buffalo River has cut deeply into bedrock layers of sandstone, shale, dolomite, and limestone, creating tall vertical bluffs up to 500 feet high. The park contains over 100 caves including Fitton Cave, which is a major resource in northern Arkansas.

In addition to outstanding geologic features, Buffalo National River has interesting wildlife and vegetation. The river is somewhat ecologically isolated from surrounding regions. The area has a variety of habitats--open fields, forests, meadows, hollows, dry and moist bluffs, springs, creeks, and gravel bars. The mix of woodlands, open fields, and riparian zones provides a visually appealing landscape mosaic.

The varied habitat types display diverse vegetation. Over 1,500 plant species can be found within the area. The two major forest associations are (1) upland oak/hickory--with six oak and three hickory species, and smaller numbers of winged elm, red maple, sassafras, persimmon, walnut, hackberry, blackgum, shortleaf pine, and red cedar and (2) river floodplain-- with sweetgum, sycamore, willow, elm, river birch, and boxelder.

Additionally, varied microenvironments provide for a number of plants that are relict or rare species in the Buffalo River watershed. Although several plants within the park are currently under review by the U.S. Fish and Wildlife Service, none have been formally listed as endangered or threatened.

Animal life in the area is representative of the deciduous forest biome. The Buffalo River is nationally known for its many fish species. The principal game fish is the smallmouth bass. Also present are largemouth bass, spotted bass, ozarkbass, suckers, catfish, bluegill, green sunfish, and longear sunfish. Because of the cold-water releases of the White River impoundments, the river is an isolated ecological unit; it is therefore protected from the invasion of warm-water rough fish. Several caves within the park are critical habitat for endangered Indiana and gray bats. Bald eagles are occasionally seen at Buffalo National River, and nesting is suspected.

CULTURAL RESOURCES

The inhabitants in this area were isolated from other cultures during prehistoric and historic times because of the rugged topography. The area along the river has been occupied for at least 9,000 years. The earliest native people, the Bluff Dwellers, were hunters and gatherers. Later they built small, semipermanent villages in the bottomlands.

The first European settlers arrived in the early 1800s. By that time Buffalo River Valley was largely an uninhabited seasonal hunting ground of the plains-dwelling Osage Indians. Early settlers cleared bottomlands and farmed. These farming activities are continued today, as seen in the cultural landscapes at Richland Valley, Boxley, and Erbie. Civil War skirmishes, lead and zinc mining, and the timber and cattle industries added to the story of life in the Ozark hills.

There are a variety of extant cultural resources within the national river boundary. About 10 percent of the land is open fields that have been used since the area was settled. An archeological site at Calf Creek, the CCC-built structures at Buffalo Point, and the Boxley Mill are listed on the National Register of Historic Places. Boxley Valley's significant cultural landscape is currently being nominated to the Register. Recent studies have identified the Parker-Hickman farmstead and the Rush mining district as significant and worthy of listing on the National Register.

VISITOR USE AND DEVELOPMENT

Historically the Buffalo River has been a place for local residents to hunt, fish, float, and swim. Since its designation as a national river, its role has expanded. Today, the park provides opportunities for a variety of recreational experiences in three different settings: (1)

wilderness/backcountry areas with trails or dirt roads and low visitation; (2) semiprimitive areas with gravel roads, low-standard campgrounds, and moderate visitation; and (3) developed areas with paved roads, high-standard campgrounds, interpretive programs, and heavy use. Visitor activities currently include floating, river camping, swimming, hunting, fishing, and picnicking. Many of the visitors still come from the local area, however, as the Buffalo National River has become more widely known it has drawn more visitors from outside the area.

In addition to the traditional recreational activities, increasing interest is being observed in hiking, backpacking, and horseback riding. Long-range hiking and backpacking opportunities are currently limited because of a lack of long trails. The national river has only about 14 miles of designated trails that, which are in scattered segments. Some hikers and backpackers use old roads in the area, and some horseback riding occurs on old roads, informal trails, open fields, and river bottoms, including sections of the seasonally dry riverbed. Existing maintained hiking trails include the following:

Trail	Length
Lost Valley	1 1/2 miles
Hemmed-in-Hollow	1 mile
Ozark to Pruitt	2 1/2 miles
Gilbert to Brush Creek (old railroad grade)	2 miles
Buffalo Point Trails (several segments)	7 miles total
Total	14 miles

In addition, some old roads are maintained as trail routes, including the Big Creek road, Center Point road, and several former roads in the Lower Buffalo Wilderness.

There are three designated wilderness areas at Buffalo National River. The Upper Buffalo Wilderness is in the uppermost section of the national river adjacent to the wilderness area in the Ozark National Forest. The Ponca Wilderness is also in the upper river area, between Ponca and Erbie. The Lower Buffalo Wilderness is at the lowest end of the park between Buffalo Point and the Buffalo's confluence with the White River (see maps in the appendix).

THE CONCEPT

As stated above the basic concept for the trail system at Buffalo National River was established in the 1975 Final Master Plan. This "Trail Plan/Environmental Assessment" expands that concept and translates it into proposed trail corridors.

The most significant element of this proposed trail system is a river-long trail, the "Buffalo River Trail," which will parallel the river for the length of the park. Spur trails will connect the Buffalo River Trail to developed areas, significant natural features, and historic sites. Other major loop or spur trails will be developed where the land base is sufficient and landscape features are conducive to trail opportunities.

In addition to hiking trails, there are demands in the area for ORV (off-road vehicle) trails, horseback-riding trails, and to some degree, bicycle trails. The master plan states that ORV trails will not be provided at Buffalo National River. Separate bicycle paths are not recommended at this time because of limited demands and high costs. If traffic projections are significant, a bicycle lane will be considered for the Tyler Bend entrance road when it is upgraded. Because of the limited demand for major long-distance horseback-riding trails, additional costs to develop trails to horse standards, limitations they place on alignment, environmental concerns, and some potential for conflicts in use, horseback-riding trails will be developed separately from the main Buffalo River Trail except for a few short segments. Horseback-riding trails are proposed for appropriate areas with an adequate land base; they will also serve as hiking trails for these areas.

Based on interest from hiking and horseback-riding clubs, local demands, and visitor requests, trails are proposed to provide opportunities for short-, medium-, and long-distance use. Short-distance users include elderly, disabled, and other visitors who may not have the time, ability, or stamina for a long hike. The medium-distance users include people who are interested in a loop trail or a segment of the Buffalo River Trail and who probably want to spend a few hours or a weekend. The long-distance users are hikers who are generally experienced and are seeking a challenging, multiday opportunity.

The proposed trail system will serve these different users. The Buffalo River Trail will provide a major long-distance hiking opportunity and will also connect with the Ozark Trail, linking the park with a cross-country, 700-mile-long hiking opportunity in Arkansas and Missouri. The medium-distance trail user will be served by frequent access points to the Buffalo River Trail and a choice of spur trails and loop systems. Some of these trails will be near developed areas; others are proposed for backcountry or wilderness areas. Most short-distance trail opportunities will be provided near developed areas.

CORRIDOR LOCATION

Proposed trail corridors were located to achieve the goals of the Final Master Plan and management objectives for this trail plan. The corridors will offer variety, connect key park features, avoid sensitive resources and potential hazards, and accommodate future links to the Ozark Trail. Experiential variety is accomplished by varying the trail terrain and accessing different ecological areas. Key park features that are connected include natural resources, such as scenic viewpoints; cultural sites, such as historic buildings; and developed areas, such as existing or proposed parking areas. Sensitive resources that were avoided where possible include known archeological sites, endangered bat habitat caves, fragile caves, floodplain areas, and cedar glades (because of their highly erodible sandstone/limestone soils). Potential hazards that were avoided include dangerous caves, mines, and numerous river crossings. Caves with fragile resources will be avoided during trail layout; however, a few selected, nonsensitive, nonhazardous caves with good access possibilities will be accessed by the trails for visitor use. Sensitive natural springs will also be avoided during trail layout.

Based on these and other factors, the Buffalo River Trail will begin at the park boundary in the Upper Buffalo Wilderness on the south side of the river. At Pruitt, it will cross the river on the Highway 7 bridge to the north side to offer variety and to avoid a major bridge over a large tributary--the Little Buffalo River. The trail will cross back to the south side on the low-water bridge at Hasty and remain on the south side down to Highway 65, where it will cross to the north side, pass by Gilbert, and cross back to the south side on a pedestrian bridge. At Highway 14 it will cross to the north side, pass through the Lower Buffalo Wilderness to the White River, and terminate at Hathaway Gap. For a more detailed identification of the proposed corridor, see the Trail Plan maps in the appendix and the area concepts described below. When completed, the 115-mile Buffalo River Trail will provide various possible experiences, lengths, and accessibility. Loop systems are also proposed for Boxley Valley, Erbie, Richland Valley, Tyler Bend, Gilbert, Dillard's Ferry (Highway 14), and the three wilderness areas. Approximately 40 miles of other spur, connecting, and loop hiking trails are proposed for the park.

Only about 15 miles of the Buffalo River Trail will be designated for horseback riding; however, another 90 miles of horseback-riding trails are proposed for certain areas based on available land, resource considerations, and demand factors. Horseback-riding trails are recommended for Boxley Valley, the Ponca Wilderness, Erbie, Pruitt, Tyler Bend, Dillard's Ferry, and the Lower Buffalo Wilderness. In most cases these horseback-riding trails will also be used by hikers. In high-use areas, an attempt was made to provide separate trails, if feasible.

The Buffalo River landscape is generally hilly, with very limited level terrain. However, a trail plan objective is to accommodate visitors with physical limitations on a portion of the system. If feasible short hiking trails, or portions of longer trails, will be accessible to these visitors at Lost Valley, Erbie, Pruitt, Tyler Bend, and Dillard's Ferry to provide a representative sample of Buffalo River environs. An estimated 5 miles of hiking trails will be made accessible.

Approximately 245 miles of trails are proposed in this plan.

TRAILHEADS

Trailheads are proposed at strategic locations throughout the national river (see appended Trail Plan maps). They will normally be connected to the Buffalo River Trail by a short spur to keep the sight and sound of motorized vehicles from intruding on the through-hiker's natural experience. Trailhead development will include parking areas for five to 20 cars depending on expected use levels. Where horseback riding is permitted, all or part of the parking area will be designed to accommodate horse trailers. Trailhead parking areas will be gravel-surfaced except for the paving at Buffalo Point where other roads and parking areas are paved and at Tyler Bend where most roads and parking areas will be paved when the area is developed. Trailheads will also include small orientation signs. In heavily used areas this will be an orientation exhibit with a "you are here" map. Restrooms will be available at developed areas--existing and proposed--such as at boat launches or campground areas. Most other trailheads will not have restroom facilities.

Trailheads will be established at the following locations:

Trailhead	Approximate Parking Spaces Needed
Upper Buffalo	5
Smith Creek	5 (car-trailer)
Casey Sawmill	5
Boxley Mill	10
Lost Valley	20
Beechwood	5 (car-trailer)
Leatherwood	10
Center Point	5 (car-trailer)
Steel Creek	5
Kyles Landing	5
Indian Creek	5
Compton	5 (car-trailer)
Schermerhorn	5 (car-trailer)
Fitton Cave (Tinsley site)	5
Erbie Church	10 (5 car-trailer)
Erbie Landing	10
Ozark Campground	5
Pruitt Landing	5
Pruitt Horse	5 (car-trailer)
Hasty	5
Carver	5
Woolum (seasonal)	5 (car-trailer)
Point Peter	5
Whisenant Bluff	5
Tyler Bend	5
Tyler Bend Horse	10 (car-trailer)
Gilbert	5
Maumee Crossing	5
Dillard's Ferry (Highway 14)	5
Kimball Bluff	10 (car-trailer)
Buffalo Point	10
Rush	20 (10 car-trailer)
Rush Ghost Town	5
Hathaway Gap	5 (car-trailer)
Duck's Head	5 (car-trailer)
Big Creek	5 (car-trailer)

In many cases these trailheads are proposed at existing or future developed areas. In some cases a portion of the designated parking area will be identified for the trailhead.

OZARK TRAIL CONNECTIONS

The Ozark Highlands Trail is the Arkansas section of the Ozark Trail, a long-distance hiking route of existing and proposed trails running from Lake Fort Smith State Park in western Arkansas to the Arkansas/Missouri border near Norfork where it connects with the Missouri section of the Ozark Trail and terminates near St. Louis (see Ozark Trail map). When completed, the Ozark Trail will provide an approximate 700-mile-long hiking opportunity through the Ozark Mountains. In Arkansas about 140 miles of the trail is complete, from Lake Fort Smith to the Old Moore CCC camp near Richland campground in the Ozark National Forest (about 10 miles south of Buffalo National River). In Missouri about 160 miles of the trail have been completed. The Ozark Highlands Trail Association has proposed that a portion of the trail would use the Buffalo River corridor from Richland Valley near Woolum to the Lower Buffalo Wilderness where it would connect with an undetermined trail through the Ozark National Forest's Sylamore district (see map pages 4-6 in appendix). The trail would exit the park somewhere between Middle Creek and the White River.

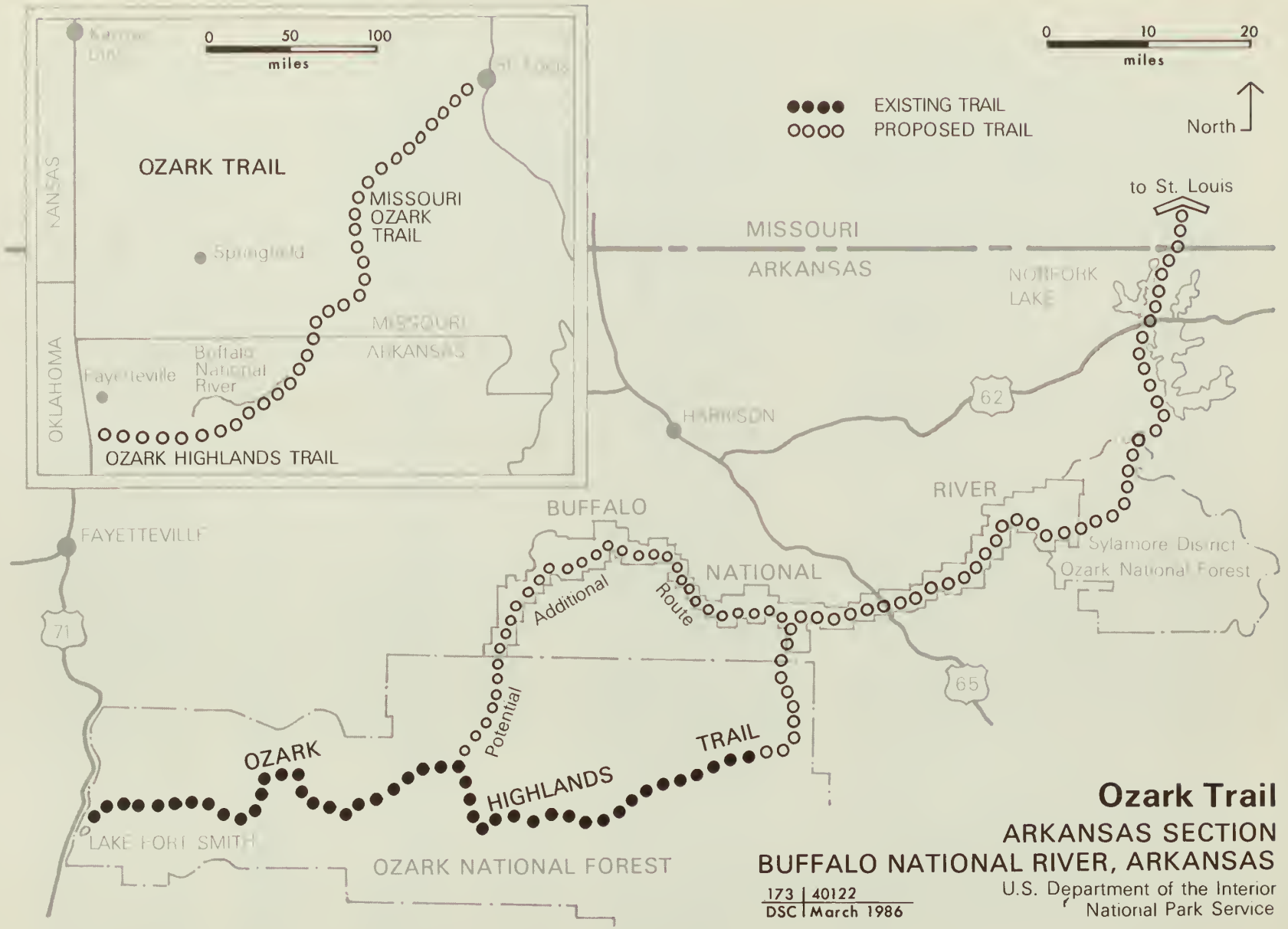
This trail plan also recommends an additional up-river route for the Ozark Highlands Trail that, if adopted, would connect to the Buffalo River Trail in the Upper Buffalo Wilderness area (see Ozark Trail map). This would provide an option for the long-distance hiker who prefers to traverse the entire length of the Buffalo River, and it would provide a multiday loop option over 100 miles long in the Newton County area.

AREA CONCEPTS

This section contains an area-by-area description of the trail corridors to provide more detail for portions of the park where major trail systems are proposed.

Upper Buffalo Wilderness

As shown on map page 1 in the appendix, the trailhead for the Upper Buffalo Wilderness will be off Highway 21 near the Whiteley School (Mountain View Church). The Buffalo River Trail will be developed on a bench between the Buffalo River and the escarpment and will also be designated as a horseback-riding trail. A loop hiking/horseback-riding trail will be provided on an old wagon road along the Buffalo River. The Park Service will cooperate with



Ozark Trail

ARKANSAS SECTION

BUFFALO NATIONAL RIVER, ARKANSAS

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the Forest Service on a trail connection and the possible additional route for the Ozark Highlands Trail discussed above.

Boxley Valley

As stated in the Final Master Plan and detailed in the Boxley Valley Land Use Plan (NPS 1985a), Boxley Valley is a private use zone where the cultural landscape will be preserved. Trails in the area will provide broad panoramic views of the pastoral landscape and give closer views of historic resources in selected areas. The Buffalo River Trail will traverse the bluffs on the east side of the valley, and a horseback-riding/hiking trail will be developed on the upland slopes and benches on the west side (see map pages 1 and 2). Trailheads for the horse horseback-riding trail would be developed near Smith Creek and in the vicinity of the Beechwood Church. A small trailhead would also be developed near the Casey sawmill to provide parking for a connecting hiking trail that will cross the river on a reconstructed swinging bridge. A short loop interpretive trail will be provided at the historic Boxley mill.

Because of an impassable hollow, the horseback-riding trail must go outside the park boundary for a short distance southwest of Lost Valley (see map page 2). A boundary adjustment or trail easement will be needed. A minor boundary adjustment and acquisition of a 40-acre tract outside the present boundary is recommended.

Lost Valley

An existing trail into Lost Valley provides access to this popular and interesting geological and botanical area. A portion of the trail will be upgraded to a high standard (accessible to elderly and disabled) to provide opportunities for special populations to use this popular area. A connecting trail will also be developed to link the Lost Valley area with the Buffalo River Trail. As mentioned above, a small trailhead will be developed in the Beechwood Church vicinity next to the Lost Valley entrance road (see map page 2) to provide parking for the horseback-riding trail on the west side of Boxley Valley. For details on other proposed development for this area, see the Steel Creek - Lost Valley Development Concept Plan (NPS 1983a).

Ponca

The Leatherwood trailhead near the Ponca bridge will be developed to provide access to the Villines farmstead and the Buffalo River Trail (see map page 2).

Ponca Wilderness

The concept for the Ponca Wilderness is to provide opportunities for hiking, backpacking, and horseback riding in a primitive environment. The Buffalo River Trail will traverse the bluffs on the south side of the river. Spur trails will provide access to Steel Creek and Kyles Landing. A portion of the Buffalo River Trail in this area will use a trail that connects Kyles Landing to Hemmed-in-Hollow. A trailhead and spur trail are also proposed for Indian Creek, a scenic hollow on the south side of the river (see map page 2). The trail will be routed around a sensitive cave in the valley.

A major horseback-riding/hiking trail will traverse the Ponca Wilderness on the north side of the river and connect Boxley Valley to the Erbie area. A connecting trail will provide hiking access to the existing Hemmed-in-Hollow trail. trailheads will be provided on the west and north sides of the wilderness area (see map page 2).

Erbie Area

As discussed in the recently completed Erbie Development Plan (NPS 1986c), a system of trails will be provided in the Erbie area for day hikes and cultural landscape interpretation. Some hiking trails in the Erbie area will be high standard. As shown on map page 2, the Buffalo River Trail will pass by the historic Hickman farmstead. A trailhead will be designated at the proposed Erbie River access parking area and will be linked to the Buffalo River Trail by a connecting loop. A spur trail will lead to a panoramic overlook on Mutton Point. A new trailhead will be developed near the Erbie church that will serve a loop horseback-riding trail, a separate loop hiking trail, and a horseback-riding trail heading east from Erbie. A secondary trailhead for Fitton Cave users exists about 1/3 mile northeast of the church at the Tinsley house site.

The historic trail along Cecil Creek will serve as the lower end of a trail to a panoramic overlook on Newberry Point, avoiding the entrance to Fitton Cave. Other spur hiking trails will lead to Mutton Point and Broadwater Hollow Falls (see map page 2).

Pruitt

Because of its strategic location on Highway 7, the master plan identifies Pruitt as one of the three major use areas in Buffalo National River. The Pruitt Development Concept Plan (NPS 1981c) provides greater detail on the facilities to be provided. A trailhead for hikers is proposed at the canoe landing area on the north side of the river (see map page 3). A separate trailhead will be developed on the west side of Highway 7 to serve a horseback-riding/hiking trail going west and to link Pruitt to Erbie on the north side of the river. This will complete a continuous horseback-riding trail opportunity on the north side of the river between upper Boxley Valley and Pruitt.

The Buffalo River Trail will pass through the Koen Experimental Forest on the south side of the river upstream from Pruitt and the Park Service will consult with the Forest Service when the trail is layed out in this area. As it approaches Pruitt, the Buffalo River Trail will use a portion of an existing trail that connects Pruitt to the Ozark campground. A trailhead will be designated at the campground that will serve the Buffalo River Trail via a connecting loop that will also serve hiking needs in the campground vicinity (see map page 3). As discussed above, the Buffalo River Trail will cross to the north side of the river at Pruitt. The Park Service will work with the state to ensure that the proposed new Highway 7 bridge provides for pedestrian crossing. Portions of the trails in the Pruitt area will be high standard if feasible.

Richland Valley

The master plan designates Richland Valley as a private use zone where the pastoral landscape will be preserved. As proposed on map page 4 of this plan, the Ozark Highlands Trail will enter the park on the west side of Richland Valley and connect with the Buffalo River Trail near the "Nars" (Narrows) upstream from Woolum Ford. The trail will use a traditional, very low-use road in the valley. If traffic increases on this primitive road, an alternative route will be determined for the trail.

A seasonal trailhead will be established at Woolum on the north side of the river. It will be used when the river is low enough to ford safely. As shown on map page 4, a system of hiking and horseback-riding/hiking trails would provide half-day to full-day loop trail opportunities.

A hiking trail to access overlooks at Point Peter and Rollins Point will be developed on Point Peter Mountain. A trailhead will be developed at McCutchen Gap to serve this trail and an overlook south of the gap.

Tyler Bend

The master plan proposes that Tyler Bend become one of the three major use areas at Buffalo National River because of its location near US 65. The Tyler Bend Development Concept Plan (NPS 1981b) provides greater detail on proposed facilities for the area.

A system of horseback-riding and hiking trails are proposed in the vicinity of Tyler Bend (see map page 4). These will provide short or all-day loop trail experiences and include riparian zones, open fields, upland forests, and scenic overlooks. The trails will be away from the Calf Creek archeological site, which is listed on the National Register of Historic Places. A high standard trail will be developed in the Tyler Bend bottomlands as a portion of this system. A trailhead will be developed to serve this area and provide access to the Buffalo River Trail by way of connecting links.

Gilbert

The Buffalo River Trail will be developed between the Tyler Bend area and the Plumfield/Brush Creek area on the north side of the river. It will cross the Buffalo by way of a pedestrian lane designed into a replacement bridge for US 65 that is scheduled for construction in 1987. The trail will follow the old railroad grade from near the Gilbert store to a former railroad bridge site. The trail will cross back over the Buffalo on a pedestrian bridge to be constructed on four existing concrete piers of this old railroad bridge (see map pages 4 and 5). The Gilbert store (on the National Register of Historic Places) could be a source of supplies and mail for long-distance hikers.

Dillard's Ferry (Highway 14)

The Buffalo Point Development Concept Plan (NPS 1981a) proposes that river access and campgrounds be developed in the bottomlands just upstream from the Highway 14 bridge.

A trailhead will be developed in this area to serve the Buffalo River Trail, which will cross over the river on the Highway 14 bridge and other hiking trails in the area (see map page 6). The Ozark Trail will split off the Buffalo River Trail near Dillard's Ferry and continue on the south side of the river. Loop trails will provide short- and medium-distance hiking opportunities. Part of the loop trail in the bottomlands near the trailhead will be high standard if feasible. A horseback-riding trail will be developed to provide access to scenic overlooks south of the area (see map page 5). It will provide an opportunity for an all-day horseback ride in the Dillard's Ferry area. The trailhead for the horseback-riding trail will be on the west side of Highway 14 southeast of Dillard's Ferry.

Buffalo Point

Buffalo Point is the most heavily developed and used area at the park. The Buffalo Point Development Concept Plan (NPS 1981a) describes recommendations for facility upgrading and expansion. This trail plan recommends a combination of existing and proposed hiking trails to connect developed facilities with area features (see map page 6). Loop hiking opportunities will provide for the short- and medium-distance user. The Buffalo River Trail will pass through the area, connecting the Dillard's Ferry (Highway 14 bridge) area with the Buffalo Point ranger station, Buffalo Point trailhead, and Rush area. The National Park Service will recommend to the Arkansas Highway Department that a pedestrian lane be added to the existing bridge.

Rush

Rush is a major takeout for river users, and it has a historic mining district that is eligible for the National Register of Historic Places. The recently completed "Rush Development Plan" (NPS 1986a) proposes a loop hiking trail for interpreting area mining history (see map page 6). A major trailhead will serve this trail and the Lower Buffalo Wilderness. A small trailhead will also be developed near the Rush ghost town.

Lower Buffalo Wilderness

As shown on map page 6, an extensive trail system is proposed for the Lower Buffalo Wilderness. The Buffalo River Trail will traverse the bluffs on the north side of the river before terminating at Hathaway Gap. The Ozark Trail will traverse the bluffs on the south side to some point downstream from Big Creek where it will leave the park and enter the Ozark National Forest. The location is dependent on U. S. Forest Service decisions regarding trail location in the Leatherwood wilderness. Additional horseback-riding/hiking trails in the Lower Buffalo Wilderness will provide day trips or overnight trips for horseback riders and a three- to five-day loop hiking trip for backpackers.

Horseback-riding/hiking trails will also be developed on the south side of the river in the Duck's Head and Big Creek areas. Because the Duck's Head area is designated wilderness, parking will have to be provided off-site or a minor boundary adjustment made to add land for a trailhead. As discussed above, a connection for the Ozark Trail will be established somewhere on the west side of the Lower Buffalo Wilderness in cooperation with the Forest Service (see map page 6).

DESIGN GUIDELINES

This section describes trail classes and design/maintenance guidelines that were developed for the needs and conditions at Buffalo National River. For general guidelines on trail design and maintenance, see NPS Trails Management Handbook (NPS 1983c). For additional guidelines on aesthetic considerations in trail layout, see "Buffalo National River Trail Master Plan" (Bruggeman 1982: 64-74). Another good reference for trail development is Trail Design, Construction, and Maintenance (Birchard and Proudman 1981).

High Standard Hiking Trails

High standard trails will provide opportunities for the short-distance trail user, including elderly, disabled, and other visitors who may not have the stamina, ability, desire, or time for a longer hike. These trails will be the widest and easiest ones at the park. They may be short trails, small loops, or portions of longer trails. Decisions on which hiking trails, or portions of hiking trails, will be developed to the high standard will be made during detailed trail design and layout for specific segments based on use levels, site considerations, interpretive potential, and cost factors.

Other walks and paths in developed areas will also be made high standard if feasible during facility design or rehabilitation.

Length: Generally 1 mile or less

Grades: 0-3% desirable; 5% maximum for short distances (no steps)

Width: 5 feet minimum (if less than 5 feet, provide pullouts)

Right-of-Way Clearing: Vegetation and obstructions should be cleared to a minimum of 8 feet high and 7 feet wide (or tread width plus 3 feet)

Surface: Materials should be firm, smooth, and consistent with other surfacing materials in the area; preferable materials include concrete, asphalt, compacted crushed stone, wood decking, or soil cement.

Medium Standard Hiking Trails

Medium standard trails will usually be near major developed areas or provide access to primary attractions. They may serve as an extension of the high standard trails or as a transition to the backcountry trails. An example of a medium standard trail is the Indian Rockhouse trail at Buffalo Point. Like the high standard trails, these trails provide the hiker with a sense of the Buffalo River. Decisions on which hiking trails should be medium standard will be made during detailed trail design and layout for specific segments based on use levels, site considerations, and cost factors.

Length: Generally less than 3 miles.

Grades: 1-7% desirable; 15% maximum for short distances (steps should normally be avoided)

Width: 24 inches minimum; 36 inches recommended

Right-of-Way Clearing: Minimum of 8 feet high and 6 feet wide

Surface: Existing soils should be used where they are capable of sustaining the anticipated use level. When native soil cannot support the traffic, tread-surfacing material that blends with the natural environment should be used.

Backcountry Hiking Trails

Backcountry (low standard) trails include wilderness hiking trails, most of the Buffalo River Trail, and other hiking trails that are subject to low levels of use. These trails are intended to provide a primitive, medium-to-long-distance trail experience in natural settings. Backcountry trails should provide a degree of remoteness. Backcountry trails in wilderness areas should be as removed as possible from the signs and influences of civilization.

Length: Generally greater than 3 miles

Grades: 1-15% desirable; 25% maximum for short distances (if greater than 25%, provide steps).

Width: 18 inches minimum; 24 inches recommended (18 inches in wilderness areas)

Right-of-Way Clearing: 8 feet high and 5 feet wide (4 feet in wilderness areas). This may be reduced to a 3-foot minimum width between large trees.

Surface: Trail surface should be existing soil and overlying organic material. Materials should be obtained nearby, but not within sight of the trail. Other material should be used only where necessary to fill low spots or repair erosion damage.

Horseback-Riding Trails

Horseback-riding trails are proposed for several areas of Buffalo National River (see maps in appendix). These will provide a variety of riding lengths, ranging from one-half day to two days. Horseback-riding trails will also serve as hiking trails in most areas. However, the standards for trails used by horses are somewhat higher than for other backcountry hiking trails.

Length: Generally greater than 3 miles

Grades: 1-10% desirable; 20% maximum for short distances (no steps)

Width: 24 inches minimum; 36 inches recommended (24 inches in wilderness areas). Tread width should vary with the terrain conditions, becoming wider on steep side slopes and rough terrain and narrower in flat open areas.

Right-of-Way Clearing: Minimum of 10 feet high and 8 feet wide (6 feet in wilderness area)

General Guidelines

Because backcountry trails, are intended to deemphasize signs of civilization, the Buffalo River Trail will not be routed directly through developed areas if possible; however, short spurs should connect it to the developed areas. Signs along the Buffalo River Trail will indicate the availability of a campground, potable water, and supplies.

All trails will be routed to avoid the need for blasting or other extensive rock work if feasible. This will minimize impacts on resources, hold construction costs down, and maximize human safety.

Various road crossings, from major highways to infrequently used dirt roads, will occur frequently along the Buffalo River Trail and occasionally along other long trails. All road crossings will maximize safety by locating perpendicular crossings on straight flat road sections and by the use of signs. On paved roads the crossing should also be indicated by striping on the pavement.

Trails will be routed to maximize opportunities for river views and overlooks. Vista clearing will be done at appropriate points to improve the scenic value of the hiking or riding experience. However, to minimize the influence of man, no vista clearing will be done in wilderness areas. Bridges and other trail structures will also be the absolute minimum necessary in wilderness areas. Native materials will be used if feasible. The objective in the wilderness areas is to give the impression that the trail was not constructed, but that it just developed over time on its own from foot or horse traffic. Trail construction in wilderness areas will use the minimum tools necessary. Mechanical equipment will be used only if there is no feasible alternative.

SIGNING

Trail signs will vary according to the type and location of the trail. In wilderness areas, signs will be limited to the minimum necessary for the safety of park visitors, such as basic directional signs at trail intersections, and they will be small and rustic in design. Other backcountry trails may be signed somewhat more extensively, but in general the intent is to provide only safety and basic orientation information. High and medium standard trails may have additional signs identifying interesting features and more extensive orientation and interpretive wayside exhibits.

Trailblaze markers will be the standard 5-inch by 7-inch diamond made of metal or plastic and will be used only in areas where the designated trail is not apparent. In wilderness areas, tree blazes, rock cairns, or other symbols using native materials will be used if feasible.

RIVER CROSSINGS

There will be numerous small stream crossings within the national river, especially during the rainy spring season. Decisions on the need for small bridges will be made during trail layout. Major tributaries will probably require pedestrian bridges. The Buffalo River is subject to extreme changes in flow. Bridges that will withstand the floods would be large and expensive, especially in the lower river; therefore, the number of river crossings requiring bridges have been kept to a minimum. Swinging bridges will be installed if feasible at historic bridge sites at Boxley and Erbie. Most upper and middle river crossings will be fords and they will be signed to identify the hazards of high water. The new pedestrian bridge near Gilbert will use the old railroad bridge concrete piers for a foundation, if feasible. Several river crossings will be on highway bridges. The Park Service will work with the state to ensure that highway bridges are designed to accommodate pedestrian traffic.

FACILITIES FOR HORSES

To provide the minimum development necessary, keep construction costs down, and avoid adverse resource impacts, facilities for horses will be kept to a minimum. Hitching rails or posts will be installed where needed on designated horseback-riding trails. Trailheads serving horseback-riding trails will be designed to accommodate horse trailers.

As stated in the 1975 Final Master Plan, "If additional facilities are not developed outside the boundaries, then horse concessions will be considered for developed areas." Visitor needs and visitor demand for horseback riding are likely to increase at Buffalo Point/Dillard's Ferry and Tyler Bend. The General Development Plan map from the 1976 Final Environmental Statement identifies horse concessions for these two areas. Studies will be made at those areas and perhaps at other areas also to consider the best way to meet those needs.

The land use plan for Boxley Valley (NPS 1985a) provided for a limited number of small-scale horse rental operations. The purpose was "to provide bed and breakfast or day-use visitors an opportunity to experience Boxley by going to one of the small farms, meeting a local person and viewing the Boxley environment on horseback." Permits for this purpose will contain restrictions to ensure that the horse stables or corals and horse use have minimum impacts on the environment.

BACKCOUNTRY MANAGEMENT

During its first 14 years Buffalo National River experienced fairly consistent levels of seasonal backcountry use. Between early March and early September most overnight backcountry use is associated with river floating. During the other six months, backcountry use shifts to the land base, which offers hiking, horseback-riding, and hunting opportunities. However, those activities are generally day use, with a moderate amount of overnight use associated with hunting (including hunting supported by pack and saddle stock), particularly in the lower wilderness. Overnight use of the backcountry will likely increase considerably once the trail system is developed, and a backcountry management plan will be developed in response to indicated needs arising from that anticipated increase. In the interim, backcountry management is in accord with the River Use Management Plan (NPS 1983b), Title 36 Code of Federal Regulations, and the "Superintendent's Orders"--the preponderance of which deal with backcountry management. Park rangers and resource management specialists will monitor backcountry use, and visitor use restrictions and other management changes will be implemented if resource damage or other problems arise.

Wilderness management policies were considered during plan preparation and the trail proposals are indicative of these policies.

IMPLEMENTATION COSTS AND PRIORITIES

A cost estimate for the trail plan and trail development priorities are provided below. It must be stressed that this is a long-range plan that may take 25 years or more to accomplish. Implementation may occur in small or large phases as the resources become available. Essential to the success of this plan is the concept that volunteers will continue to have a major role in constructing and maintaining the park's trail system. NPS staff will do all trail layout and work closely with volunteers during construction activities. Natural and cultural resource clearances will be coordinated with regional office specialists before and during plan implementation. Given the uncertainties of private sector support, half the development costs are assumed to be by government-contracted construction. Local labor or more volunteer work could, of course, reduce these estimates further.

Table 1: Estimated Development Costs

Medium Standard and Backcountry Hiking Trails (135 miles)	$ 1,282,000
Horseback-Riding Trails (105 miles	1,365,000
High Standard Hiking Trails (5 miles)	140,000
Trailheads	132,000
Total (Net)	$ 2,919,000
(Gross)	$ 4,262,000*

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*Gross costs add 46 percent of net costs for design, construction supervision, and contingencies (assuming one-half development by government-contracted construction).

There will be major long-term costs for trail maintenance at the national river that will develop over time as the trail plan is implemented. With proper layout and construction techniques, maintenance costs will be kept as low as possible. Like construction costs, it is possible that volunteer maintenance could reduce NPS costs considerably. Annual maintenance costs are estimated to be about $400 per mile, or about $50,000 per year when the plan is fully implemented (assuming one-half maintenance by volunteers).

Table 2: Trail Development Priorities*

Priority (highest to lowest)	Suggested Areas
Medium or high standard trails near developed areas	Lost Valley, Erbie, Pruitt, Tyler Bend, Dillard's Ferry, Buffalo Point
Trails to major park features	Hemmed-in-Hollow
Ozark Trail portion of Buffalo River Trail	Woolum to Lower Buffalo Wilderness
Connecting portions of Ozark Trail	Richland Valley, Lower Buffalo Wilderness
Remainder of Buffalo River Trail	Upper Buffalo Wilderness to Woolum
Major trails in wilderness areas	Upper Buffalo, Ponca, Lower Buffalo
All other trails	

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*Other factors may also enter decision-making on a specific trail segment--such as completing a connecting link.

Numerous options, including variations on portions of the system and individual trail corridor locations, could be visualized for the parkwide trail plan. This section describes one basic alternative to the proposal. Stated briefly, the alternative includes a less-extensive trail system with somewhat more horseback-riding trails.

The alternative would include a system more reflective of what was proposed in the Final Environmental Statement for the Master Plan (NPS 1976). The system would total about 145 miles of trail development, or 90 miles less than the proposal. The Buffalo River Trail (approximately 105 miles) would be a combined horseback-riding/hiking trail except near major developed areas where separate horseback-riding and hiking paths would be established. An additional 15 miles of horseback-riding trail would be developed. Only 25 miles of hiking-only trails would be constructed in this alternative. As in the proposal, 5 miles of these hiking trails would be high standard--accessible to visitors with physical limitations.

Trails included in the proposal that would be excluded in this alternative follow:

Upper Buffalo Wilderness bottomland horse trail and Boxley Valley west side horseback-riding trails (approximately 15 miles)

Newberry Point and Mutton Point overlook trails, Hideout Hollow trail, and Indian Creek trail (approximately 5 miles)

Twenty miles of horseback-riding trail in the Ponca Wilderness and Erbie and Pruitt areas

Richland Valley loop horseback-riding trail and 3 miles of horseback-riding trail near Tyler Bend (approximately 12 miles)

Approximately 16 miles of hiking trail and 22 miles of horseback-riding trail in the Buffalo Point vicinity and Lower Buffalo Wilderness, including the Buffalo Point loop, Dillard's Ferry loop, Duck's Head loop, Southside hiking trail, spurs from Ozark National Forest, Big Creek trail, Cow Creek spur, Spencer Ridge spur, and part of the loop for horseback-riding trail near Hathaway Gap

Trailheads would be limited to the following locations: Upper Buffalo, Lost Valley, Leatherwood, Center Point, Steel Creek, Fitton Cave (Tinsley), Erbie Landing, Pruitt, Hasty, Carver, Point Peter, Tyler Bend, Dillard's Ferry, Rush, and Hathaway Gap.

Total parking capacity would be about 140 spaces; half would accommodate horse trailers.

The costs of implementing the alternative would be less than for the proposal because of reduced trail mileage and fewer parking areas. However, the cost per mile would be somewhat higher because of the added expense of constructing the entire Buffalo River Trail to horseback-riding standards. Following is a breakdown on costs, again assuming half the construction is by government contract.

Table 3: Estimated Development Costs of Alternative

Medium Standard and Backcountry Hiking Trails (20 miles)	$ 190,000
Horseback-Riding Trails (120 miles)	1,560,000
High Standard Hiking Trails (5 miles)	140,000
Trailheads	87,000
Total (net)	$ 1,977,000
(gross)	$ 2,886,000

Long-term maintenance costs would be less than for the proposal, albeit still significant. Assuming $400 per mile per year and one-half of the maintenance by volunteers, the estimated cost would be about $30,000 per year when the trail system is completed.

IMPACTS OF THE PROPOSAL

Vegetation

A certain portion of the proposed trails will use old roads where vegetation destruction will be little or none. Where new trails are constructed, the impacts on vegetation will be minimal because of the narrow nature of the corridor and because large trees can usually be avoided during layout.

There are no endangered or threatened plant species known to exist at Buffalo National River, however, several plants under review for possible listing do exist in the park. The trails were routed to avoid known locations of these plants. Detailed surveys will be done, as necessary, during actual trail layout so that the trail may be routed around any areas that contain federally listed species. Parking areas will be small (5-20 spaces), and in most cases they will be developed in already disturbed areas. At most, they will affect one-half acre of forest each. Again, detailed surveys will be done to ensure that listed plant species are not adversely affected. Use by horses may result in the spread of nonnative plant species along trails by seeds transported in manure.

Wildlife

There will be some disturbance to wildlife species during construction and through use of the trails and parking areas. If explosives or helicopters are used during construction, these impacts will be greater. Of the species likely to be affected, none are considered especially sensitive to human disturbance. Endangered Indiana and gray bats inhabit several caves at Buffalo National River. Trails have been routed to avoid these caves by at least 500 feet. Entrance to the subject caves is also prohibited during the critical bat occupation periods. Also, trails are generally not proposed in riparian areas which are used by the bats. Therefore, no adverse impacts are anticipated on endangered bats.

Bald eagles are occasionally seen along the Buffalo River, and nesting is suspected. The Park Service is cooperating with the state to introduce nesting in the park. Trails will be routed to avoid any identified nesting sites. Therefore, impacts on bald eagles should be minimal.

Water Quality

The impacts on water quality resulting from the proposed trail plan will generally be minimal. There could be increases in water pollution where horseback-riding trails are near watercourses and animals are allowed to congregate. However, in most cases horseback-riding trails have been located away from the Buffalo River and major tributaries, and with the expected moderate levels of horseback-riding use, overall impacts on water should be very limited.

Soils

There will be some soil erosion along the proposed trails. Easily eroded soils associated with cedar glades have been avoided. Once constructed, properly designed trails should have minimal erosion problems. The horseback-riding trails and high use trails will have greater levels of soil erosion. There may be greater soil erosion on trails located on old roads where past disturbance and improper grades have caused erosion problems.

Floodplains and Wetlands

Many of the trails will cross floodplain areas. To minimize long-term maintenance costs, the number and extent of trail alignments within floodplain areas have been kept to a minimum. About 10 of the trailheads, most of which are in relation to existing or proposed river access/campground developments, will be in the 100-year floodplain. Because of the small size of the parking areas and the limited number of bottomland trails, there will be minimal impacts on floodplain values. Trails and small trailhead parking areas are excepted from further floodplain compliance by NPS procedures for implementing Executive Order 11988. No wetlands will be affected by the proposed trails or trailheads.

Archeology

Impacts on known archeological sites will be minimal because such sites were avoided, where feasible, in selecting trail corridors and trailhead locations. In most cases the trails are up in the bluffs and not in the bottomlands where archeological sites are more numerous. Prior to construction, specific trail alignments will be surveyed and adjustments will be made to avoid sensitive sites. Ground disturbance during trail construction will be very limited, but there is a chance of encountering unknown prehistoric resources. As mentioned above, most trailheads have been located in previously disturbed areas such as old farm fields and building sites. Because access will be facilitated by the new trail system, there may be some impacts caused by visitors disturbing sites in proximity to proposed trails.

Historic Resources

There will be no direct effect on historic structures from the proposed development. There is a possibility of additional vandalism to backcountry cultural resources because of improved access and increased use. Proposed trailheads in Boxley Valley would introduce new visual intrusions to the cultural landscape scene and convert small areas of historic farmland to an alternative use. Interpretation of historic resources, such as those at Boxley Valley, Erbie, and Rush, will be facilitated by the proposed trail network. This may encourage preservation activities for historic resources in the park.

Visitor Use

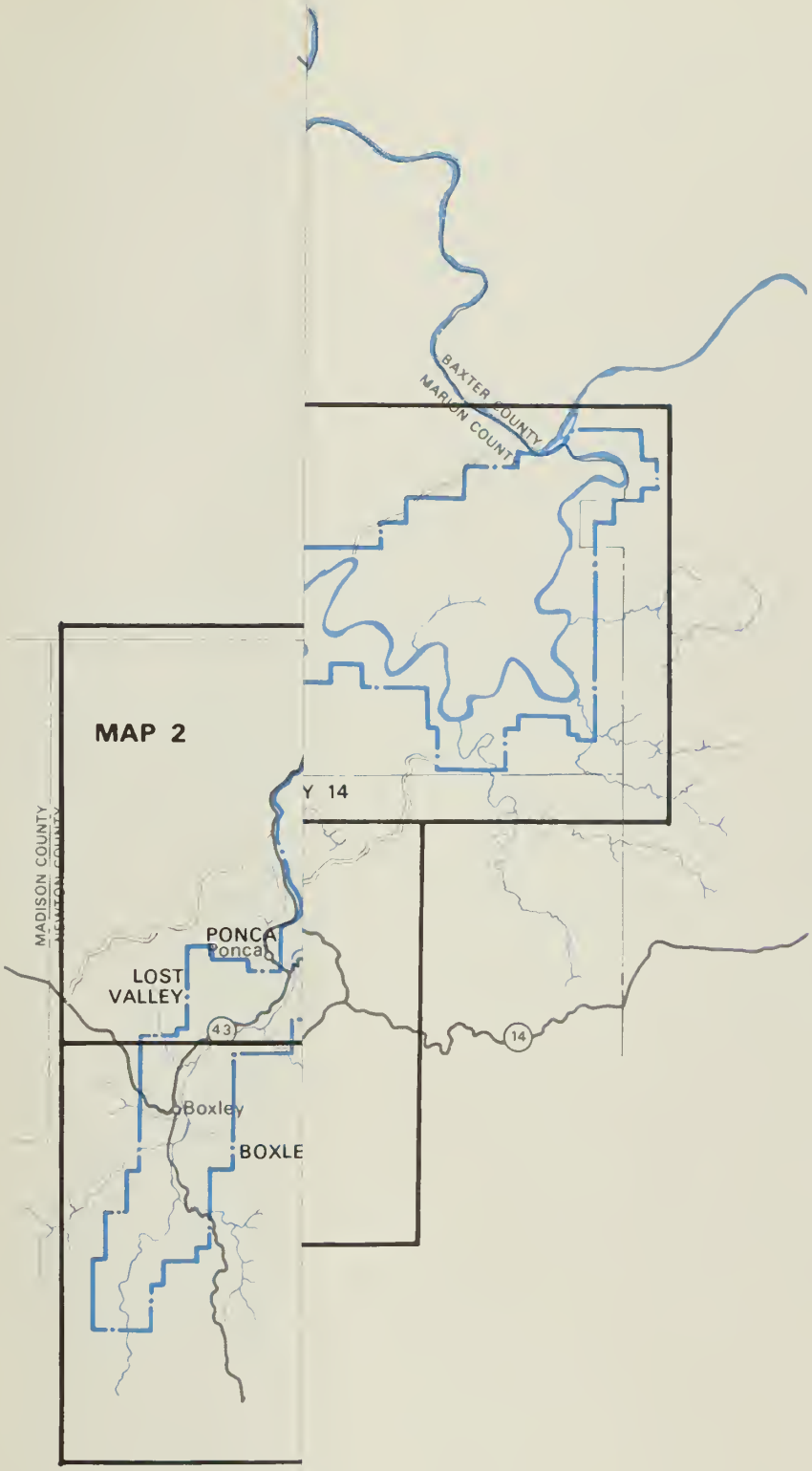
There will be some interference with visitor use during trail construction, especially if the use of explosives is required. Visitor use in the backcountry will increase substantially as the trail system is developed. The opportunities for a variety of trail experiences will be much greater. This includes options for long-distance overnight trail use, which is currently nonexistent in the park. There will be some conflicts between hiking and horseback riders; however, this will be minimized by excluding horses from hiking trails and providing separate horseback-riding trails in several areas. Visitors may be exposed to hazardous situations that are typical of backcountry use in the Ozarks. This has been minimized by avoiding extensive trail fords and keeping trail corridors at least 500 feet away from hazardous caves and mine openings when possible. In the Rush area hazardous mines are being fenced to prevent visitor access into the mines.

IMPACTS OF THE ALTERNATIVE

Impacts of the alternative would be similar to those in the proposal except as explained below. Less vegetation would be disturbed because 90 fewer miles of trail and 20 fewer trailheads would be constructed and maintained; there would also be less disturbance to wildlife and less potential for disturbing cultural resources. Water quality impacts would be similar, although horseback-riding use would be extended along the entire Buffalo River Trail and therefore greater soil erosion would occur. Impacts on floodplains would be minimal, as in the proposal. There would be less intrusion on cultural landscapes, such as at Boxley and Erbie. The primary differences between the proposal and the alternative are the alternative's lower costs and reduced visitor use opportunities. Access would not be provided to as many areas, and options for loop hikes or horseback rides would be fewer. However, visitor opportunities in the alternative would still be vastly expanded over existing conditions. By making the Buffalo River Trail a combined hiking/horseback-riding trail, horseback riders would have a longer, multiday riding opportunity than provided in the proposal. There would also be increased potential for conflicts between user groups.

CONSULTATION

The National Park Service has consulted with selected individuals, the U.S. Forest Service, and the Arkansas Trails Council during the preparation of this plan. Because Buffalo National River contains resources listed on the National Register of Historic Places, the Park Service is also consulting with the Advisory Council on Historic Preservation and the state historic preservation officer in the preparation of this plan. This document will also be sent to other appropriate agencies and individuals for formal review and comment.



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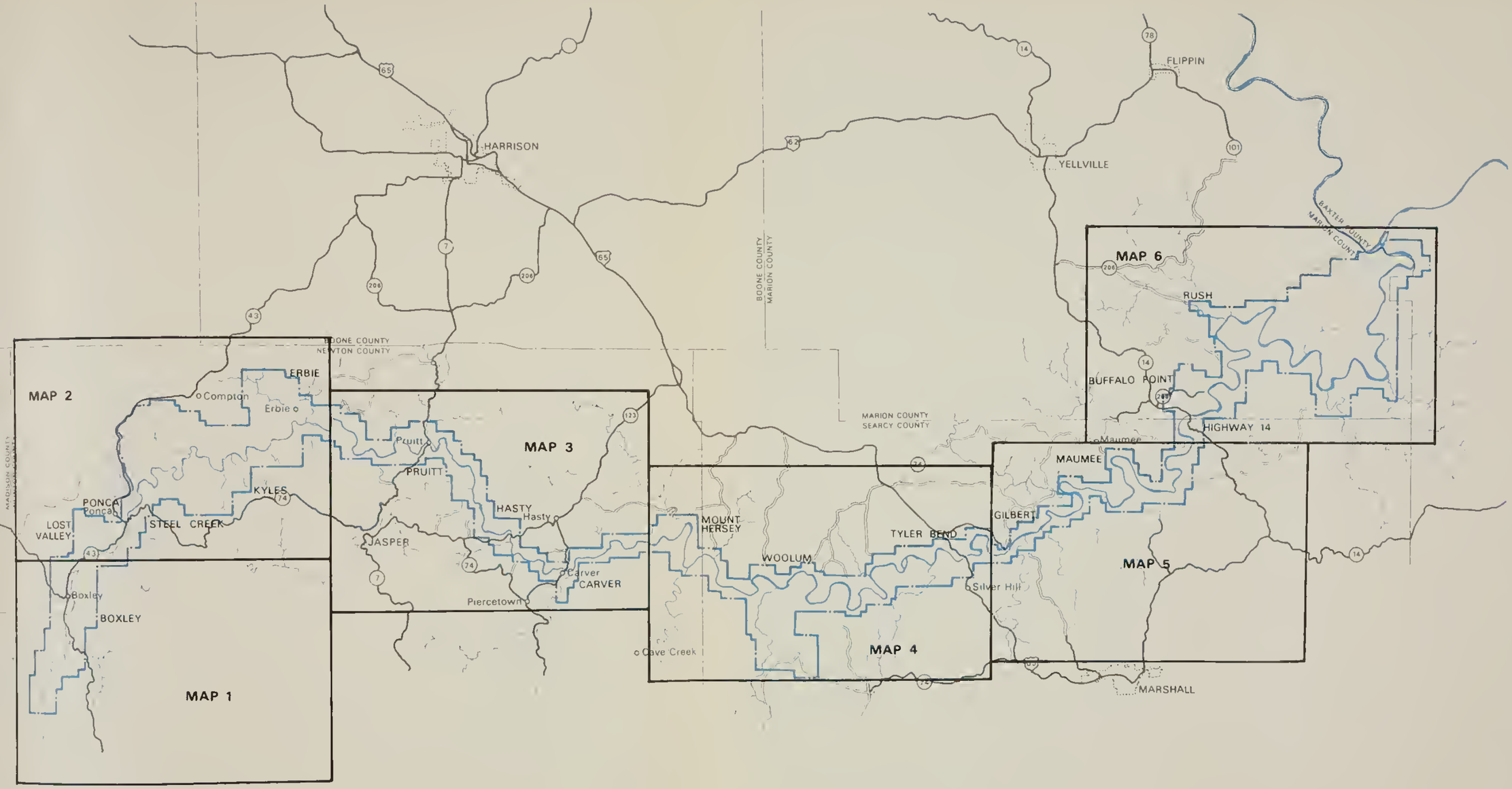

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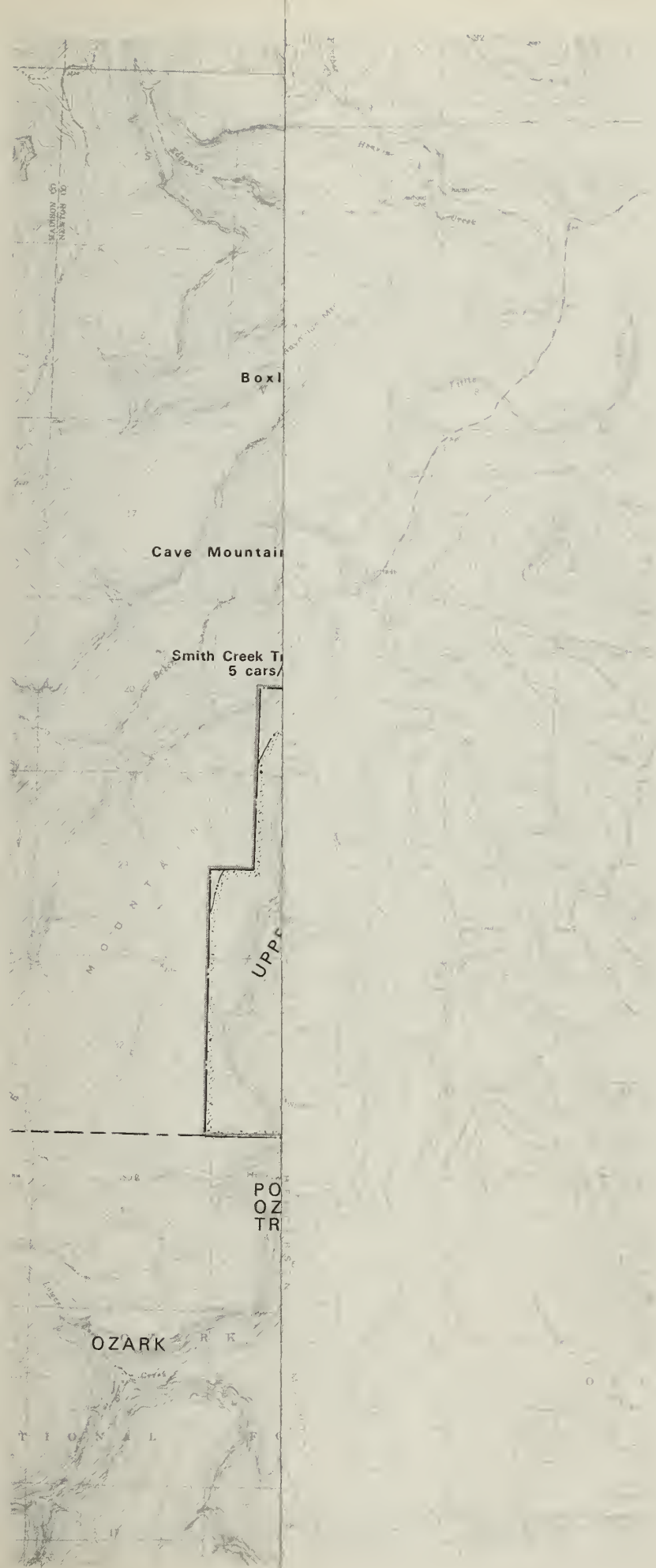

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- HORSE/HIKING TRAIL
- TRAILHEAD
- TRAILHEAD & DEVELOPED AREA
- VIEWPOINT
- WILDERNESS BOUNDARY
- HIGHWAY

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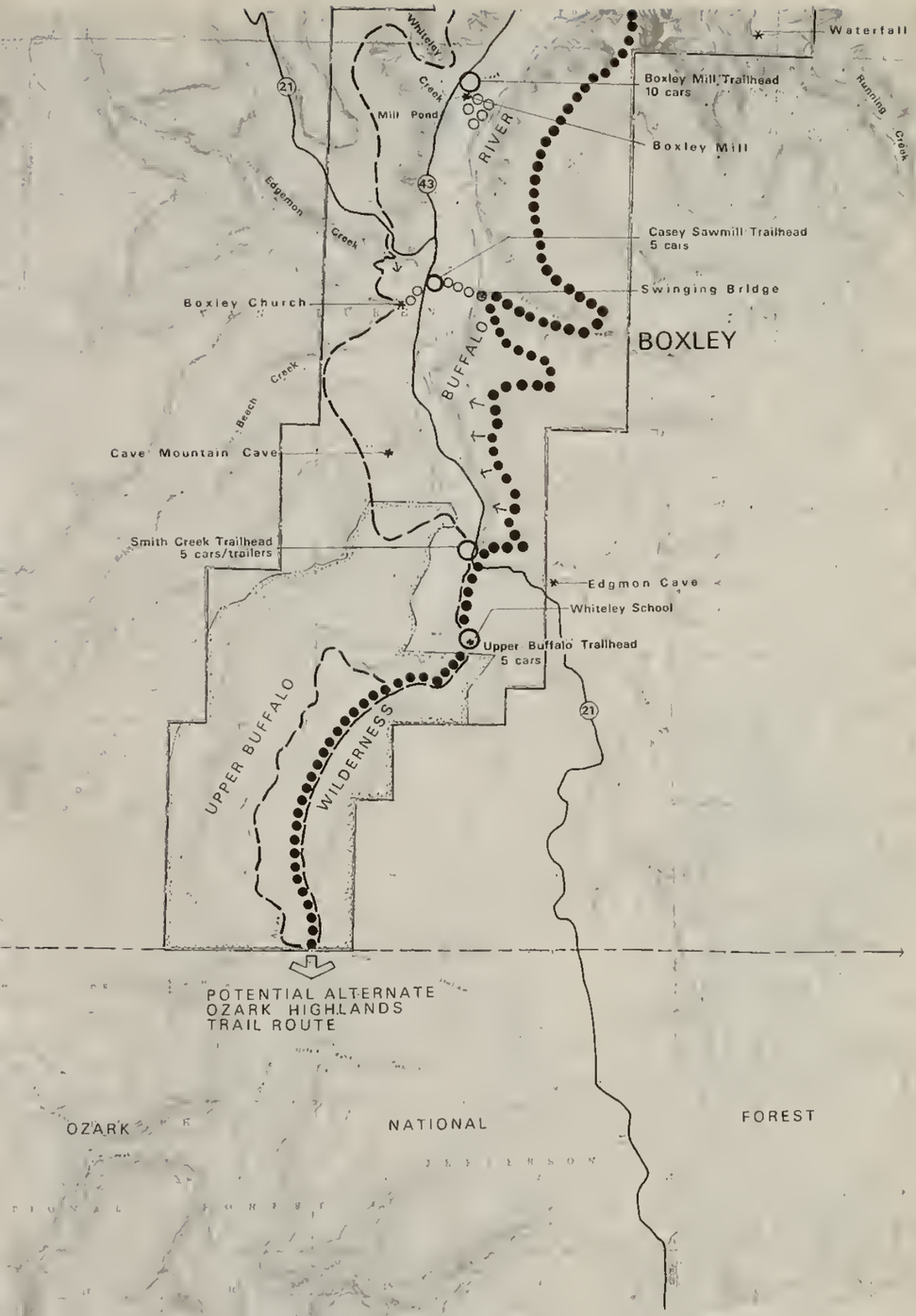

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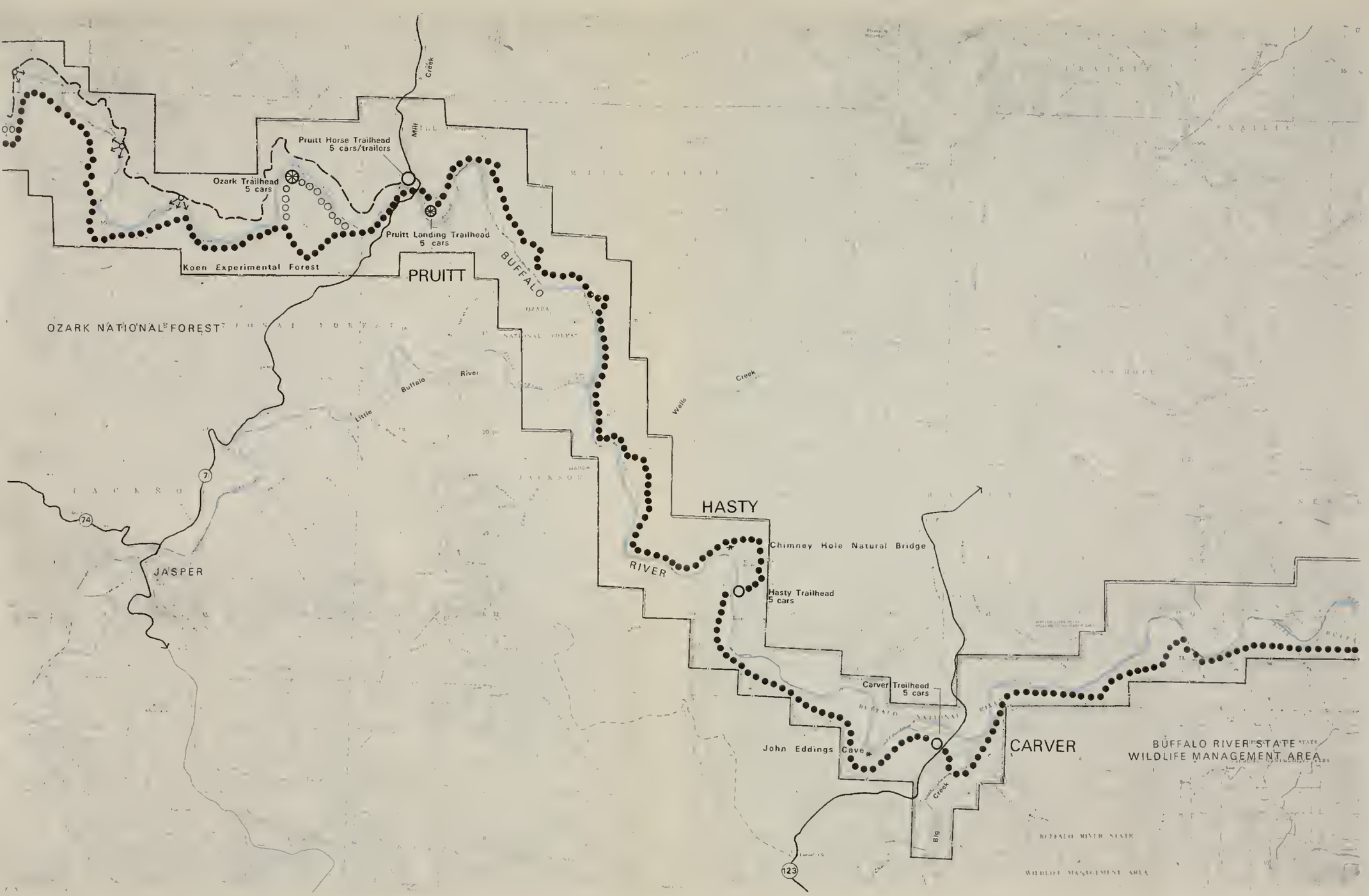

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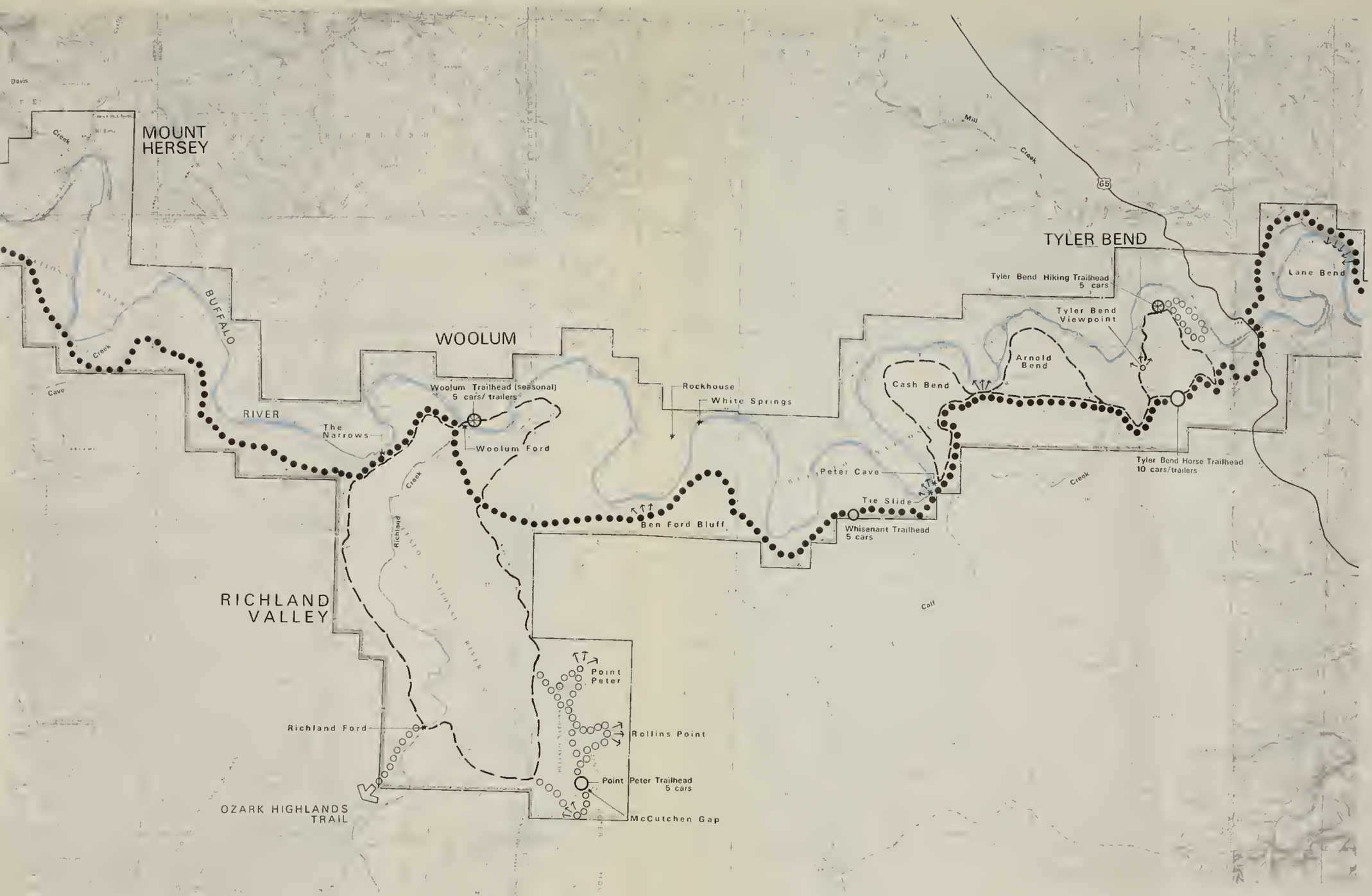

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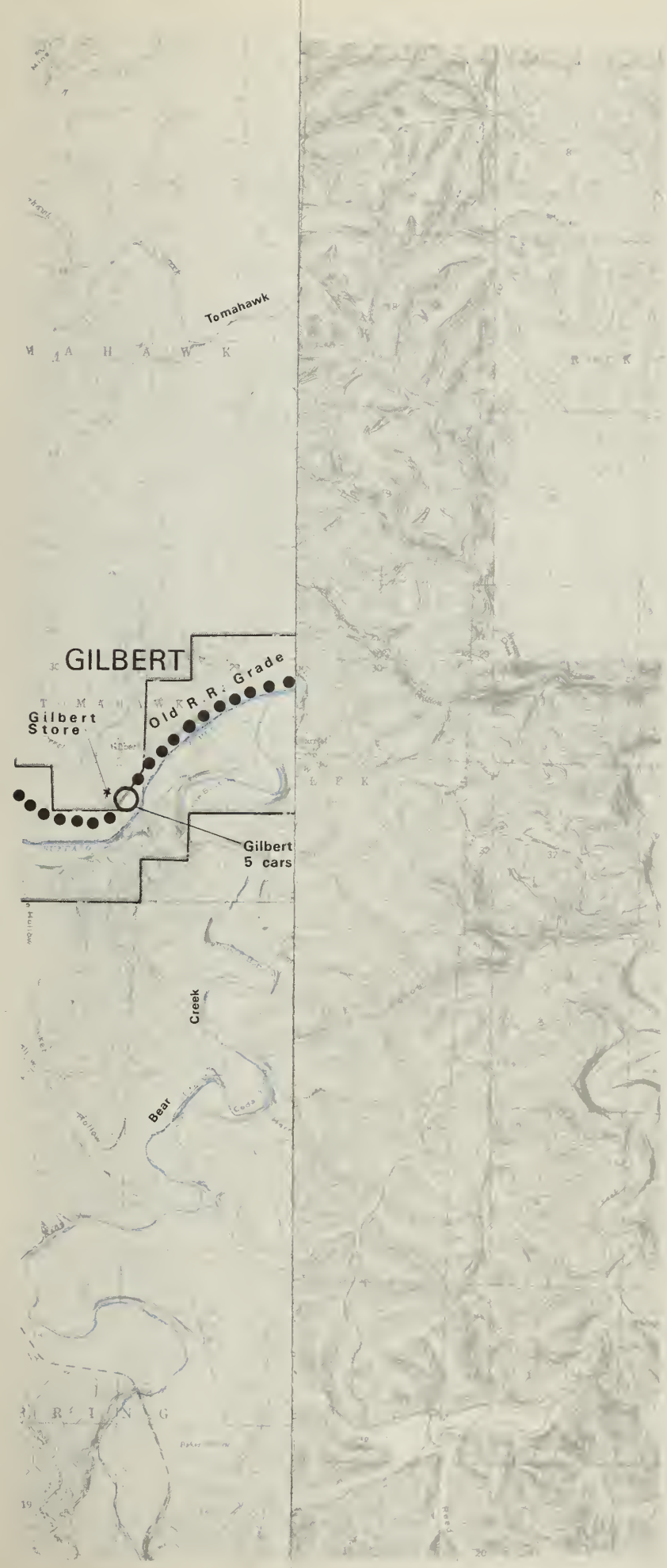

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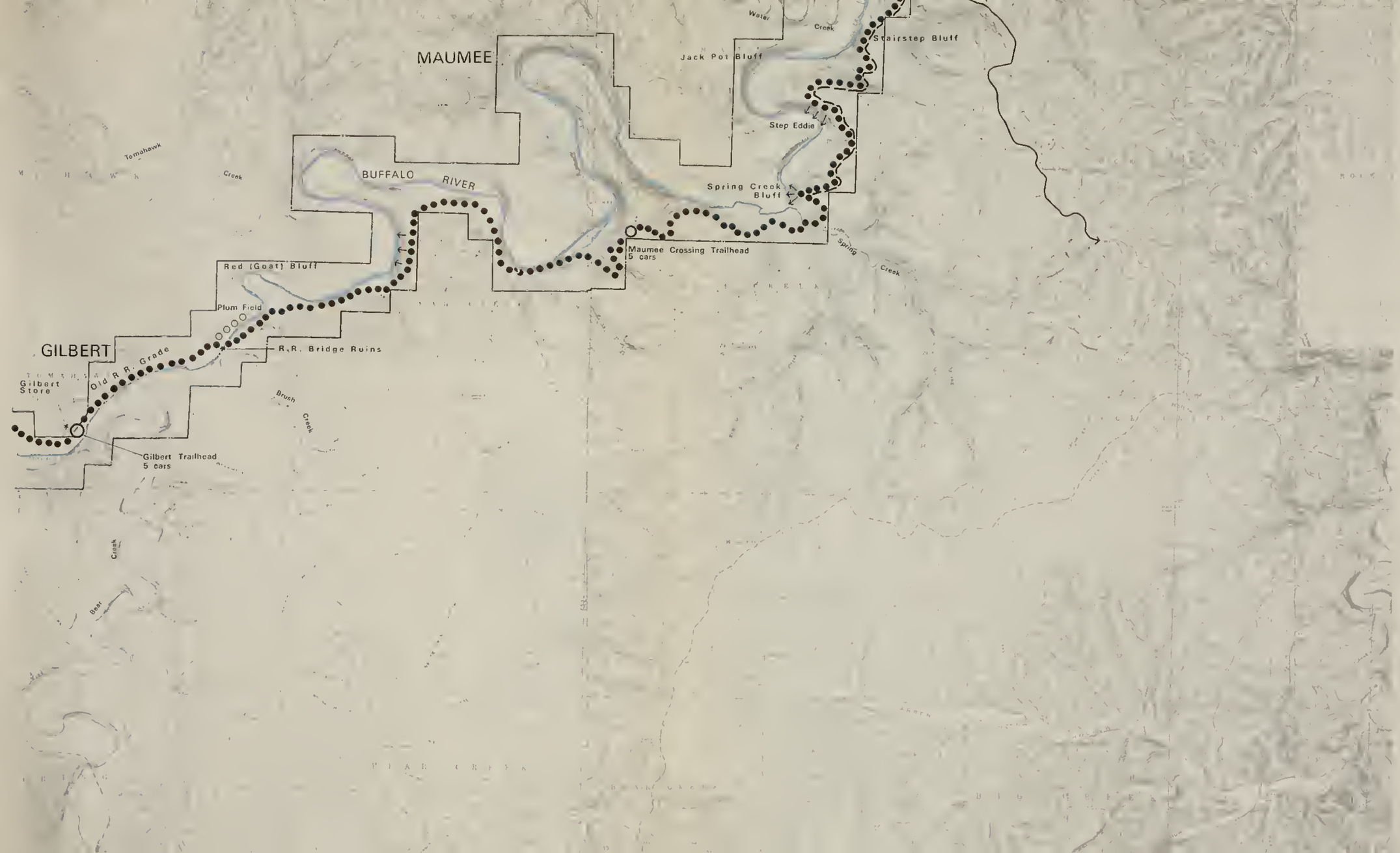

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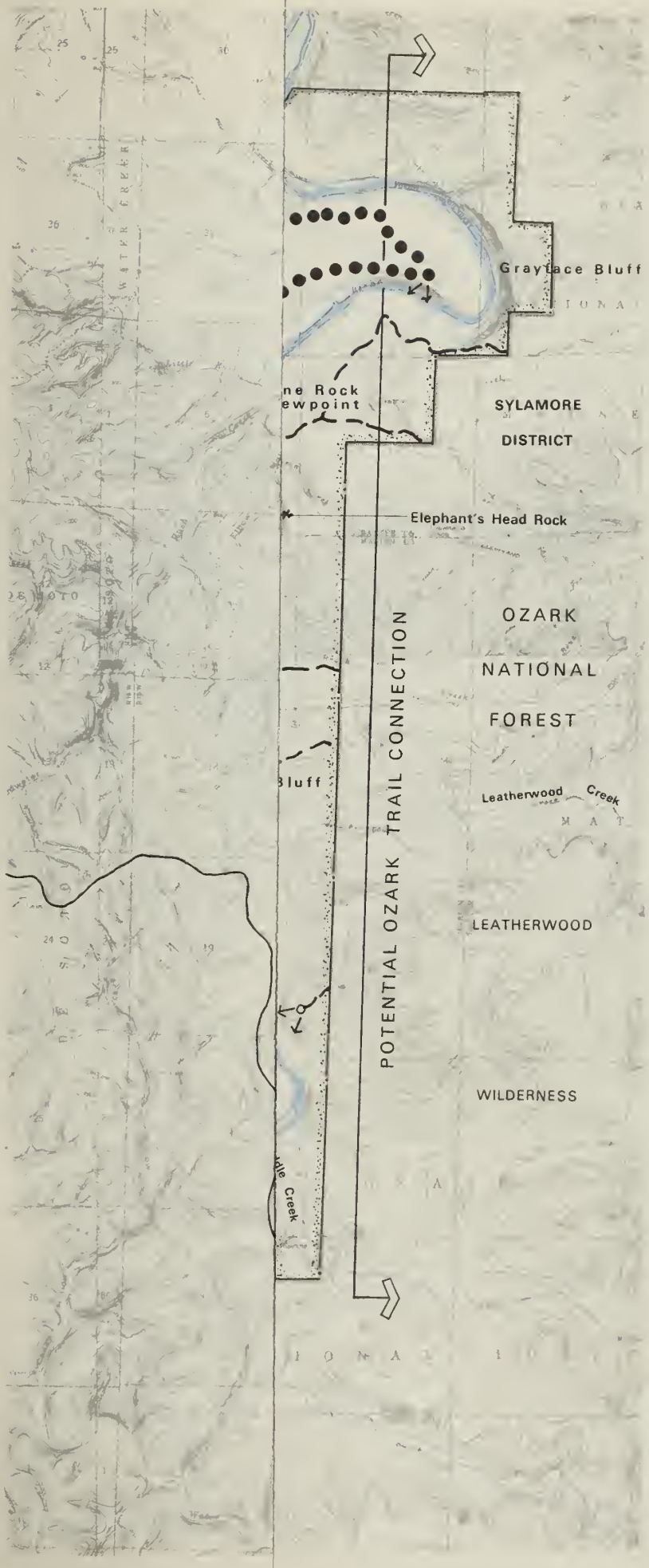

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- VIEWPOINT
- WILDERNESS BOUNDARY
- HIGHWAY

TRAIL PLAN
BUFFALO NATIONAL RIVER
arkansas

north

United States
Department of the Interior
National Park Service

173 | 401218
DSC | MARCH 86

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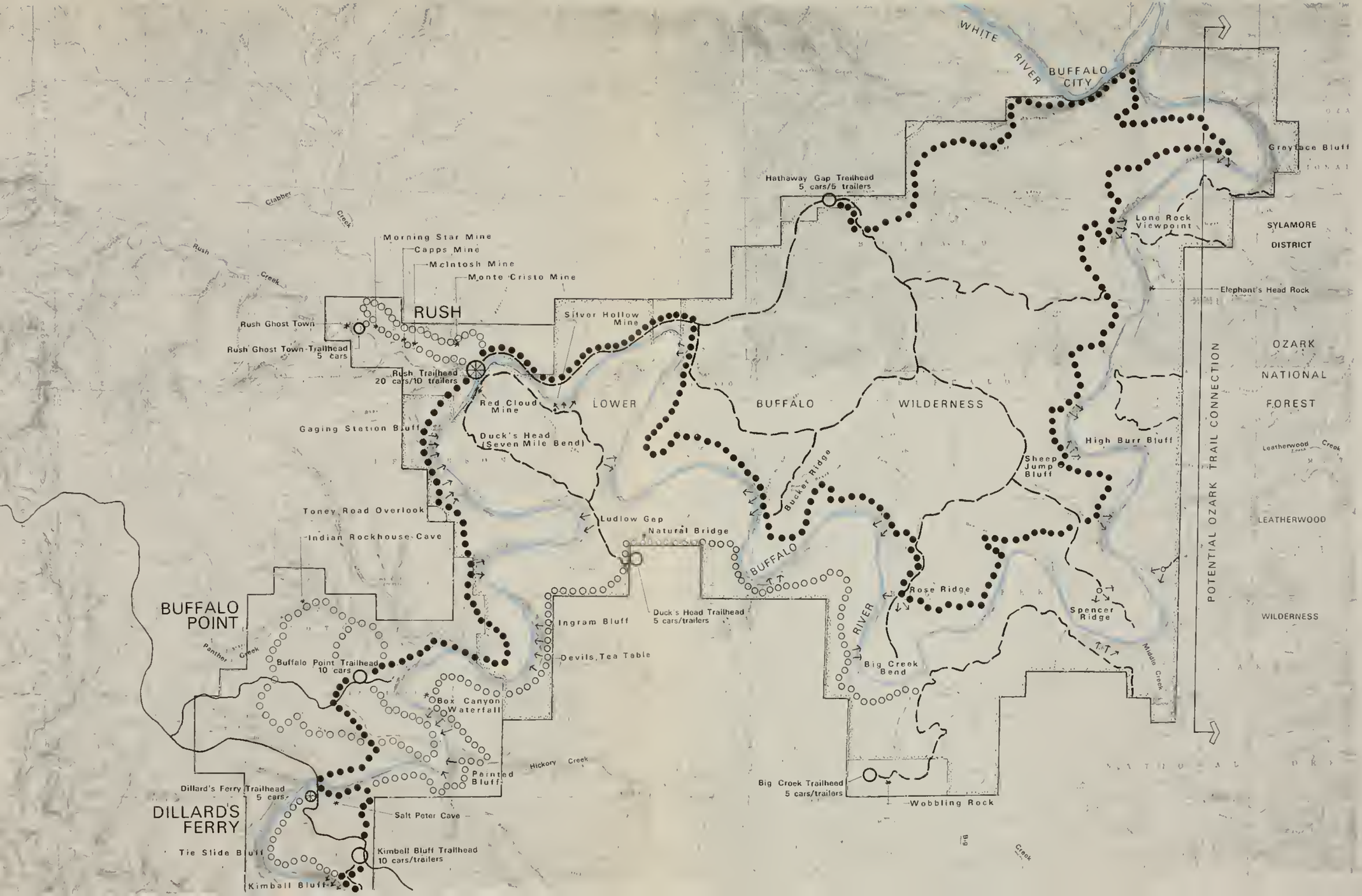
Contour Interval 20 feet



LEGEND

- BUFFALO RIVER TRAIL
- HIKING TRAIL
- HORSE/HIKING TRAIL
- TRAILHEAD
- TRAILHEAD & DEVELOPED AREA
- VIEWPOINT
- WILDERNESS BOUNDARY
- HIGHWAY

TRAIL PLAN
BUFFALO NATIONAL RIVER
arkansas

north

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Department of the Interior
National Park Service

173	401218
DSC	MARCH 80

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Contour Interval 20 feet

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PLANNING TEAM

CORE TEAM

Ric Alesch, Planner/Environmental Specialist (Team Captain), Denver Service Center (DSC)
Alec Gould, Superintendent, Buffalo National River (BUFF)
Jim Liles, Assistant Superintendent, (BUFF)
Terri Urbanowski, Landscape Architect, DSC

CONSULTANTS

Steve Chaney, Resource Management Specialist, BUFF
Hugh Duffy, Landscape Architect, DSC (formerly stationed at BUFF)
Doug Faris, Chief, Division of Planning and Design, Southwest Regional Office (SWRO)
Milford Fletcher, Chief, Division of Natural Resources, SWRO
Carl Hinrichs, Chief Ranger, BUFF
Sammy Lail, Acting Lower Buffalo District Ranger, BUFF
Mark Moseley, Upper Buffalo District Ranger, BUFF
John Paige, Cultural Resource Compliance Specialist, DSC
John Scott, Middle Buffalo District Ranger, BUFF
Chris Turk, Natural Resource Compliance Specialist, DSC
Russ Virgin, Landscape Architect, DSC
Larry Walling, Landscape Architect, DSC, (duty stationed at BUFF)
Keith Whisenant, Resource Management Specialist, BUFF

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, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for Americcan Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the editorial and graphics staffs of the Denver Service Center. NPS D-43, April 1986

U S GOVERNMENT PRINTING OFFICE 1986—676-038 20,025 REGION NO 8