

# **PRESERVING THE BUFFALO SPRINGS AREA**

## **Orange County, Indiana**

### ***A Citizen's Preferred Alternative to the Buffalo Springs Restoration Project***

**December 2022**

This alternative focuses on utilization of the Hoosier National Forest (HNF) for recreation, education, climate moderation, heritage preservation, biodiversity, water resource protection, and carbon sequestration. It reflects changing environmental and societal conditions, and evolving public attitudes. It places the role of public ownership in the context of the entire landscape rather than managing primarily for the generation of oak-hickory forests, and takes into consideration the critical role played by surrounding private, corporate, utility, and agricultural entities in meeting critical conservation objectives. This alternative moves the USFS closer to meeting compliance with the “30 x 2030” directives and the Sentinel Landscape project.

The concepts presented in this alternative are specific to the Buffalo Springs project area, but are intended to serve as a model for development throughout the HNF. Similar opportunities exist in the HNF parcels in northwest Orange/southeast Martin/southwest Lawrence Counties, eastern Perry/southwest Crawford Counties, and southern Brown/southeast Monroe/northeast Lawrence/northwest Jackson Counties.

Several opportunities exist as a catalyst for preservation of the area. These include the creation of a National Scenic Recreation Area, a National Historic Trail, a National Monument, or a National Park and Climate Preserve. These should all be considered as alternatives to the Buffalo Springs Restoration Project proposed by the United States Forest Service (USFS).

## **PURPOSE**

The USFS has proposed the largest logging and burning project in the history of the HNF, to occur in the Buffalo Springs area, mainly in south-central Orange County, Indiana. The project will clearcut 12% of the oldest forest in the area over a 12 to 15 year period. During that same time, another 37% of the forest will be cut so that about one-third of the trees will be removed. Thus, 49% of the federally-owned land in the Buffalo Springs area will be subjected to cutting. In addition, the USFS plans to perform prescribed burns on more than 12,000 acres. These burns will occur repeatedly on the area, on a three-year rotation for 25 years.

In the draft Environmental Assessment, a document that is required to be prepared in accordance with the National Environmental Policy Act, USFS does not perform any

substantiative analysis of alternatives to the cutting and burning project described above, other than the legally-mandated No Action Alternative. Two alternatives that were suggested in the Scoping Letter public comments are briefly mentioned and immediately dismissed because they do not meet the Purpose and Needs of the project.

The purpose of this Citizens Preferred Alternative (CPA) is to prevent the destruction of almost 100 years of forest development that occurred when the forest was restored after decades of agricultural use, for which it was ill-suited. In place of logging in nearly half of the area, this alternative presents a plan to emphasize recreation, heritage preservation, water quality protection, endangered species protection, and carbon sequestration, as well as using the tremendous geological resources of the area as a base for field instruction and research in the geological sciences. A consequence of this alternative is that the local economy is strengthened.

## **NEED**

The need for the Citizens Preferred Alternative is based on several factors that reflect the changing global environment and society's desire to enjoy and preserve the forest.

1. The population of Indiana and its neighbors is steady increasing. Citizens that enjoy various outdoor pursuits are limited to existing public land. The project proposed by the USFS in the Buffalo Springs area will discourage users from the area, as the landscape is transformed into clearcut-created, even-age stands. The CPA will provide expanded recreational opportunities. Trail mileage will be roughly doubled. Access to public land will be increased, with parking lots established at all trailheads and isolated parcels. Users will be able to experience the forest in greater numbers.
2. The Buffalo Trace, utilized by bison, native Americans, and early settlers as a primary westward transportation corridor, is well-preserved in the Buffalo Springs area. Not only is the Buffalo Trace present, but so are artifacts of those who used it. Early settlement in the area emanated from the Trace, so the area is rich in local pre-history and historical interest. Homestead ruins are present in many parts of the Buffalo Springs area. Rather than be subjected to logging/burning equipment and processes, the area should be preserved forever.
3. Most of the Buffalo Springs area drains into Patoka Lake, which serves as a water resource for an estimated 100,000 people. Logging introduces soil erosion, and burning presents the opportunity for accelerated erosion and water quality impacts. Forests help ensure high water quality by acting as a filter and buffer. There can be no argument that a mature forest not subjected to logging will offer the best protection for the Patoka Lake water resource.

4. Bat species protected by the Endangered Species Act listing are present in the Buffalo Springs area. The Eastern Box Turtle is often observed, and is considered by the Indiana Department of Natural Resources as a species of special concern. A long list of the Regional Forester Sensitive Species are also present, as are many on the Indiana Endangered, Threatened and Rare Species List for Orange County. Logging and burning will disturb these creatures, whereas a protected area without logging and burning will provide them with the resources they need for long-term survival.

5. The effects of the global climate crisis are alleviated by sequestration of carbon in large trees. Cutting them and opening the ground for the development of the typical brushy thicket, often ultimately dominated by poplar trees, will decrease the carbon sequestration. Encouraging a mature, unlogged forest increases carbon sequestration. This CPA is designed to enhance carbon sequestration, a goal of current United States Government environmental policy. A new Forest Plan to replace the 16-year-old plan must be prepared to guide the management of the HNF using current science and policy.

6. The Buffalo Springs area is rich in geologic features that should be recognized by the USFS, and used as a springboard for geologic instruction and research.

7. Per capita income in Orange County is ranked at 84<sup>th</sup> out of Indiana's 92 counties, and Crawford County is the poorest. The USFS Buffalo Springs project plan will negatively impact the economic structure of Orange County and the surrounding area. Visitors will not be attracted by a forest that is half-logged in 12 to 15 years, or one that is repeatedly burned for 25 years. The beauty of our forest will be lost. Tourist dollars (equestrians, hunters, fishermen, hikers and backpackers, mushroom hunters, and nature enthusiasts of all sorts) will go elsewhere to enjoy a natural experience in a beautiful forest.

This CPA will greatly enhance tourism in Orange County and the surrounding area. Restaurants, gas stations, local attractions, lodging establishments, outfitters and guides, as well as the various and sundry local businesses will benefit from increased use of the area.

## **I. PRESERVATION OF THE BUFFALO SPRINGS AND GREATER ORANGE COUNTY, INDIANA AREA**

We propose that legislation creating one or more preservation designations for the Buffalo Springs area be presented to Congress. The entire area, as well as other federal land in Orange and nearby counties, can be protected as a National Scenic Recreation area. The best-preserved remaining remnants of the Buffalo Trace pass

through the Buffalo Springs area, and should be preserved as part of a Buffalo Trace National Historic Trail, or Buffalo Trace National Monument. These strategies are all available within the purview of the Hoosier National Forest.

A more drastic preservation approach is to transfer the federal land to the National Park Service and create a Buffalo Springs National Park and Climate Preserve. A similar grassroots effort is underway in southern Illinois to preserve the Shawnee National Forest and protect it from logging and heavy-impact, unnatural forest management.

An area spanning more than 15,000 acres in central Orange County, Indiana is planned for an intensive logging and burning project by the US Forest Service (USFS), known as the Buffalo Springs Restoration Project (BSRP). The BSRP proposal includes 5000+ acres of logging and 15,000+ acres of prescribed burns. During the planning for this project, the USFS evaluated two alternatives, their logging/burning alternative, and a “no action” alternative.

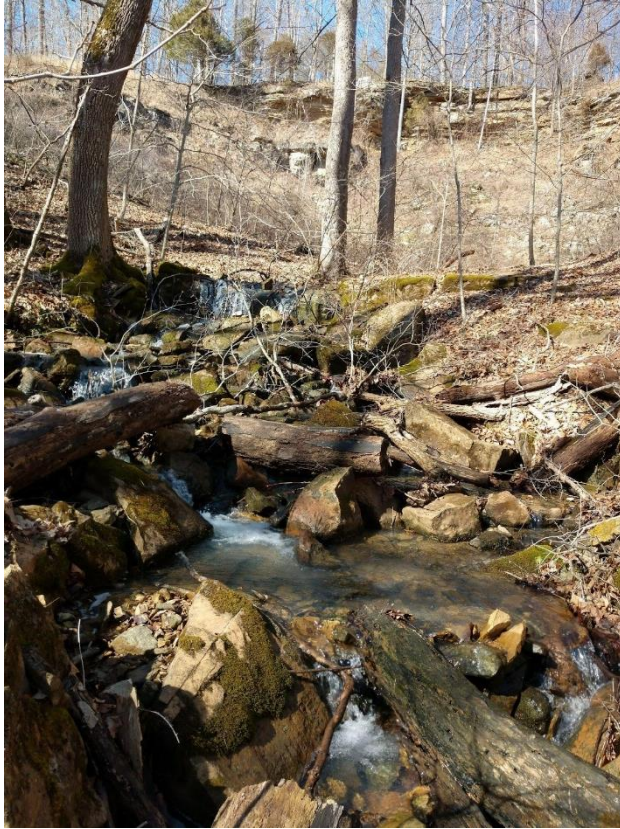
We propose to utilize the resources in the Buffalo Springs area in a drastically different way, and have developed another alternative for evaluation by the USFS. That alternative, herein called the Citizens’ Preferred Alternative (CPA), proposes to utilize the local resources for recreation, education, carbon sequestration, and heritage preservation, in a manner consistent with the USFS creed of “Leave No Trace.” We request that this alternative be subjected to thorough analysis during the preparation of an Environmental Impact Statement for the project, as well as a revision to the outdated 2006 Forest Plan.

The Buffalo Springs area contains all of the characteristics of a National Scenic Recreation Area, as described in the document entitled *Federal Land Designations: A Brief Guide*. Those characteristics are outstanding scenery, recreational value, and geologic, ecological, and cultural resources.

The rugged hills of the Buffalo Springs area are in the Crawford Upland physiographic region. The area is generally recognized as the most scenic area in the State. The topography has protected it over the last 200 years from intensive development, and ultimately resulted in its inclusion in the National Forest system. Recreational opportunities abound. Several trail systems and much land are available for off-trail hiking and backpacking; equestrians also enjoy the trail systems. Hunting and fishing are popular, as is mushrooming and birding.

Scenery in the Buffalo Springs area occurs on many levels. The long, sweeping vistas of the Patoka River Valley are captivating, as is the beauty of a solitary wildflower in the early Spring, or a rutting buck in the Fall. Observing a settlement ruin can be the introduction to study of the fascinating local history and how it helped shape the early development of the United States. Every step along a trail in the Buffalo Springs area brings more scenic beauty to the beholder.

The steep topography of the Crawford Upland is the result of erosion of alternating layers of sandstone, shale, and limestone. These rocks are exposed and readily visible, lending themselves to geologic study. Indeed, they have been studied for almost 200 years by generation after generation of geologists. A forest that is approaching old-growth status is present, and provides for carbon sequestration and a home for endangered species of bats, as do the widespread cave and karst



features.

Water quality in the Buffalo Springs area is crucial to the region. Most of the Buffalo Springs area drains southwest through the Patoka River, Young's Creek, and other tributaries, into southern Indiana's second largest regional water supply reservoir, Patoka Lake. The remainder of the area drains into the Lost River watershed to the north. Lost River is a karst system that includes two National Natural Landmarks, Wesley Chapel Gulf and the Orangeville Rise. The hydrology of the Lost River system is complex and not well understood. Smaller scale karst features are abundant throughout the Buffalo Springs area. Forests play an important role in filtering water and maintaining water quality. Creating and preserving a mixed hardwood old-growth forest is the best resource protection for the water supply.

The Buffalo Springs area contains a unique and often well-preserved record of the early settlement period in the Indiana Territory. Native Americans occupied the land for thousands of years prior to the migration of mostly Europeans into the area. The transportation routes used by the pioneers were often those used by man and animal for hundreds of years prior, including the Buffalo Trace. The early settlement period in southern Indiana utilized the Buffalo Trace as a transportation corridor.

This alternative builds on the characteristics of outstanding scenery, recreational value, and geologic, ecological, and cultural resources that are all present in the Buffalo Springs area. By encouraging the development of old growth forest, the environment and resources are protected rather than threatened.

## **II. EXPANDING RECREATIONAL RESOURCES**

The expansion of recreational resources in the Hoosier National Forest compliments the cessation of logging. In its simplest form, let our trees grow and let our people enjoy them. Expand the trail systems, provide additional trailheads and parking lots, and build organized campgrounds suitable for horse trailers and trailers/RVs. These facilities will provide outdoor recreation venues for hikers, equestrians, hunters, anglers, and nature enthusiasts who may pursue photography, mushroom hunting, natural sciences field study (geology, biology, anthropology) and a host of other interests. The forest lends itself well to backpacking, off trail hiking, and backcountry camping. The backcountry aspect of the area is a southern rival to the Deam Wilderness/Nebo Ridge area to the north.

### **Existing Opportunities**

The Hoosier National Forest (HNF) in Orange County has four existing trail systems, with three in the Buffalo Springs project area (Figure 1). The Shirley Creek trail system is in northeast Orange County, and the Springs Valley, Young's Creek and Lick Creek trail systems are within the Buffalo Springs area. These are popular trails for horseback riding and hiking. Hunters and others also use these trails.

The single, small horseman's campground in the Buffalo Springs project area is located on the Young's Creek trail system. A second campground is on the Shirley Creek trail system several miles north of the Buffalo Springs project area. The only other organized camping facility is an unused campground at Springs Valley Lake, which was permanently closed several years ago by the USFS.

The existing trail systems are served by a few trail heads that generally consist of graveled parking lots. Where the trails cross county roads at non-trailhead locations, parking is generally either very limited or ruled out by limited area and signs warning to not block the gates. Trail head access is provided at two locations on the Springs Valley trail system (one trailhead can accommodate horse trailers), two locations on the Young's Creek system (12.6 miles of trail) and two locations on the Lick Creek system (7.7 miles of trail).

Springs Valley Lake is in the Buffalo Springs project area, and provides anglers and paddlers with opportunities to enjoy water sports.

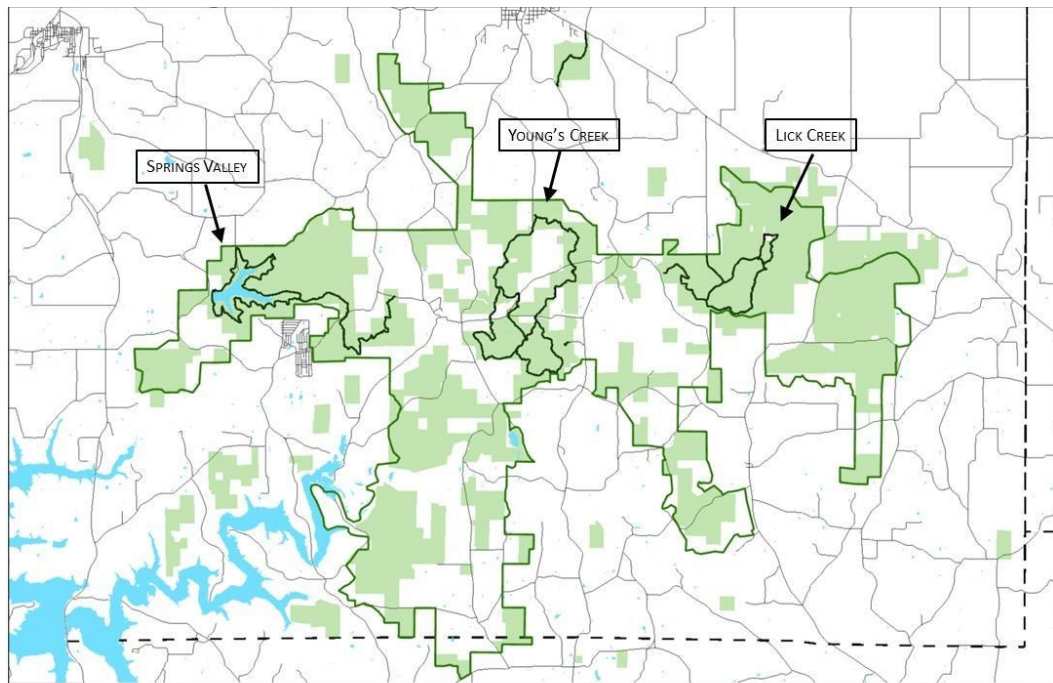


Figure 1. Existing USFS trails in the Buffalo Springs project area.

Figure 1 includes the Buffalo Springs project area (dark green line), and the federally-owned land (light green overprint). The existing trail systems are shown in heavy black lines, and the dashed black line is the boundary between Orange County and adjacent counties.

### **Limited Access**

Nearly all of the smaller, non-contiguous parcels in the Buffalo Springs project area (Figure 1) and generally throughout the HNF do not have developed public access points. While it is possible to park on the side of the road in a few areas, most of the smaller parcels don't have any identifiable parking areas due to steep shoulders, limited cleared areas, and the presence of roadside ditches. This effectively makes these areas unusable to visitors who do not have access to parking on private property nearby. An exception is the access to the Cane Branch area, where an Indiana Department of Natural Resources parking lot provides access.

Creation of access and parking to all parcels of the HNF is critical for public use of these areas. As it exists today, access is tremendously stifled.

### **Conceptual Trail System Expansion Plan**

Opportunities abound for the creation of additional trail systems. Most of those systems either are, or can be, connected to each other and to the existing trails. A plan that shows the potential for this concept is illustrated in Figure 2.



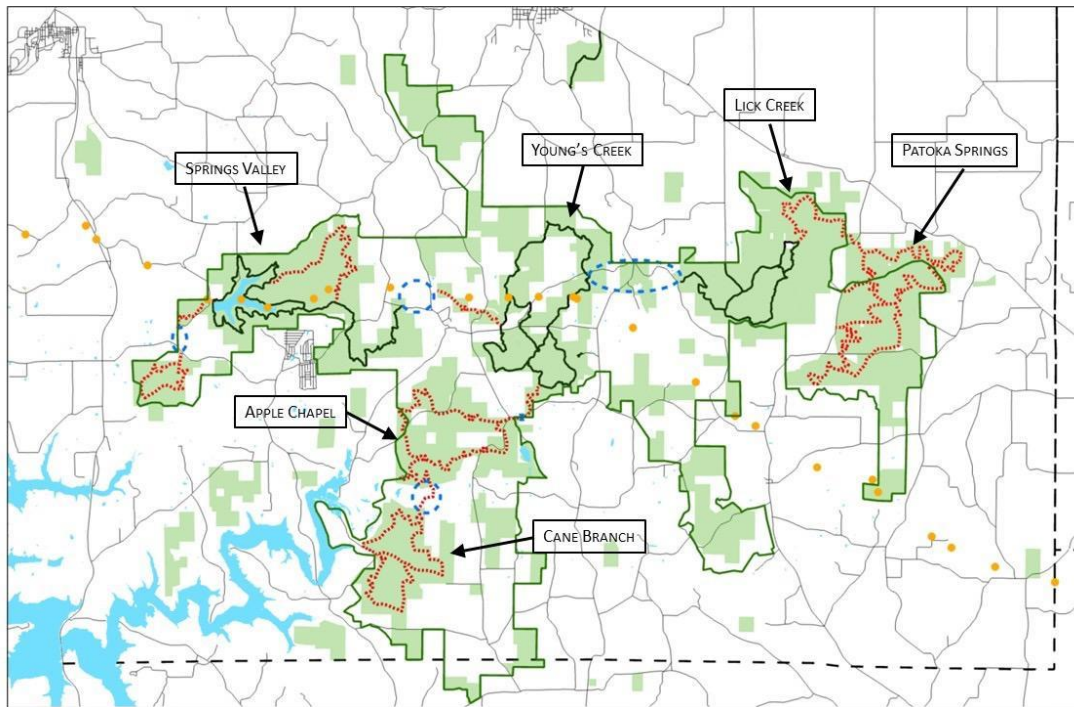


Figure 2. Conceptual locations for trail development in the Buffalo Springs area.

Figure 2 includes the Buffalo Springs project area (dark green line), and the federally-owned land (light green overprint). The existing trail systems are shown in heavy black lines, while the conceptual locations of additional trail systems are shown in dotted red lines. Dashed blue circles and ovals show areas where trail system connections require land or easement acquisition. The dashed black line is the boundary between Orange County and adjacent counties. Lastly, the orange dots represent the locations of surveyed locations of the Buffalo Trace where it crossed sections lines as documented in a survey performed by the General Land Office (GLO) c. 1805.

**Springs Valley.** An additional trail can be added to the northwest from the existing Springs Valley trail system. This should provide the USFS with additional locations to mark the route of the Buffalo Trace. A small loop trail can be built in the area south of Springs Valley. An additional trailhead can be constructed where this section of trail intersects Forest Road 2313.100.

**Patoka Springs.** A new trail system in the Patoka Springs area opens up additional forest land and the headwaters of the Patoka River. This area contains the oldest bedrock in the Buffalo Springs area. In addition to the added trail mileage, trails in this area make it feasible to access the area for geologic study of the Blue River and West Baden Groups.

**Apple Chapel.** A large loop trail is possible in this area.



**Cane Branch.** There are scattered sections of informal trail in this area, which can be incorporated into a double loop trail system north of County Road 1050 South. The trail crossing of this road should provide a location for an additional trailhead parking lot.

**Connector Trails.** The development of the Buffalo Springs area trail system should be focused on land or easement acquisition in order to build trails connecting the six major trail systems. Most of these connections can be made currently if the county road system is used. Two challenges to the connector trails are the State Road 37 crossing to connect Young's Creek and Lick Creek, and the connector between Apple Chapel and Cane Creek. The SR37 crossing may require a traffic light or elevated pedestrian bridge, and the Apple Chapel-Cane Creek connector must pass over the Patoka River. A low-water passage would permit a connection during all but high water conditions.

**Organized Campground.** A convenient access, that is close to a State Road, into a modern campground development would provide facilities for people who may wish to camp in the area. The campground should have accommodations for tents, trailers, and RVs, with provision for horse trailers in a portion of the campground.

Developing the recreational resources in the Buffalo Springs project area, while pursuing the growth of a climax forest, will enhance the economy of the local area through an increase in tourism, with the accompanying increase in lodging, restaurant, and other related businesses. This in turn, will raise public support for the HNF.

As our population grows and land is lost to urban sprawl, the public lands in Indiana will become more and more popular. This is what has led to the overuse and over-crowding of the Deam Wilderness and Nebo/Hickory Ridge area. Some of that congestion can be alleviated, and the future generations of forest users can be assured of having more space for their pursuits, by simply ceasing logging in the HNF and developing the recreational resources that exist. This includes building additional trails, and greatly improving forest access.

### III. CREATE A GEOLOGICAL LEARNING CENTER

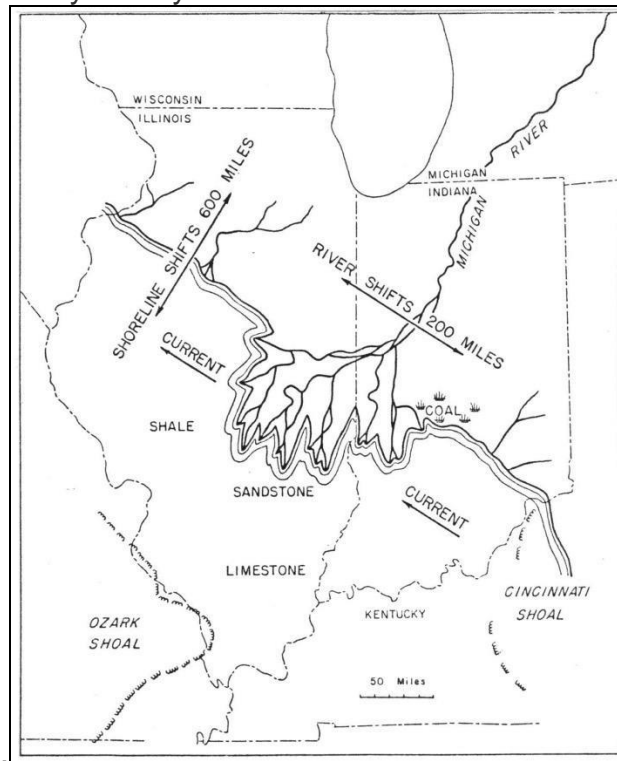
The geology of Orange County, Indiana provides an exceptional outdoor laboratory for the study of sedimentary rocks in the field. World-class examples of stratigraphy, physiography, geomorphology, paleontology, structural features, and soft rock geology are present throughout the area. Opportunities abound for field study by all ages, from elementary school children through post graduate studies. These opportunities are not limited to the Buffalo Springs project area, but are present throughout the Hoosier National Forest. Development of a multi-level course of study for the geology of the area provides educational institutions in Indiana and beyond, as well as interested members of the public, the capability to obtain the maximum benefit of the geological resources of the area. Such an offering would not only provide unique educational benefits, but would increase tourism in the area with the resulting economic benefits.

## Geologic History

The rugged bedrock exposures in Orange County (Plates 1 and 2) represent the southwestern transgression of a river system that carried sediment from eroding highlands to the northeast and deposited it in a shallow sea. Erosion of some of those rocks over 300 hundred million years after the Pennsylvanian Period created the landscape that we know today. The nature of that landscape has exerted a significant level of control over how animals and mankind have interacted with the area.

During the middle Mississippian Period, the area that we think of today as Orange County was an ocean. A thick layer of limestone was deposited on the ocean bed over several million years. Then, in the late Mississippian, a river system developed on the shore, with its mouth somewhere north and east. The river extended to the northeast, and is called the Michigan River. Along its route to the ocean, the river moved sediment from the erosion of mountains in Canada, and a river delta transgressed into the ocean to the southwest as time passed. An ocean current moved from southeast to northwest, parallel to the shoreline. Sand was deposited at the front of the delta, while mud that became shale was deposited in the lower energy environmental more distal to the delta. Carbonate mud that lithified to limestone was deposited in the least energetic water farther from shore (Figure 3).

This process is represented in the rock record as a series of time-transgressive, alternating layers of limestone, shale, and sandstone. Thin beds of coal are present in the northwest. Bedrock younger than Pennsylvanian Age is not present in Indiana, and Orange County is the only county in Indiana that does not have either glacial ice-contact



or outwash deposits.

Figure 3. Paleogeography during the Chesterian Epoch.

### **Geomorphology**

Erosion of the Mississippian and Pennsylvanian rocks over the last 300 million years resulted in the development of lithostratigraphic-controlled physiography and geomorphology (Figure 4).

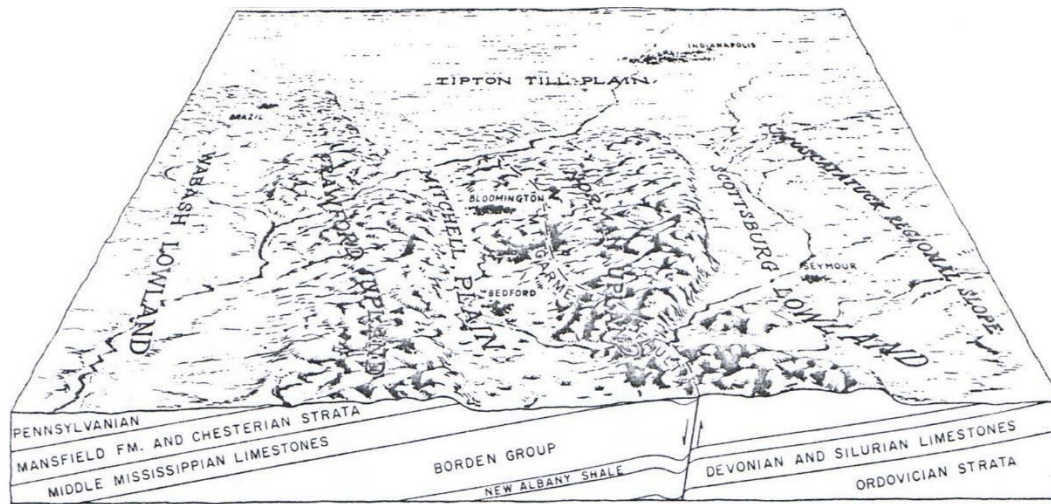


Figure 4. Physiographic diagram of south-central Indiana.

To the north and east, the thick Blue River Group limestone formed a gently undulating landscape with well-developed karst of the world-renowned Mitchell Plan, including Wesley Chapel Gulf, the Orangeville Rise, Lost River, and a plethora of caves. Powell mapped 57 caves in Orange County. Uncounted smaller caves are present throughout the Crawford Upland.

To the west, the Chester Escarpment rises above the solution plain. The Crawford Upland is underlain by alternating layers of carbonate and clastic rocks of the Chester Series. The upland is a complexly eroded area with deeply entrenched valleys. Slopes are generally steep, sometimes with benches. Flatter surfaces are commonly present along the larger ridge tops and valley bottoms. The area arguably contains some of the most rugged topography in the State, and is an exceptional study in geomorphology.

### **Structural Geology**

Bedrock in Orange County dips gently to the west-southwest at a few dozen ft per mile. It is on the west flank of the Cincinnati Arch and the east margin of the Illinois Basin.

The Mount Carmel Fault and associated Leesville Anticline run for 50 miles from Monroe County south to Washington County, including a classically-studied area in the Deam Wilderness, Frog Pond Ridge. Near there, Patton Cave was created when a limestone formation faulted normally and a bluff resulted along the fault line. The southern fault terminus has traditionally been mapped a few miles east of the Buffalo Springs project area, although recent discoveries appear to push that southward.

### **Springs**

Early settlers in Orange County utilized the numerous springs in the area as a water resource. Although public water is generally available, some residents continue to rely on springs as their principal water supply. Protection of the forest is the best way to protect these springs from impact.

### **Geological Center and Conference Facility**

Orange County is blessed with rich geological resources that should be exploited as a world-class educational facility. An educational program should be established to provide access to the resource. Well-exposed outcrops in a forest setting provide educators with the opportunity to teach soft rock stratigraphy, sedimentology, paleontology, structural geology, physiography, geomorphology, and karst, all in an outdoor setting. Self-guided instruction should also be developed.

Development of this program will result in geologic field trip visitors. This will impact local lodging, restaurants, and bars.

Given the strategic location and resources, a ranger station should be established in the Buffalo Springs area, with a nature/geological center and conference facility. USFS support of this program will have a positive impact on the local area. The Center should be located proximal to State Road 37 for easy access by visitors. The Center could also highlight the control that geology exerted during the early settlement period in

## Indiana, and the heritage of the Buffalo

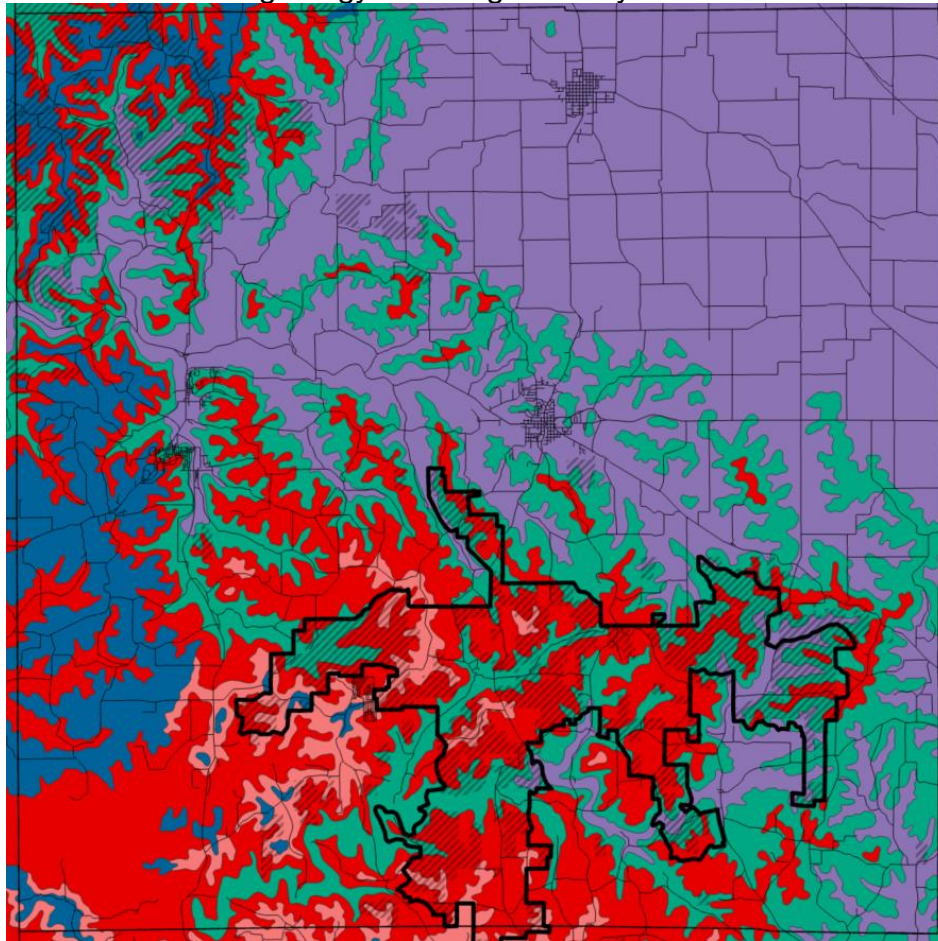



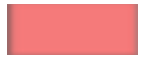



Trace.

Plate 1. Stratigraphic column showing units that outcrop in Orange County, Indiana.



Plate 2. Bedrock geology of Orange County Indiana.



LEGEND	
Map Symbol	Rock Unit
	Raccoon Creek Group
	Buffalo Wallow Group
	Stevensport Group
	West Baden Group
	Blue River Group

- Buffalo Springs project area shown by heavy black line.
- Federally owned land shown by diagonal black hatch.
- US, state, and county roads shown by light black lines.



#### **IV. PRESERVE AND STUDY HERITAGE AND CULTURE AND CREATE THE BUFFALO TRACE NATIONAL HISTORIC TRAIL OR NATIONAL MONUMENT**

This alternative use of the HNF fully utilizes the noteworthy recreational and scenic potential, and historical significance of the area and places a premium on the preservation of the archaeological, historical and cultural resources of the HNF. This includes the Lick Creek African-American Settlement, established in 1811, Native American sites, Pioneer Mothers Memorial Forest, and pioneer homesteads. The unique and well-preserved Buffalo Trace (Trace) bisects the area.

The HNF, and more specifically, the portion designated by the USFS as Buffalo Springs, is exceedingly rich in its cultural heritage resources and historical importance. The land that comprises the HNF has been home to humankind for over a hundred centuries. Located in south-central Indiana's rugged hill country, the HNF is unique in many ways. Its rich resources served Native Americans well until the American frontier pushed them westward. The ancient Trace, which passes through central Orange County, provided an early thoroughfare from Kentucky to Illinois through the dense Indiana forests. Homesteads sprang up throughout the wilderness, which fell to axes and the plow. But the early prosperity was short lived; poor soil conditions, primitive farming techniques, erosion and the rugged terrain made farming increasingly



difficult.

During the early twentieth century, many farms were abandoned and population growth in the county lessened. Much of the abandoned land was acquired by the federal government for the first time and the HNF was created in 1935. This sequence of events creates an unusual situation in Orange County – many of the early cultural sites

and artifacts were not destroyed by later development, but have been preserved on both private and public land. The USFS says these historic sites “are important reminders of the ways people have coped with their world through time and offer us a glimpse into the past.”

### **Cultural Heritage Resource Preservation**

The USFS National Heritage Program manual states “The Congress in 1966 declared it to be our national policy that the Federal government will 'administer federally owned, administered, or controlled prehistoric and historic resources in a spirit of stewardship for the inspiration and benefit of present and future generations.' To this end, the Forest Service will provide leadership in preserving America's heritage through responsible stewardship activities that recognize, preserve, protect, enhance, and use cultural resources for the greatest public benefit.”

The USFS also maintains that: “In partnership with other land managing agencies, local communities, stakeholders, and Tribes, the program contributes to economic and cultural sustainability in a manner sensitive to traditional cultures and local/regional priorities.” Furthermore, USFS endeavors “to fully integrate opportunities for preservation, protection, and utilization of cultural resources into land use planning and decisions.”

The USFS has recognized the HNFs significant historical significance and its unique state of preservation through several preservation projects, namely; Indiana Pioneer Mothers Memorial Forest, Lick Creek Settlement, and the Buffalo Trace Working Group.

### **Indiana Pioneer Mothers Memorial Forest**

What is now known as the Indiana Pioneer Mothers Memorial Forest, one of a very few stands of virgin old growth forests left in Indiana, was first settled by the Cox family in 1811 and it has not been timbered. In the early 1990s, the Glenn A. Black Laboratory of Archeology at Indiana University conducted an archaeological dig in the forest. They excavated an Oliver Phase stockaded village that measured over an acre in size, dated to A.D. 1380.

### **The Lick Creek Settlement**

Research in the early 2000s found the site of an African-American community dating back to before 1820, one of around 30 African American Farm communities started in Southern Indiana during the first half of the nineteenth century. Included were cemeteries, wells and cisterns, house and barn foundations, and old roads. Hiking trails, interpretative signs, a bike and a horse trail are recent additions to the site.

### **Buffalo Trace**

In 2014, the Buffalo Trace Working Group, a team of investigators volunteering for the HNF, searched for remnants of the famed Trace in Southern Indiana, in preparation for Indiana's 2016 bicentennial. The group sought to use the Trace as a case study on how to discover and research historical roads and American by-ways. Their report

closed with “The Buffalo Trace is a heritage resource of great importance to the history of Indiana and the history of westward migration in the United States. It engages themes of military history, exploration, and settlement, Native American peoples, and natural history themes surrounding the bison. As more segments of the Buffalo Trace are identified it will be important to gauge the level of degradation and select methods to preserve and interpret them. Many times, trying to positively identify a historic road/trail can be extremely difficult. However, that is not necessarily the case with the Buffalo Trace. Countless individuals have contributed to our knowledge and understanding of the trace and have kept the legacy of this important historical road alive.”

Much of the original trace outside of the HNF has been erased from the landscape either through farming or development, including the creation of roads over the old trace. However, to the great surprise of the researchers, many parts were discovered intact and visible, mostly in the Buffalo Springs area. These were found mostly in the hilly and rough terrain that is a hallmark of southern Indiana. Development of the trails at Springs Valley Lake included interpretive signs to mark the deep impressions of the trace and document its story.

### **Buffalo Trace National Historic Trail**

The designation of a National Historic Trail is made by an Act of Congress under Executive Order 13195. The intended purpose is to fully recognize and utilize the potential of a site with National historical significance by connecting history, culture and outdoor recreation in a meaningful way. The Buffalo Trace and the surrounding area fit into this vision perfectly. A key component of a National Historic Trail designation is cooperation and collaboration across multiple jurisdictions. Additional related sites within the Buffalo Tract heritage corridor include Indiana Department of Natural Resources properties, a county park, the George Rogers Clark National Historical Park, and the INDOT/FHWA Indiana Scenic Byway, as well as similar organizations in Kentucky and Illinois. A coalition of these groups would enhance the visitor experience to the Buffalo Trace and meet federal mandates for its creation, development and management. Elements that can be included in a National Historic Trail to achieve this goal for the Buffalo Trace are extended foot, bike, and horse trails, historical trails with interpretive, guided driving tours, lecture series, an interactive media site, and a nature and cultural center.

Another necessary component is the involvement of citizens groups and volunteers. The Indiana Forest Alliance, the Buffalo Trace Preservation Group and other citizen allies have expressed interest and would be available for the planning, development, maintenance and management of the trail and facilities.

The geography of the trail is also significant; a National Historic Trail must be at least 100 miles in length. The distance of the historic trace from Vincennes, Indiana to the Falls of the Ohio on the Ohio River is over 120 miles long, and longer if the portions in Kentucky and Illinois are included. The Buffalo Trace Historic Trail would enhance tourism revenue from visitors and travelers on this Byway.

### **Buffalo Trace National Monument**

Preservation of the portions of the Buffalo Trace located on federally-owned land could be accomplished by Presidential proclamation of a National Monument. This provides another avenue to preserve the best remnants of the Trace and its related heritage features.

## **V. HOOSIER NATIONAL PARK AND CLIMATE PRESERVE**

Another ecologically sound preservation approach is to transfer the HNF from the USDA to the Department of the Interior and create the Hoosier National Park and Climate Preserve. A similar project is underway in southern Illinois' Shawnee National Forest. This option maximizes the preservation of recreational, scientific, heritage, and ecological resources. This is the most complex alternative, and is included so that an alternative exists if the USFS is unable to execute the alternatives described above. Because it includes the entire HNF, conceptual planning for it is beyond the scope of this Citizens Preferred Alternative at the present time, and it will be developed in the future if necessary. The work by the citizens involved in the Shawnee project will set the benchmark for this option.

## **VI. PROTECT AND ENHANCE ECOLOGICAL RESOURCES**

The value of the HNF in the coming centuries is immense. Protection of the landscape and all of the organisms it contains is paramount. Equally important is the protection of the regional water supply.

Perhaps the single most important aspect of the alternative is carbon sequestration in the climate change fight. This is a dynamic scientific arena, and has come to the forefront after the 2006 Forest Plan was written. Recognition of the need for carbon sequestration has developed over the last two decades, and federal government guidance has grown with it. The HNF must be used as an old growth carbon sink. In this regard, the Paoli Experimental Forest should be used to conduct research on how to best accomplish maximum sequestration and minimum release in older and old growth forest, while also studying forest diseases and blights, natural regeneration,

succession, disease resistance and other ecological processes.



The revised Forest Plan must be written using the 2012 Planning Rules, and the latest USFS and US Government guidance of climate change, especially the “30 x 2030” plan. With this framework, the preservation opportunities described in this alternative are favored.

## **VI. A NEW SENSE OF MISSION, VALUES AND FUNDING FOR THE US FOREST SERVICE**

The actions described in this alternative require that the USFS transition from its current dependence on timbering to finance and fulfill its mission. USFS must recognize the importance of the Hoosier National Forest as the largest public forest in a populous state with limited public land, and include the needs of underserved communities and non-traditional users for recreation and spiritual renewal. This is founded on recognition of the crucial contribution that the HNF makes in the quality of life for those who reside in urban settings, and the HNF's role in meeting public needs for old growth forest that are not met on private lands. At the same time, the USFS must also develop programs to support and encourage proper forestry protocols on private land, in much the same way the USDA does with farmers and agricultural land.

The USFS staff must transition its focus away from timbering-based forestry to a recreation- and education-based program. An important part of the process is to provide resources to the USFS for management of the Buffalo Springs area under one or more of the programs described in this alternative. The loss of timber income must be met with increases in other revenue streams. Part of the revenue can be generated through user fees and an expanding user base.