NATIONAL BLUEWAYS SYSTEM

NOMINATION

WHITE RIVER WATERSHED
ARKANSAS AND MISSOURI

ROGER MANGHAM – THE NATURE CONSERVANCY

National Wildlife Refuge Association

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

RE: National Blueways Designation for the White River Watershed

Dear Ms. Wodder:

The National Wildlife Refuge Association ("NWRA") is pleased to nominate the White Water Watershed (the "Watershed") in Arkansas and Missouri for designation as a National Blueway. NWRA makes this nomination on behalf of a capable and accomplished sponsoring partnership that includes four national non-profit conservation organizations, three federal environmental agencies, the Lower Mississippi Valley Joint Venture, three state wildlife and environmental agencies and two Watershed communities, all of which are committed to the goals and objectives for the proposed National Blueway as articulated in the nomination.

The ecosystem services, recreational opportunities and economic benefits that the Watershed provides are central to the quality of life and economic sustainability of south-central Missouri and a large portion of Arkansas. The Watershed covers 27,900 square miles in the two states – an area that is geologically and ecologically diverse, but which is uniformly rural in nature. The Ozark Mountains dominate the upper Watershed. The lower portion sits in the Mississippi Alluvial Plain. In both sections, rivers sustain the region's two economic drivers: outdoor recreation and its associated recreation-based tourism, and agriculture.

Of equal importance, the rivers nourish wetlands of international importance and the largest remaining bottomland hardwood forest above the Atchafalaya Basin. Conservation and restoration efforts in the lower portion of the White River hold significant promise for improved water quality in the Lower Mississippi Valley, and for the well-being of 70 distinct plant communities, 80% of the Delta's fish species, and 256 bird species, including the nation's largest wintering population of breeding Mallard ducks.

This is a nomination for the entire Watershed. The partnership's goals and objectives are intended to produce a national model for multi-agency/organization partnerships organized to address the full suite of activities it takes to succeed at landscape-scale conservation. We believe that a National Blueway designation for the Watershed will add weight and standing to the partnership as it

recruits additional members to broaden its influence and effectiveness in both states. More importantly, we believe that the people of the Watershed will be the true beneficiaries of the designation if we are able deliver on the objectives we hope to achieve in the communities where they live, work and recreate.

We are grateful to the National Blueways Committee for its consideration, and look forward to working with you as the nomination moves ahead.

Very truly yours,

Badge Blackett
Project Manager

David Houghton
Executive Vice President

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/RF/RS-1

AUG 24 2012

Ms. Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Ms. Wodder:

I am pleased to support the designation of the White River watershed as the first National Blueway in the Southeastern United States. The Cache River/lower White River system is perhaps best known in wildlife conservation circles for its importance as a "Wetland of International Importance" and as the most important wintering area for mallards in the continent.

The U.S. Fish and Wildlife Service (Service) and its partners have a long history of conservation successes in this watershed. Two of our flagship national wildlife refuges, Cache River and White River National Wildlife Refuges, are located here among an extensive complex of conserved public and private lands. We have a successful Partners for Fish and Wildlife program here as well as active fisheries, ecological services, migratory birds, and law enforcement programs – all directed toward protecting and enhancing trust resources, restoring and managing fish and wildlife habitats and populations, providing public recreational and educational opportunities, working with partners, and engaging communities. The watershed is encompassed within the geography of the Gulf Coastal Plain and Ozarks (GCPO) Landscape Conservation Cooperative, and is one of the focal areas of the Lower Mississippi Valley Joint Venture, and the Lower Mississippi River Ecosystem Team. The Service is actively engaged with U.S. Army Corps of Engineers, U.S. Department of Agriculture (USDA), and other partners in a Rivers Demonstration Project in the Cache River/White River - Big Woods of Arkansas Pilot Project under Goal 9.4C of America's Great Outdoors initiative.

Despite this demonstrated record of success, there is a need for broadening the scope of our conservation efforts. Designation of the White River watershed would be the catalyst that would promote connecting the conservation actions in the upper watershed in the highlands of Arkansas and Missouri with the floodplain systems of the lower watershed. Missouri is administratively situated in the Service's Midwest region so increased inter-regional collaboration also would result from Blueway designation, similar to that associated with the GCPO geography, which also extends into the Midwest and Southwest regions. Increased synergies would result as new partnerships were fostered, existing relationships strengthened, communities connected, stakeholders engaged, and economies benefitted. The health and quality of the river systems

within this watershed are fundamental to the overall condition of the landscape. The Service has a vital interest in working with its partners to improve water quality; restoring aquatic, wetland, and terrestrial ecosystems; protecting and recovering endangered species; educating the public about conservation values, providing recreation access and use; enhancing local economies and communities; and advancing the use of sound science in integrating land and water resource decisions.

We realize the benefits for trust resources and the public that could accrue from National Blueway designation, including: (1) the pride developed by a partnership-based, community-led endeavor; (2) national recognition and prestige associated with the recognition of nationally-significant resources in which the Service plays an integral role; (3) technical and financial assistance to enhance watershed-wide conservation and education programs; (4) expanding the cadre of partner organizations involved in a watershed-wide initiative such as USDA Forest Service, National Park Service, Missouri Department of Conservation, various non-government organizations, and watershed communities; (5) increased conservation efficiencies though coordinated programs; (6) improved ecosystem services; (7) increased sustainability of natural resources and dependent local economies; and ultimately, (8) better quality of life for residents of the watershed.

As the Service's Southeast Regional Director, I support the nomination of the White River watershed as a National Blueway and am eager to witness the beneficial results in years to come by virtue of this designation.

Sincerely yours,

Cynthia K. Dohner
Regional Director

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Arkansas Game & Fish Commission
Arkansas Natural Heritage Commission
Arkansas Cooperative Fish & Wildlife Research Unit
City of Clarendon, Arkansas
City of Augusta, Arkansas

I. EXECUTIVE SUMMARY

Introduction

The narrative and maps included in the following sections of this document comprise the nomination of the White River Watershed (including the proposed expansion area for the White River National Wildlife Refuge, collectively the "Watershed") in Arkansas and Missouri for designation as a National Blueway. In all respects, the Watershed is an outstanding candidate for this designation.

- **Watershed-based:** For their entire lengths, the White River and its tributaries run through rural landscapes. Excluding Springfield, Missouri and Fayetteville, Arkansas, which are both on the extreme periphery of the upper Watershed, the largest population center in the Watershed – Searcy, Arkansas – has 23,000 residents. Augusta, Arkansas and Forsyth, Missouri are more typical in size for Watershed communities, with around 2,000 inhabitants each. But it is not rural character that qualifies the Watershed for designation. Rather it is the fact that because the Watershed is uniformly rural, its rivers provide the region's environmental, recreational, cultural and, perhaps most importantly, economic identity. While the Watershed's environmental imperatives will be discussed in detail later in the nomination, there is no viable substitute for the economic impact that recreation, tourism and agriculture along these rivers provide to Watershed communities in both states. Augusta, Forsyth and the dozens of other small towns in the 27,765-square mile Watershed are the stakeholders closest to the ground as the rivers' challenges and opportunities are addressed.

- **Partnership-driven:** The importance of the Watershed's natural resources attracts federal, state and philanthropic investment by a diverse collection of agencies and organizations already working in partnership to protect, restore and manage the landscape. The Nature Conservancy and the Natural Resources Conservation Service have been at work for years protecting and restoring the bottomland hardwood forest whose runoff retention capacity is critical to water quality in the lower Mississippi Basin. Ducks Unlimited has worked with state and federal wildlife agencies to complete hundreds of habitat improvement projects in one of the world's most important waterfowl wintering areas. The Lower Mississippi Valley Joint Venture and the Audubon Society implement national and international bird conservation plans throughout the region. The U. S. Army Corps of Engineers is leading a partner-driven effort to complete an America's Great Outdoors ("AGO") pilot project on the lower portion of the Watershed – an outcome designed in part to restore natural flow to channelized portions of the Cache River. The U. S. Fish & Wildlife Service and the National Wildlife Refuge Association, with the demonstrated support of Watershed communities, are pursuing major expansions of the White River and Cache River National Wildlife Refuges, and with the Arkansas Game and Fish Commission, creating and managing new and existing points of public recreational access to the rivers and their upland areas. Through its Partners for Fish and Wildlife Program, the Fish & Wildlife Service also has more than 150 projects in Watershed areas in both states that complement programs run by NRCS intended to engage private landowners as partners in the effort to improve water quality. Trout Unlimited has four active chapters in upper regions of the Watershed, and is a respected, community based advocate for water

quality in the world-class cold-water trout fishery of the Ozark Mountain portion of the Watershed. Multiple agencies and organizations, including Audubon Arkansas, Trout Unlimited, the Arkansas Game and Fish Commission, Arkansas Natural Heritage Commission, the Missouri Department of Conservation, and environmental education associations in both states, collaborate on environmental education programs for school children, sportsmen and producers with a clear goal of building a culture of enlightened advocacy for the region's most important natural resource.

- **Integrated and Adaptive Land and Water Management:** The missions and expertise brought by the partners described above are at the heart of an integrated and adaptive land and water management strategy for the Watershed. The partners represent the full range of land management skill and advocacy for the major goals that all partners hope to achieve in the Watershed: improved water quality through integrated land and water management, land protection and restoration, abundance of fish and wildlife, efficient agriculture, and high quality recreation and access, all aimed at preserving viable communities and their traditional way of life. This nomination details an integrated vision for the Watershed that is inclusive of each component of this way of life, because each is essential to the viability of these rural communities. In strategies designed to achieve its major goals, the nomination also describes the partnership's commitment to create a model management structure to monitor and adapt to environmental, political, funding, and social changes that affect the proposed Blueway's ability to support the goals articulated in this nomination. Important to the adaptive success of the Blueway partnership will be the proven effectiveness of the combined scientific, policy, and advocacy capabilities of its four national non-profit conservation organizations, and the local support that its federal and state wildlife, agriculture and water resource agencies enjoy for the work they do that ultimately safeguards the local way of life. The most recent example of this support came this year during the public scoping process for the proposed 86,000-acre expansion of the land acquisition boundary at Cache River National Wildlife Refuge. Bucking the national trend of popular opposition to federal land acquisition, input from the public scoping process resulted in a 16,000-acre *increase* above the acreage amount originally requested. If this nomination is approved, the White River Watershed National Blueway will be created in a very receptive public environment.

White River Watershed Blueway Coalition

Currently, the White River Watershed Blueway Coalition (the "Coalition") is an informal partnership of private organizations, public environmental agencies and local communities. These include:

- The National Wildlife Refuge Association
- The Nature Conservancy
- Ducks Unlimited
- The Audubon Society through its Arkansas State Office
- The Lower Mississippi Valley Joint Venture
- The U. S. Fish & Wildlife Service
- The Natural Resources Conservation Service
- The U. S. Army Corps of Engineers

- The Arkansas Game and Fish Commission
- The Arkansas Natural Heritage Commission
- Arkansas Forestry Commission
- Arkansas Department of Parks and Tourism
- The City of Clarendon, Arkansas
- The City of Augusta, Arkansas

As detailed in later parts of the nomination, each of these agencies and organizations brings unique expertise, capacity, track record and commitment to support different functions of a successful National Blueway. The coalition is already operating productively and cooperatively in support of the AGO pilot project on the lower portion of the Watershed.

If the Blueways nomination is successful, the Coalition intends to create a formal structure for management, monitoring and reporting purposes. As it does so, the Coalition is committed to recruit additional members to address the full Watershed's issues and opportunities in conservation and restoration, recreation, environmental education and sustainable local economies. Additional members will include:

- The USDA Forest Service
- National Park Service
- U. S. Geological Survey
- The Missouri Departments of Conservation
- Missouri Department of Natural Resources
- Trout Unlimited chapters from both states
- Audubon Missouri
- Missouri and Arkansas Environmental Education Associations
- Arkansas Wildlife Federation and other sportsmen's groups in both states
- Farm Bureaus in both states
- Institutions of higher education in both states
- Ozarks Water Watch and their Upper White River Basin Foundation
- Interested communities throughout the Watershed

Goals, Objectives and Strategies

The White River Watershed is comprised of two 6-digit HUCs, generally defined as the lower White River watershed in the Mississippi Delta (including the discreet 8-digit Cache River watershed) – roughly 7,000 square miles in size, and the upper White River watershed in the Ozark Mountains of northwestern Arkansas and south-central Missouri – roughly 21,000 square miles in size. The U. S. Army Corps of Engineers is leading the effort to complete an America's Great Outdoors pilot project on the lower White and Cache Rivers. Many of the concrete near and mid-term goals, objectives and strategies contained in this nomination are tied to intended outcomes included in the evolving planning underway for the pilot project. The practical reasoning behind this connection is that the pilot project's intended outcomes a) represent commitments made to the project by the AGO/Coalition organizations, and b) when completed, the outcomes will represent measurable success for the Watershed as a whole in support of integrated land and water management, conservation and restoration, recreation, environmental education and sustainable economies.

Other goals, objectives and strategies for the Blueway are tied to broadening the Coalition, as described above, and creating a permanent management structure that will be accountable to the guidelines of the National Blueways Committee.

II. MAPS OF THE WATERSHED

FIGURE 1: Blueway Locus

FIGURE 2: White River Watershed

FIGURE 3: Conserved Lands within the Watershed

FIGURE 4: Land Cover within the Watershed

FIGURE 5: White River Watershed Eco-regions

FIGURE 6: White River Watershed Geology

Figure 1:
Watershed Locus
White River Watershed National Blueway

Figure 2:
White River Watershed
White River Watershed National Blueway

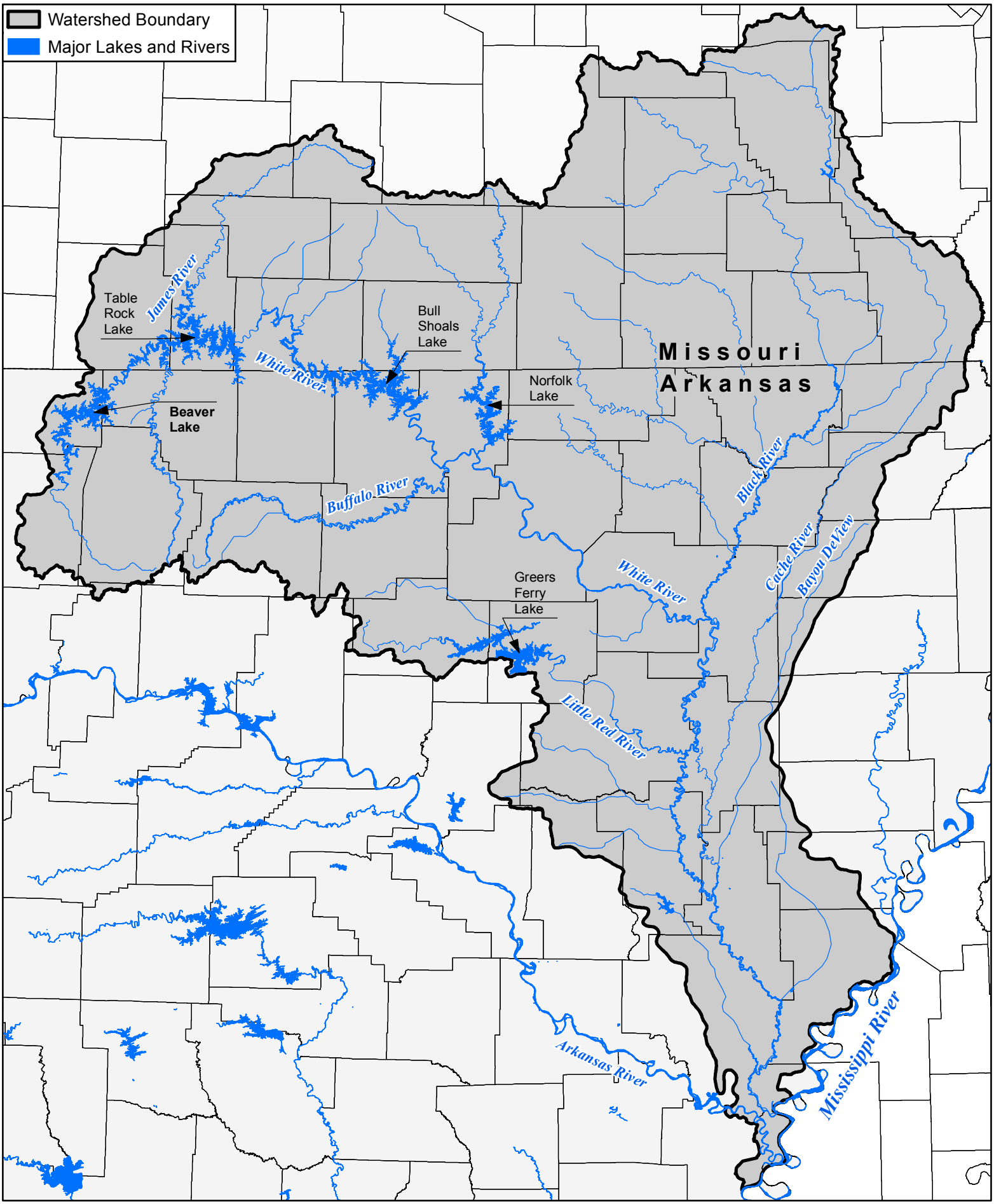


Figure3:
Conservation Estate within the Watershed
White River Watershed National Blueway

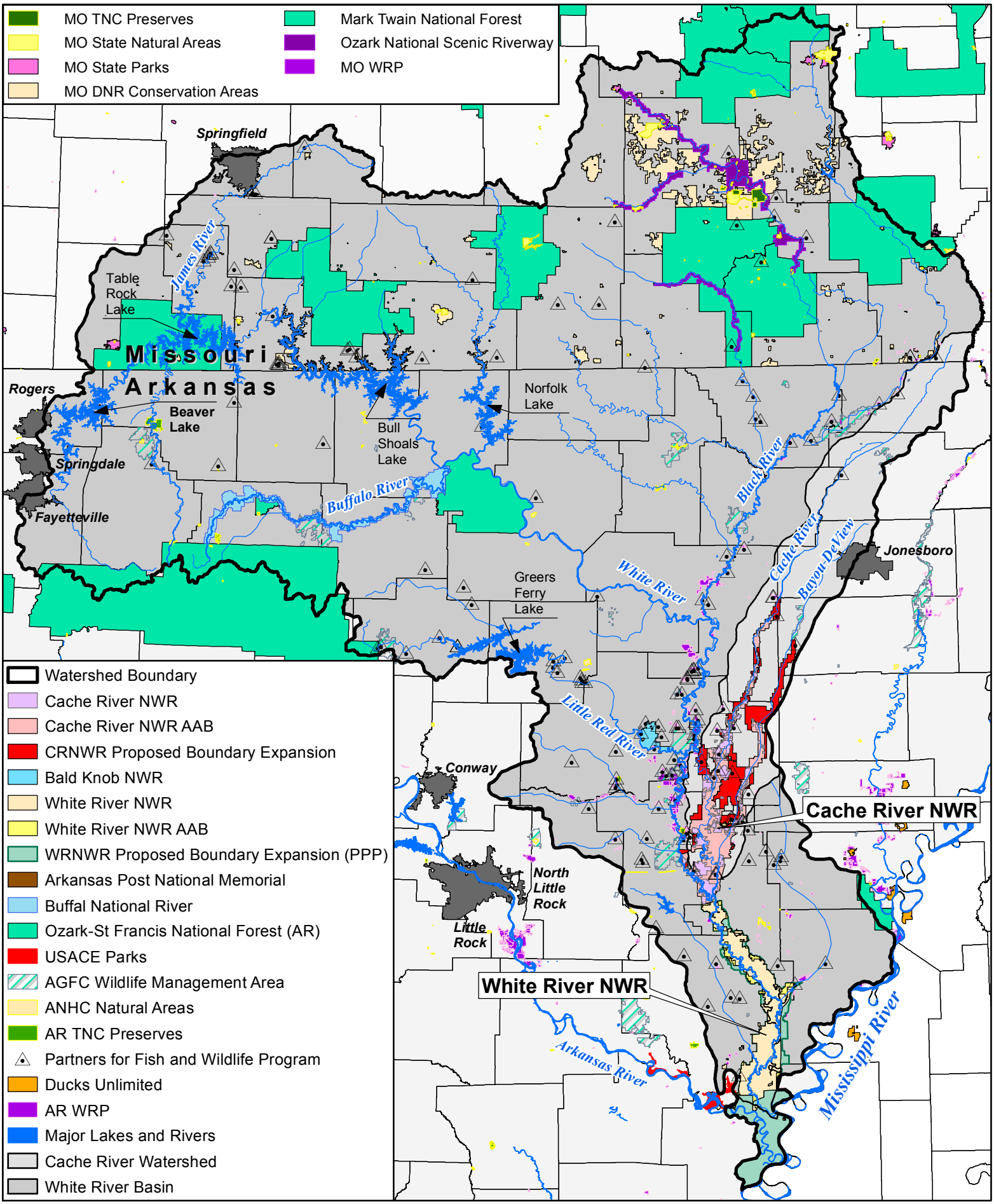


Figure 4:
Land Cover
White River Watershed National Blueway

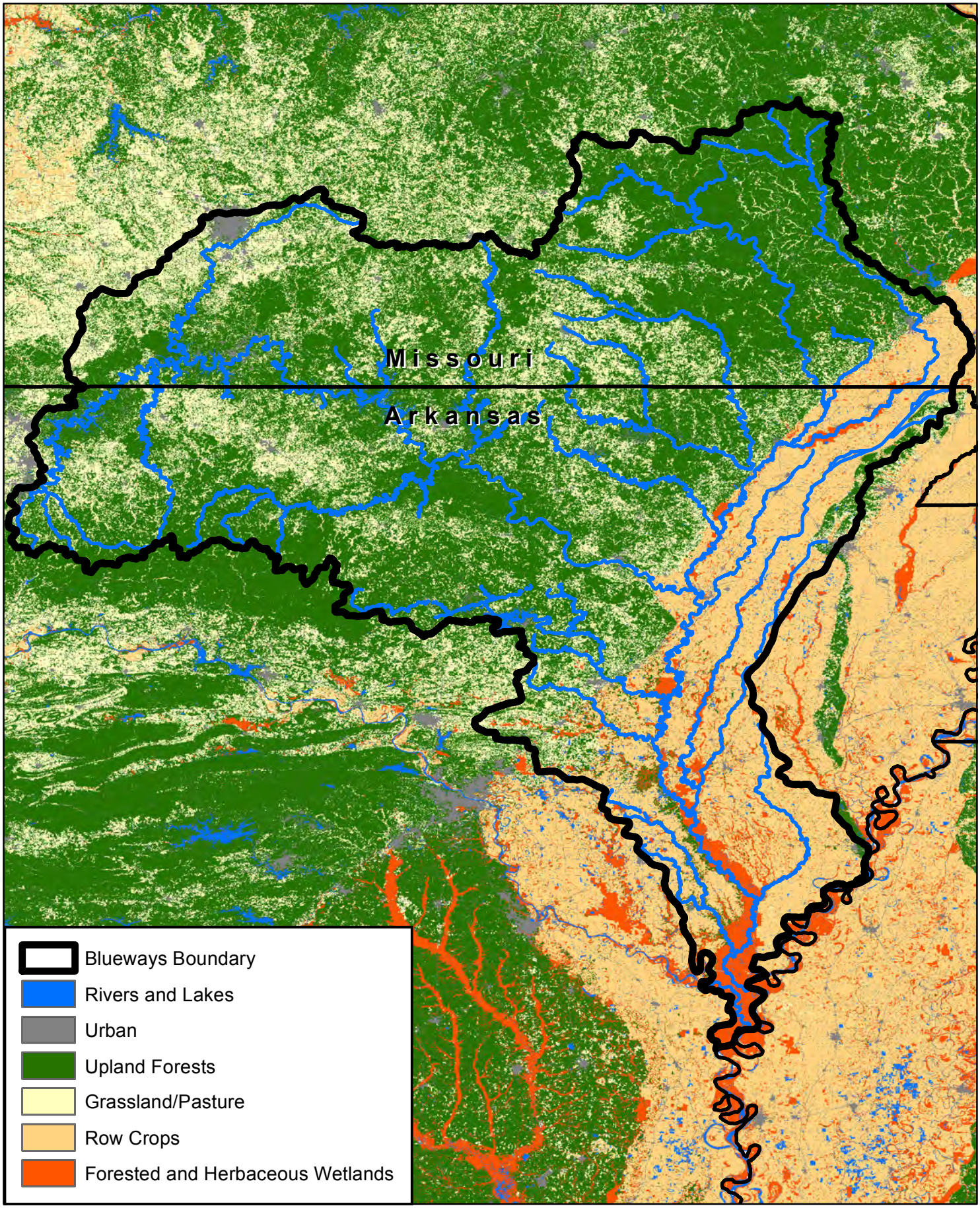


Figure 5
White River Eco-regions
White River Watershed National Blueway

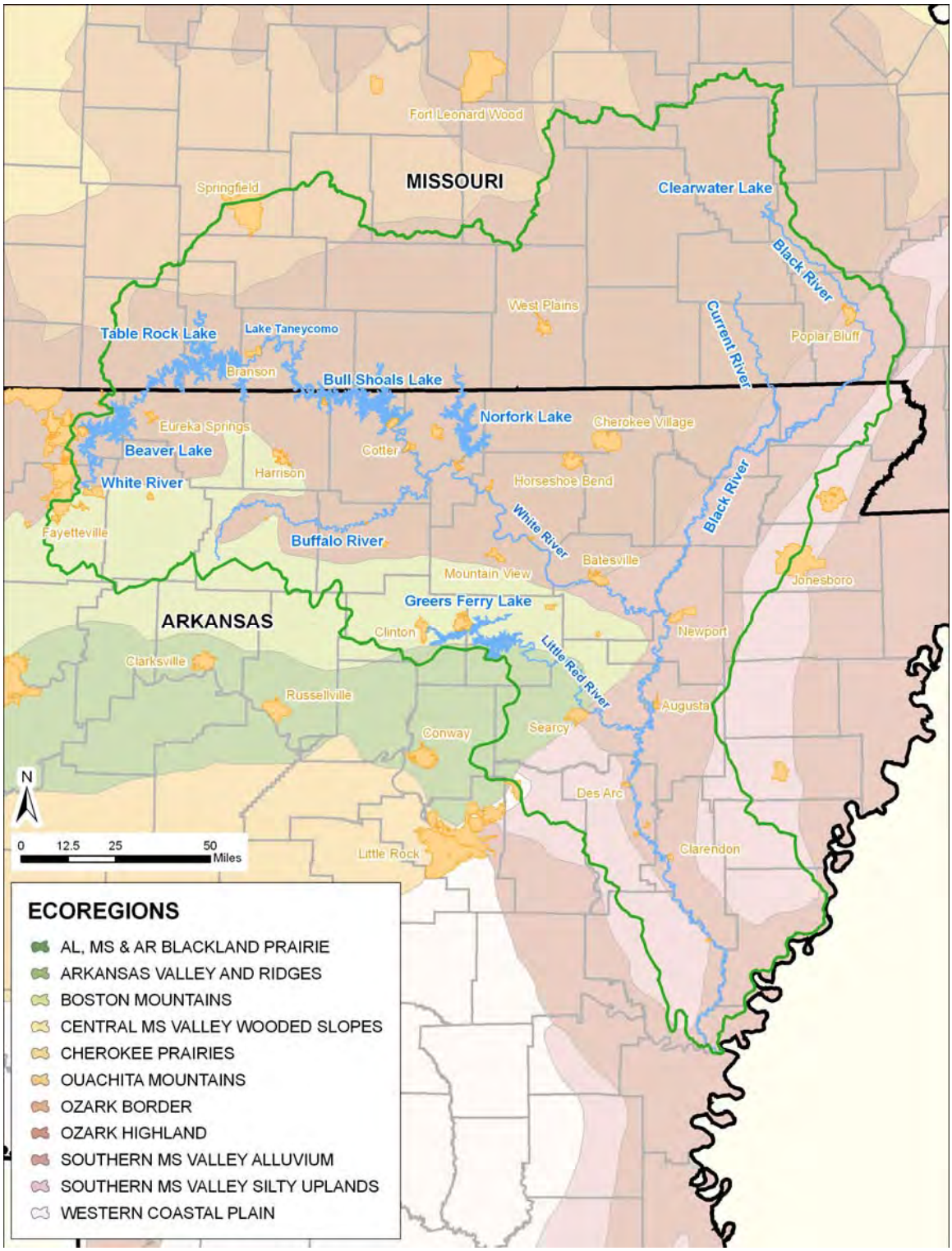
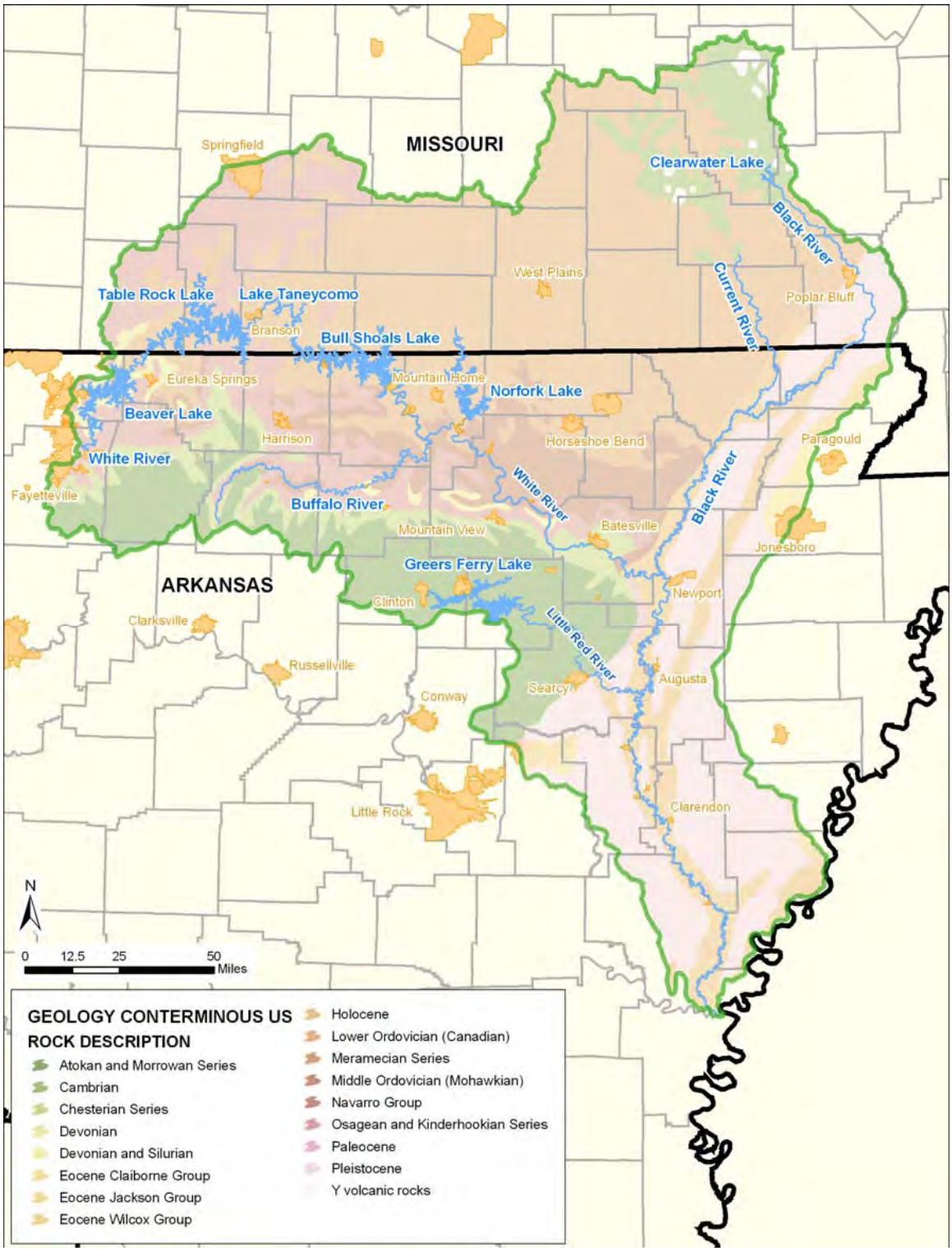


Figure 6
Watershed Geology
White River Watershed National Blueway



III. THE WHITE RIVER WATERSHED[1]

The 17.9 million-acre White River Watershed is located in two states – Arkansas (11,076,308 acres) and Missouri (6,818,231 acres) – and hosts a conservation estate in excess of 3.2 million acres (18% of the Watershed) consisting of a network of federal, state, and private lands (Figure 3). The conservation estate includes 23 U.S. Army Corps of Engineers Parks, three National Forests, two National Parks, three National Wildlife Refuges, ten federally-designated wilderness areas, four National Wild and Scenic Rivers, a Ramsar Wetland of International Importance, the most important wintering area for Mallard ducks in North America, 92 state wildlife management areas, 73 state natural areas, 19 state parks, 34 Nature Conservancy preserves/easements, more than 193 Wetlands Reserve Program easements, and 158 U. S. FWS Partners for Fish and Wildlife projects. Twenty-one counties and 80 communities in Missouri, and 39 counties and 193 communities in Arkansas are situated wholly or in part in the Watershed. Approximately 1.2 million people reside in the Watershed.

Communities within the Watershed benefit from an influx of visitors and local residents utilizing the myriad of outdoor recreational offerings found on the Buffalo, Cache, Little Red and White Rivers and elsewhere within the network of public lands and waters. Most of these outdoor pursuits are made possible by the diversity and abundance of natural resources including terrestrial, wetland, and aquatic habitats and their dependent wildlife populations. Beautiful scenery, rural lifestyle, and cultural, historic, and natural attractions complement the potential for active outdoor recreation. Tourism and recreation-based visitation to the Watershed is second only to agriculture in its positive impact on the Watershed's economy. Fishing, hunting, wildlife observation, and scenic viewing are among the most popular recreational pursuits. The Watershed also provides high quality and abundant opportunities for camping, boating, hiking, bicycling, and swimming. In addition to recreation, the Watershed also provides electric and natural gas energy sources, flood control, navigation, commercial fisheries, and agricultural irrigation. The Watershed's forests provide important commercial timber resources and the surrounding agricultural areas are highly productive croplands for rice, cotton, corn, soybeans, and wheat. Notably, Arkansas is the largest rice producing state in the country. The river systems also provide opportunities for research, application, and demonstration of hydrologic/stream restoration techniques.

Upper White River Basin

The White River starts its journey to the Mississippi as a mountain stream in the Boston

[1] This description of the White River Watershed, and the statistics contained in this section, were compiled from the following sources:

1) *Upper White River Watershed Integrated Economic and Environmental Project*
   Food & Agriculture Policy Research Institute – University of Missouri – 2008
2) *An Ecological and Habitat Vulnerability Assessment of Arkansas's White River Basin*
   United States Environmental Protection Agency – 2002
3) *Status of the Watershed*
   Ozarks Water Watch – Upper White River Foundation – 2011
4) *Big Woods: Ecological Significance and Threats*
   The Nature Conservancy – 2012

Mountains near Washington, Arkansas, flowing north across the first of the upper river's three major sub-basins until it hits its first significant impoundment at Beaver Lake Reservoir. Below Beaver Lake the White crosses into south-central Missouri and into the James River sub-basin, which drains a 1,500 square mile watershed flowed by the James River and its tributaries. The combined flow then moves southeast, back into Arkansas and into the Bull Shoals Lake sub-basin. Below Bull Shoals Lake, the White is joined by the Buffalo River. Managed by the National Park Service, the Buffalo is free flowing for its entire 135 miles, and was the first river in the National Park System to be designated a National River. Early European settlers and their descendants fought a largely futile battle to make the White River into a navigable highway to get their produce and goods to the Mississippi; dredging projects were common on the upper river well into Missouri until the beginning of the twentieth century, when they were abandoned in favor of rail transport.

In all, there are six dams in Arkansas and two in Missouri that impound sections of the upper White River. These impoundments are a valuable recreational resource that is an integral part of the Ozark regional economy. The Buffalo River attracts backcountry paddlers and adventurers with its unspoiled path through the Ozarks. The region's lakes are more heavily developed, drawing regional, national and international visitors to lakeside inns and cottages. Coldwater outflow from the Norfork and Bull Shoals Dams maintains a 60-degree water temperature for 100 miles downstream, cold enough to support trout and create a world-class sport fishery on the upper White.

Land use on the upper White River is less intensely agricultural than in the lower section. Of the three major sub-basins, the James River watershed has the greatest agricultural land base, with land cover that is 30% upland hardwood forest, 63% agricultural (mostly pasture) and 7% urban (Springfield, Missouri). As a whole, the upper White has a land cover mix that is 59% hardwood forest, 30% pasture, 9% cropland and 2% other (Figure 4). In spite of the relatively low agricultural pressure, the upper White River is still a victim of the same water quality issues of high phosphate and nitrate counts that confront the more intensely agricultural lower river. Organizations such as Ozarks Waters Watch and Trout Unlimited, and the Food & Agriculture Policy Institute at the University of Missouri closely monitor the region's water quality and advocate for effective programs to reduce agricultural runoff and non-point source pollution associated with urban development in the upper White River basin.

Lower White River Basin

The lower White River and two of its principal tributaries – the Cache River and Bayou DeView – flow through the Mississippi Alluvial Plain, one of the most important bottomland hardwood wetlands in the world and a designated Ramsar Wetland of International Importance. This part of the Watershed is known as the Big Woods, and its streams and wetlands are unique in that they support the largest winter concentration of Mallard ducks in North America and also provide critical habitat for plant species and animals, such as black bear and migratory birds. The river system also supports an important riverine fishery, including sturgeon and paddlefish. The aquatic plant communities within bottomland hardwood swamps of this region are among the most biologically diverse and productive systems in the world.

The Mississippi Delta was once an unbroken landscape of bottomland forests, swamps, bayous and rivers teeming with life. Delta forests blanketed 24 million acres – the largest expanse of forested wetlands in North America. In the last two centuries, the river valley's fertile soils have been transformed into fields of cotton, rice and soybeans, and its rivers harnessed for flood control, irrigation and navigation. Today fewer than five million forested acres remain, mostly in small, degraded patches.

The Big Woods are the exception. Lining the Cache, White and Arkansas Rivers and Bayou DeView, these 550,000 acres are the largest corridor of bottomland hardwood forest remaining in the Delta outside of Louisiana's Atchafalaya River Basin. The area is made up of more than 70 distinct natural plant communities, and its rivers are home to fully 80 percent of the fish species in the entire Delta. Here one can find towering baldcypress trees that have been growing since long before Columbus landed in the New World. Black bears still roam, and because forests have declined so severely elsewhere, a block of this size is critically important to the area's 265 bird species, including resident and migratory songbirds, raptors and waterfowl.

However, the Big Woods is not an untouched nature reserve; it is a working forest and river system that has tremendous ecological, economic and cultural value. The challenge lies in finding the balance between human and ecosystem needs so that both can be sustained over the long term. The partners in this nomination and other stakeholders are working to integrate land and water management through conservation and restoration, and balance the agricultural, recreational and wildlife needs in this landscape through partnership engagement, community involvement, and economic sustainability.

Stresses to the Big Woods ecosystem mirror those of the Mississippi Delta region as a whole. Forest fragmentation threatens animal species that depend on large, undisturbed forest blocks to survive. Rivers have been leveed, dredged, straightened, drained and diverted, disrupting their natural flooding cycles and destabilizing their channels. Water quality suffers from sediment, nutrient and biocide runoff from unsustainable agriculture practices. Surface and groundwater extraction for irrigation negatively affects aquifers and stream flow. The results of these changes are dramatic and will prove catastrophic to Delta communities and the Big Woods ecosystem alike without concentrated attention to the goals and objectives that form the core principles of the Nation Blueways initiative.

IV. THE NOMINATING PARTNERSHIP

The nominating partnership is currently comprised of twelve organizations and agencies informally organized as the White River Blueway Coalition (the "Coalition"). Each member is actively involved in one or more aspects of effective landscape-scale resource conservation on the lower White River, and brings a commitment to the central goal of the National Blueways System of stakeholder engagement in the integration of land and water management. In fact, the Coalition predates the Blueways nomination process, having been at work as a functioning partnership for almost a year in support of an America's Great Outdoors pilot project on the lower portion of the Watershed. The Coalition shares the

National Blueways Committee's belief that the objectives of the Blueways and AGO initiatives are intertwined and mutually supporting.

The Blueway nomination form requests that the nomination discuss the nominating partnership's accomplishments, effectiveness and capacity. This is difficult to do for an informal partnership such as the Coalition, which has no track record as a formal coalition, but whose strength is the in the union and synergy of diverse organizational priorities, resources and accomplishments. Coalition members have demonstrated records of conservation successes in the Watershed, both singly and in various long-standing partnerships. Therefore, alternatively, the Coalition respectfully requests that the National Blueways Committee evaluate the capability of the Coalition to deliver the mission of the National Blueways System in the White River Watershed based on the following brief descriptions of the Coalition members. If the White River Watershed is designated a National Blueway, the Coalition will institute a formal membership, management and reporting structure, and recruit additional membership from all regions of the Watershed that can help the new Blueway's governing body meet the land and water management integration, conservation and restoration, recreation, environmental education and economic sustainability goals for the Watershed.

Membership and Diversity

The National Wildlife Refuge Association

With a mission to conserve America's wildlife heritage for future generations through strategic programs that protect and enhance the National Wildlife Refuge System and the landscapes beyond its boundaries, the National Wildlife Refuge Association ("NWRA") brings a unique perspective and creative strategies to conservation. NWRA has created a powerful recipe for success by leveraging the world's largest wildlife conservation program – the U.S. Fish and Wildlife Service's 150-million acre National Wildlife Refuge System – and engaging other conservation nonprofits, private land owners and refuge Friends groups in safeguarding wildlife. By mobilizing citizens in support of conservation, generating support for wildlife conservation among decision makers, and creating mosaics of public and private protected lands, NWRA works to strengthen the ecological integrity of our national wildlife refuges, and maintain the diversity of American wildlife and plants for the future. Through its Beyond the Boundaries Program, NWRA has been working for more than three years with the Cache River and White River National Wildlife Refuges on expansion, planning, public outreach and land protection efforts.

The Nature Conservancy

The Nature Conservancy ("TNC") is the world's leading and most accomplished conservation organization. TNC's mission is to conserve the lands and waters on which all life depends through the dedicated efforts of its diverse staff, including more than 550 scientists located in all 50 U.S. states and 33 countries, with the help of partners from individuals and governments to local nonprofits and corporations, and by using a non-confrontational, collaborative approach and staying true to its five unique core values of *integrity beyond reproach, respect for people, communities and cultures, commitment to diversity, One Conservancy and tangible, lasting results*. TNC created the Arkansas chapter in 1982 and, since then, has helped protect over 25,000 acres of ecologically rich wetlands, threatened native

prairies, caves, forests and waterways. The Conservancy and its partners – public agencies, private organizations, businesses, landowners – are working together to conserve the Big Woods as a healthy, functioning floodplain ecosystem within the context of sustainable human use. To accomplish this, the Conservancy has outlined four goals: conserve the remaining forests and wetlands; reforest degraded sites to reconnect forest fragments; restore sustainable form and function to major rivers; and reduce river sedimentation and pollution to preserve water quality. TNC has assisted in acquiring thousands of acres of wildlife habitat for Cache River NWR.

Ducks Unlimited

Ducks Unlimited ("DU") got its start in 1937 during the Dust Bowl when North America's drought-plagued waterfowl populations had plunged to unprecedented lows and has grown into the world's leader in wetlands and waterfowl conservation. DU's mission is *to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl; habitats also benefit other wildlife and people*. In Arkansas, DU carries out this mission through its Arkansas Partners Project, a cooperative effort among Ducks Unlimited, Arkansas Game and Fish Commission, U.S. Fish and Wildlife Service, and USDA Natural Resources Conservation Service. The objective of the program is to help ducks and other waterbirds return north to their breeding areas physically conditioned for maximum reproductive success. The program offers assistance to private landowners interested in restoring wetlands and managing existing wetlands, idle areas, and agricultural fields after harvest as shallow wetland habitat. These flooded areas provide valuable forage that birds need to meet their daily energy requirements. The Arkansas Partners Project was initiated in 1993. Since that time, Ducks Unlimited and its partners have restored and enhanced more than 150,000 acres of waterfowl habitat in the Watershed. In the pats three years, DU has leveraged nearly $9 million for land acquisition and wetland restoration on Cache River NWR.

Audubon Arkansas

The Audubon Society's mission is *to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity*. Audubon Arkansas was established in 2000 as the 25th state office of the National Audubon Society. Since then, the state office has carried out the Society's mission by engaging in the restoration and protection of watersheds and other habitats important to birds and other wildlife; citizen involvement in science and habitat protection; environmental education for young people; and public outreach and education related to targeted policy initiatives, including global warming and water issues. Notably, Audubon's Important Bird Area ("IBA") program was initiated in November 2001 with the establishment of the IBA Technical Committee. An IBA is a site that provides essential habitat for one or more breeding, wintering, and/or migrating species of bird. The IBA Program is proactive, voluntary, participatory, science-based and credible, and involves various types of landowners. IBAs are a natural focus of volunteer monitoring projects, which can lead to positive local stewardship and advocacy.

The Lower Mississippi Valley Joint Venture

The Lower Mississippi Valley ("LMV") Joint Venture is a self-directed, non-regulatory private, state, federal conservation partnership that exists for the purpose of implementing the goals and objectives of national and international bird conservation plans within the

Lower Mississippi Valley region. The LMV Joint Venture functions as the forum in which the private, state, federal conservation community develops a shared vision of bird conservation for the LMV region; cooperates in its implementation; and collaborates in its refinement. The LMV Joint Venture partnership is focused on the protection, restoration, and management of those species of North American avifauna and their habitats (endemic to the LMV Region) encompassed by the North American Waterfowl Management Plan; North American Land Bird Conservation Plan; United States Shorebird Conservation Plan; North American Waterbird Conservation Plan; and Northern Bobwhite Conservation Initiative. Collectively, these national and international plans are recognized as the North American Bird Conservation Initiative ("NABCI"). The operational scope of the LMV Joint Venture emanates from the operational goal for integrated bird conservation partnerships established by the NABCI, that being "to deliver the full spectrum of bird conservation through regionally based, biologically driven, landscape-oriented partnerships".

The U. S. Fish & Wildlife Service

The U. S. Fish & Wildlife Service ("FWS") manages more than 550 National Wildlife Refuges across the United States. In this capacity, FWS is the world's largest wildlife conservation organization. The mission of FWS's National Wildlife Refuge System is *to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.* In Arkansas, FWS manages three national wildlife refuges ("NWR") encompassing nearly 250,000 acres in the White River Watershed, White River, Cache River, and Bald Knob NWRs. White River NWR was established in 1935 for the protection of migratory birds. The refuge lies in the floodplain of the lower White River near its confluence with the Mississippi River. Long and narrow, three to ten miles wide and almost ninety miles long, the refuge is the largest protected area in the Big Woods. The refuge's fertile forests and three hundred lakes are interlaced with streams, sloughs, and bayous. The result is a haven for a myriad of native wildlife and migratory birds. Cache River NWR was established in 1986 to protect significant wetland habitats and provide feeding and resting areas for migrating waterfowl. The Cache River basin contains a variety of wetland communities including some of the most intact and least disturbed bottomland hardwood forests in the Mississippi Valley region. These unique and valuable wetlands have been designated by the Ramsar Convention as "Wetlands of International Importance", and the Cache River is the landscape for the AGO pilot project. Major expansions are currently proposed for both refuges. Bald Knob NWRA was established in 1993 to protect and provide feeding and resting areas for migrating and wintering waterfowl. It provides the most important wintering and migratory habitats for shorebirds and Northern Pintail ducks in Arkansas. FWS has a strong commitment to public recreational access to its refuges in the Watershed, as well as to work through its Partners for Fish & Wildlife program to engage private landowners as partners in the effort to protect water quality.

The Natural Resources Conservation Service

The Natural Resources Conservation Service ("NRCS") is an agency of the Department of Agriculture. Through its multiple assistance programs to farmers, ranchers and other private landowners, NRCS is a leader in national efforts to improve water quality. Originally established by Congress in 1935 as the Soil Conservation Service, NRCS has expanded to become a conservation leader for all natural resources, ensuring private lands are conserved,

restored, and more resilient to environmental challenges like climate change. Seventy percent of the land in the United States is privately owned, making stewardship by private landowners absolutely critical to the health of the nation's environment. NRCS works with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants, and animals that result in productive lands and healthy ecosystems. In Arkansas, and with continued funding from Congress through a reauthorized Farm Bill, NRCS's Wetlands Reserve Program will continue to be perhaps the most important and effective tool in the effort to restore to bottomland hardwood forest cleared lands within the Big Woods that have become impractical for agricultural production.

The U. S. Army Corps of Engineers

The U. S. Army Corps of Engineers' (the "Corps" or "USACE") story began more than 200 years ago when Congress established the Continental Army with a provision for a chief engineer. The Army established the Corps of Engineers as a separate, permanent branch in1802. Since then, the U.S. Army Corps of Engineers has played an integral part in the development of the country. Among its many accomplishments and missions, the Corps is the Nation's number one federal provider of outdoor recreation; the Nation's environmental engineer; owns and operates more than 600 dams; operates and maintains 12,000 miles of commercial inland navigation channels; dredges more than 200 million cubic yards of construction and maintenance dredge material annually; restores, creates, enhances or preserves tens of thousands of acres of wetlands annually under the Corps' Regulatory Program; and provides a total water supply storage capacity of 329.2 million acre-feet in major Corps lakes. Within the White River Watershed, the Corps is leading the effort to have the Cache River and lower White River system designated as an America's Great Outdoors landscape, and is the lead agency in an AGO pilot project that includes significant natural stream flow restoration projects on the Cache River.

The Arkansas Game and Fish Commission

The Arkansas Game and Fish Commission ("AGFC") plays an important role in keeping The Natural State true to its name. During the last 100 years, the agency has overseen the protection, conservation and preservation of various species of fish and wildlife in Arkansas. This is done through habitat management, fish stocking, hunting and fishing regulations, and a host of other programs. An essential part of ensuring a healthy wildlife population involves people. Through agency programs geared toward the public, the Arkansas Game and Fish Commission works to generate awareness of ethical and sound management principles. Whether it be educational programs, fishing and hunting regulations or environmental awareness, the agency understands that working with people is just as important a factor in managing wildlife as any other. Through its mission *to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people*, AGFC is an energetic advocate for public recreational access to the Watershed's public lands, and a leader in environmental education programs that foster an ethic of good land and resource stewardship in those that use them. AGFC manages 27 wildlife management areas within the Watershed.

The Arkansas Natural Heritage Commission

The Arkansas Natural Heritage Commission focuses on identifying and preserving Arkansas's natural heritage. That includes the acquisition and hands-on management of the

System of Natural Areas and the compilation of an extensive database on rare and endangered species. Natural Areas represent remnants of the original landscape that have remained relatively undisturbed for hundreds of years. Often, they contain unique ecosystems that the ANHC restores, maintains and protects for future generations of Arkansans. The commission also collects, analyzes and houses data on more than 800 rare species.

Arkansas Forestry Commission
The Arkansas Forestry Commission was established with the passage of Act 234 by the 1931 session of the Arkansas Legislature. AFC works with agencies, organizations and residents to prevent and suppress wildfires, control forest insects and disease, grow and distribute trees, and gather and disseminate information concerning the growth, use and renewal of forests.

Arkansas Department of Parks and Tourism
The Arkansas Department of Parks and Tourism is a department of the State of Arkansas charged with promoting, protecting, interpreting, and managing the state's natural and cultural resources. The department is also tasked with increasing tourism and promoting individuals, families, and businesses to relocate to Arkansas.

Recruitment for a National Blueway Partnership

The Coalition as currently structured is weighted heavily toward integrated land and water management, conservation and restoration, outdoor recreation and education, and public outreach expertise in the lower part of the Watershed, tied to the AGO pilot project and the expansions of the Cache River and White River NWRs. Many of the near and mid-term goals proposed in this nomination will be achieved through the work associated with the achievement of the AGO goals. However, an important near term Blueway goal, described in the following section, involves the formation of a formal governing body for the White River Watershed National Blueway, and the expansion of its list of partners to include full Watershed representation with partner expertise across the four categories of activities that comprise a fully functional and sustainable National Blueway. Missouri's environment and wildlife agencies need to be recruited into the Coalition, as do sportsmen's groups, environmental education associations and agricultural interests in both states.

Specifically, the Coalition intends to bring the following entities into the participation and management of the formal structure that emerges as the management body of the White River Watershed National Blueway:

- **National Park Service and the USDA Forest Service**. Both federal agencies are major land managers and provide important visitor services throughout the Watershed.
- **U.S. Geological Survey.** This federal agency is the nation's largest water, earth, and biological science and civilian mapping agency, is a science partner with FWS and NPS, and is the main cooperator in the Arkansas and Missouri Cooperative Fish and Wildlife Research Units.

- **The Missouri Departments of Conservation and Natural Resources.** These are the counterpart agencies to the Arkansas Game and Fish Commission and Natural Heritage Commission.
- **The Conservation Fund.** The Fund works with partners to conserve land, train leaders and invest in conservation to produce both environmental and economic benefits. The Fund has assisted FWS in land acquisition efforts in the lower Watershed.
- **Trout Unlimited Chapters in Missouri and Arkansas.** TU is a respected advocate for water quality in the Watershed, and runs popular and effective environmental education programs from all its chapters.
- **Audubon Missouri.** To complement the bird advocacy, public outreach and environmental education programs of Audubon Arkansas.
- **Missouri and Arkansas Environmental Education Associations.** The Blueway's goal is to complement, rather than duplicate programs already successfully running in the Watershed. The Blueway will advocate for additional environmental education assets only to the extent that those assets fill a specific need that is not being met, or that bring a new and unique educational resource to the Watershed.
- **Arkansas Cooperative Fish & Wildlife Research Unit.** Research at the Arkansas Cooperative Fish and Wildlife Research Unit focuses on management related issues and provide our Cooperators with practical information needed to better manage natural resources in Arkansas and the region. Areas of emphasis include tail-water fishery management, marsh bird life history and management, crayfish life history and management, stable isotope research, resource selection, and parameter estimation.
- **The Arkansas Wildlife Federation and other sportsmen's organizations in both states.** The advocacy of sportsmen for quality recreational access to public lands can be an essential ingredient in generating political and funding support for the Blueway, and for an overall increase in the conservation estate.
- **Farm Bureaus in both states.** Agriculture is the most important component of the Watershed's economy. Agricultural practices, good or bad, have the biggest impact on the Watershed's environment. The Farm Bureaus, in partnership with NRCS, can play a vital role in ensuring the balance between sustainable agriculture and the functionality of the wetland resource.
- **Institutions of higher education.** Universities in both states have extensive research experience in the study of water quality, agricultural practices, economic impacts of agriculture and the recreation industries, and environmental science. They are also centers of innovation and leadership in their roles as educators of the states' next generation of farmers, environmentalists and community leaders.
- **Ozarks Water Watch and their Upper White River Basin Foundation.** The foundation annually monitors water quality in the upper Watershed, and is an opinion leader on issues affecting the health of the river and its tributaries.
- **Additional interested communities in both states.** The Towns of Clarendon and Augusta, Arkansas are engaged in the process that the Coalition hopes leads to the success of the AGO pilot project. Other river communities in the Watershed have an equal stake in a successful National Blueway in their backyards for the environmental and economic benefits that the designation can bring.

Support Within the Watershed

The organizations and agencies that comprise the Coalition have each enjoyed sustained, widespread support for their work in the Watershed. The letters of support from the Cities of Clarendon and Augusta, Arkansas, attached to this nomination, barely scratch the surface of the support that has led to far-ranging and demonstrable success. State chapters of The Nature Conservancy, the Audubon Society and Ducks Unlimited have engaged and growing memberships that support their programs and justify the investments their national organizations make in the Watershed. All three also have long track records of success in working with private landowners on habitat protection and improvement projects that benefit the Watershed. NRCS runs hugely popular programs – almost 200 Wetlands Reserve Program easement acquisitions alone in the Watershed – and delivers countless other instances of technical and land improvement assistance to landowners. In the public process for the proposed expansion of the Cache River National Wildlife Refuge, popular support for the expansions bucked the national trend by requesting the Fish & Wildlife Service to increase the amount of acreage proposed in the boundary expansion. Major forest landowners are supporting the proposed expansion for the White River NWR, a predominantly forested landscape. The Fish & Wildlife Service has completed more than 150 landowner assistance projects in both states of the Watershed. The state wildlife agencies are the local, accountable and highly trusted promoters for wildlife recreational opportunities in their states. All of these organizations and agencies have proven their worth as partners in the Watershed and earned the local support that will be essential to the success of the Blueway.

V. VISION FOR THE WHITE RIVER NATIONAL BLUEWAY

The Watershed is a rich mosaic of varied landscapes – mountainous at its headwaters, rich delta flatland at its end. In the Big Woods of Arkansas, located in the Mississippi Alluvial Plain, there are more than 20 different forest communities along the White River and its three major tributaries. They support an incredible diversity of wildlife: 180 species of fish and mussels (80 percent of the fish and mussel fauna in the ecoregion), 265 species of birds, the largest population of wintering Mallards in the world, native black bears, and eight endangered species. The upper Watershed is a recreational paradise of lakes, rivers and mountains that draws visitors from around the world. What it may lack by comparison to the lower portion in terms of biodiversity, species counts, and globally important wetlands, is compensated for by its scenic beauty, recreational opportunities, tourism-driven economic impact and importance to water quality and river management in downstream communities. The White River is many landscapes but one Watershed. In total, it is an invaluable remnant of Arkansas and Missouri's natural heritage and an integral part of the state's future.

The Coalition envisions a National Blueway in the White River Watershed that:

- Provides a national model for restoration and enhancement of aquatic, wetland and terrestrial habitats, and supports a host of rare, threatened, and endangered species and other migratory/native wildlife;
- Contributes to improved water quality in the lower Mississippi River;
- Contributes to economic growth and sustainability of the region through vibrant recreational and agricultural economies;
- Highlights the value and effectiveness of private, municipal, state, federal partnerships, and
- Promotes awareness and support of Watershed restoration and conservation.

The Coalition's central commitment and goal is to develop a conservation framework for the Watershed that implements a multi-level strategy for achieving this vision – a framework that integrates partners and demonstrates successful river restoration methodologies, sustainable economic growth, diversification of recreational and educational programs, effectiveness of partnerships, and a Watershed-wide conservation ethic.

Consistency of Partnership Vision

This partnership vision is entirely consistent with the vision and intent of the National Blueways System:

- The vision is shared by all members of the Coalition – a functioning and growing partnership of professional conservation agencies and organizations already in place to design and deliver a landscape-scale AGO pilot project on a large portion of the Watershed. Community support has been demonstrated both for this nomination, as well as for the body of work already completed by individual Coalition members.

- The vision addresses the full range of opportunities and challenges of the entire, multi-landscape Watershed.

- The vision integrates all of the elements of successful landscape-scale conservation. In the organizational missions and strengths of its individual members, the Coalition combines capacity, skill and proven success to deliver exemplary land and water conservation and restoration, outdoor recreation and access, public outreach and environmental education, all of which contribute to viable human and animal communities and contribute to sustainable local economies.

Goals, Objectives and Strategies

The rivers are the lifeblood of the Watershed; their health is the single most important determinant in whether the suite of ecological services and quality of life and economic benefits they have historically provided can be sustained for the long term. They should be protected from the surrounding cropland by forest, and adjacent cropland should have well-developed and implemented conservation plans to maximize water use efficiency and reduce off-farm losses of sediments and agrichemicals. Non-productive and/or frequently flooded farmland should be returned to wetland or forest, as appropriate. At their headwaters, the

White and its tributaries should each be protected to establish increasingly effective corridors for wildlife population migration and expansion. As each river boundary should be protected, so should the river's natural hydrogeomorphology. Each river's ability and nature to move and stabilize should be restored or protected as much as possible for its value to the stream bank, sediment abatement, flood control and biological diversity.

For the lower Watershed, the goals, objectives and strategies mirror those articulated in the conservation framework for the America's Great Outdoors Goal 9.4C land and water conservation pilot project moving forward under the leadership of the U. S. Army Corps of Engineers on the Cache and lower White Rivers. For the upper Watershed, these same goals, objectives and strategies are also applicable, but their success is tied to the recruitment of additional stakeholders as detailed in earlier sections.

Goals
The following strategic goals represent the overall guiding principles that govern the conservation framework:

Habitat: Improve ecological health of the Cache and White River system.

Agriculture: Promote voluntary, sustainable agricultural and forestry practices that improve water quality and enhance wildlife habitat.

Hydrology: Effectively manage surface and ground water resources to support all users

Recreation: Increase outdoor recreational opportunities and access

Education and Outreach: Increase public awareness of the link between economic benefit and conservation goals.

Strategic Objectives
Strategic objectives are the actions designed to achieve the strategic goals over the next seven to ten years. These include projects compiled from all Coalition members. Coalition members will primarily work together in areas where individual goals and objectives overlap, but for which project leads will be determined by member (in parentheses). Short (1-3 years) and mid-term (3-7 years) objectives are identified for each Strategic Goal and organized as items to complete and items to initiate.

HABITAT Short-term (1-3 years)

1. Complete approval of Cache River NWR expansion area boundary by 102,000 acres (USFWS)
2. Complete approval of White River NWR expansion area boundary by 125,000 acres (USFWS)
3. Complete restoration project on the upper 3 meanders of the lower Cache River (USACE/TNC)
4. Complete acquisition and restoration of 15,000 acres through WRP (NRCS)
    a. Establish minimum 180' wide vegetative buffers along all surface water.
5. Complete acquisition of 5,000 acres into public ownership (USFWS/AGFC)
6. Initiate planning of the restoration of the lower 3 meanders of the lower Cache River (TNC)

7. Initiate watershed restoration plan of the Cache River Basin (USACE)
    a. Create a multiple-party, widely scoped Watershed Management Plan
8. Recruit the National Park Service and USDA Forest Service, and institutions of higher education in both states into the Blueway's managing body

HABITAT MId-term (3-7 years)

1. Complete restoration of the lower 3 meanders of the lower Cache River (TNC)
2. Complete acquisition and restoration of 40,000 acres through conservation easements or long-term agreements (NRCS/USFWS)
3. Complete acquisition and restoration of 35,000 acres of public land (USFWS/AGFC)
4. Complete White River Comprehensive Study (USACE)
5. Complete 10 additional stream restoration projects (TNC/NRCS)
6. Initiate implementation of the watershed management plan in the upper Cache River watershed (USACE)
    a. Alleviate Grubbs Blockage on Cache River with a multi-partner approach that provides flood relief for landowners while adequately mitigating negative impacts to ecosystem

AGRICULTURE Short-term (1-3 years)

1. Complete enrollment of 10% of eligible cropland into conservation programs (NRCS)
    a. Develop conservation plans for 75% of the farms in the designated watersheds.
    b. Obtain funds to implement conservation plans, and implement the plans.
2. Complete restoration of 20,000 acres of public forestland into desired condition for wildlife (USFWS/AGFC)
    a. Plan, implement, and /or complete silvicultural treatments and reforestation to enhance forest habitat according to DFCs - 5,000 acres on Cache River NWR and 15,000 acres on White River NWR
    b. Implement at least one grassland/prairie restoration/demonstration project on Cache River NWR and on White River NWR;
3. Complete restoration of 30,000 acres of farmland to desired condition for wildlife (NRCS/TNC/USFWS)
    a. Implement 25 new Partners for Fish and Wildlife projects;
    b. 5 Additional stream restoration project in conjunction with NRCS
4. Recruit Farm Bureau offices in both states to the Blueway's managing body

AGRICULTURE Mid-term (3-7 years)

1. Complete enrollment of 30% of eligible cropland into conservation programs (NRCS)
2. Complete restoration of 50,000 acres of public forestland for desired condition for wildlife (USFWS)
3. Complete restoration of 60,000 acres of farmland to desired habitat condition for wildlife (NRCS/TNC/USFWS)

HYDROLOGY Short-term (1-3 years)

1. Complete reduction of on-farm, consumptive water use by 5% using irrigation efficiency practices (NRCS)
2. Complete the inclusion of ecological flows for the Cache River and Bayou DeView into the Arkansas State Water Plan (TNC)
    a. ensuring positive flow regimes.
3. Initiate a plan for sustainable flood risk management that supports food security (USACE)
    a. Resolve dredge spoil deposition issue on White River NWR through land exchange with USACE;
    b. Control encroachment of human activities into the existing floodplain
4. Initiate a collaborative water quality monitoring program for the project area rivers to prioritize sub-watershed sediment issues (TNC)
    a. Obtain extensive water quality information in the area to identify the watersheds needing the greatest treatment.
    b. Measurably improve water quality in Cache and White River.
    c. Through water quality monitoring, be able to detect water quality improvements.
    d. Reduce in-stream sediment loading that encumbers both adequate flow hydraulics, increases risk from flooding, and increases maintenance costs.
5. Initiate the increase of annual, seasonal flooding of agricultural lands for wildlife habitat by 10% (DU)
6. Initiate discussions between Coalition partners, Southwest Power Administration and the Corps of Engineers aimed at designing and implementing scientifically-based release guidelines for impoundments in the upper Watershed.

HYDROLOGY Mid-term (3-7 yrs)

1. Complete reduction of on-farm, consumptive water use by 15% using irrigation efficiency practices (NRCS)
2. Implement a coordinated water quality monitoring program to prioritize sub-watershed sedimentation projects (TNC)
3. Implement the plan for sustainable flood risk management that supports food security (COE)
    a. Setback levees to restore historic floodplain habitat.
4. Complete the removal of 1 sub-watershed from the EPA list of impaired watersheds by working with ADEQ (TNC)
5. Initiate the increase of annual, seasonal flooding of agricultural lands for wildlife habitat by 20% (DU)
6. Monitor release guidelines and adapt as necessary
7. Complete and implement release guidelines in the upper Watershed

RECREATION Short-term (1-3 years)

1. Complete the opening of the Bayou DeView Water Trail with associated camping platforms (AGFC/USFWS)
2. Complete increase in land available to the public by 5,000 acres (USFWS)
    a. Explore opportunities to expand appropriate, compatible recreational opportunities on public lands;

3. Complete the enhancement of 4,000 acres of public wetland habitat for recreational use (AGFC/USFWS/DU)
4. Initiate the planning of a birding trail network (AA)
5. Initiate the installation of 15 miles of interpretive hiking trails within the refuge system (USFWS/AGFC)
6. Initiate the identification of public access needs (USFWS/AGFC)
    a. Provide for public access points and public viewing areas for recreational economics.
7. Recruit Missouri state wildlife and conservation agencies, sportsmen's associations from both Watershed states and Missouri chapters of Audubon and Ducks Unlimited to the Blueway's managing body.

RECREATION Mid-term (3-7 years)

1. Complete the addition of 35,000 acres available for public use (USFWS/AGFC)
2. Complete additional 2,500 acres of public wetland enhancement for recreational use (DU/AGFC/USFWS)
3. Complete the addition of 30 miles of interpretive hiking trails (USFWS/AGFC)
4. Complete a package and market an Arkansas Delta Water Trail System
5. Complete construction of at least 3 new boat ramps on public land (AGFC/USFWS)
6. Complete the creation and implement the marketing of a birding trail network (AA)

EDUCATION and OUTREACH Short-term (1-3 years)

1. Complete the development of an AGO Outreach Plan (TNC)
    a. Solidify and implement AGO working group planning/action/advocacy;
    b. Establish "Friends" group for Cache River NWR/Big Woods (e.g., Friends of SOCNFWR model) (USFWS);
2. Initiate the documentation/report of the Blueway's economic impact (TNC/USFWS)
3. Recruit river communities from both states to the task of grass roots advocacy for Blueway-related issues and resource investment

EDUCATION and OUTREACH Mid-term (3-7 years)

1. Complete and implement an AGO Outreach Plan (TNC)
2. Initiate the development of agritourism / nature tourism training workshop (AA)
3. Initiate the enhancement of environmental education and interpretation programs (AGFC/USFWS)
4. Continue to document and market the value of Blueway's economic benefits

Challenges and Opportunities

Table 1

Land and Water Use

Challenges	Opportunities
➢ Agricultural practices that negatively affect water quality ➢ Continued and further channelization of the Watershed's rivers that could alter natural flood patterns and increase sediment load ➢ Release patterns that adversely affect downstream habitat quality ➢ Water diversions, and over consumption of water by residential, commercial and agricultural users that adversely affects water level ➢ Changing agency and organizational priorities ➢ Pressure from advocacy for destructive recreational and commercial land uses ➢ Urban sprawl and resultant habitat fragmentation	➢ Continue the trend to restoration of natural flows in the lower Watershed ➢ Expansion of National Wildlife Refuges ➢ Concentrate organizational investment and advocacy in the Watershed to the same extent as is currently focused in the lower Watershed – create a unified network of advocacy and action for the entire Watershed ➢ Build on the effective partnership that has coalesced around the AGO pilot project

Environmental and Ecological Change

Challenges	Opportunities
➢ Effects of climate change on habitat, weather patterns and water levels ➢ Encroachment of invasive or exotic plants and animals ➢ Agriculture-related genetic pollution ➢ Urban runoff from commercial and residential development, particularly in growing areas of the upper Watershed	➢ Provide a leadership model for the country and the world on adaptive, effective multi-agency and multi-discipline watershed management

Social Factors

Challenges	Opportunities
➢ Increased competition for scarce public and private financial resources for conservation ➢ Toxic political climate ➢ Environmental agency bashing ➢ Urban growth without appropriate planning for wastewater treatment and water consumption ➢ Decreased relevance of open space and the natural environment to the lives of younger populations ➢ Decreased political influence for environmental advocates	➢ Build a holistic conservation framework that respects the Watershed's culture and way of life, and meets the needs of both humans and the plants and animals of their environment ➢ Set an example of inclusion in addressing environmental issues in the Watershed ➢ Build coalitions with political influence at all levels of Watershed government

Desired Outcomes

The success proposition for the White River Watershed National Blueway relies on the ability of the Coalition to deliver outcomes that 1) achieve the objectives of the AGO pilot project as detailed in this section, and 2) translate the qualities of the partnership to the entire Watershed through strategic recruitment and management of additional Coalition members. The job in front of the Coalition is straightforward but undeniably hard.

In the larger picture, perhaps the most important outcome that the Blueway could achieve is to give substance and accomplishment to the America's Great Outdoors initiative and the National Blueways System. The potential of both programs to focus the federal family of agencies – and the financial, scientific and human resources that they can concentrate on different features of a common landscape – holds great promise for the future of conservation initiatives around the country. With leadership, partnership and leverage, the federal family can transform the face of modern conservation by working beyond the boundaries of individual National Wildlife Refuges or National Forests to protect America's land, water, plants and animals on a truly landscape scale.

VI. Resource Attributes of the Watershed and Its Rivers

Scale

The area nominated includes all or portions of the following river basins (HUC6): Upper White (110100), Lower White (080203), Lower Mississippi (080201), Lower Mississippi-Greenville (080301), Lower Arkansas (080204), and Boeuf-Tensas (080500). The Watershed encompasses approximately 28,000 square miles (17,894,539 acres). The mainstem of the White River is 722 miles in length. The mean annual discharge of the White River at DeVall's Bluff (river mile 122) is 26,796 cfs (cubic feet per second) while the mean annual discharge at Clarendon (river mile 99 downstream of Cache River confluence) is 29,470 cfs.

Geographic Context[2]

The area drained by the White River includes parts of two major physiographic divisions, the Interior Highlands and the Coastal Plain. Each is further divided into provinces and sections.

Interior Highlands

The Interior Highlands include about three-fourths of the White River drainage basin, and are characterized by plateau surfaces entrenched by steep-walled valleys. The nearly flat, plateau surfaces tend to delay runoff. Where the plateau surfaces are underlain by calcareous rocks, karst topography develops. This enhances infiltration of precipitation. Karst features are locally prominent in both the Salem and Springfield plateaus (MDNR 1986a). Several

[2] This description of the Geographical Context of the Watershed, and the statistics contained in this section, were compiled from the following source:

1) U. S. Army Corps of Engineers – Final Environmental Impact Statement – White River Basin, Arkansas Minimum Flows – January 2009

faults are present in the Watershed, but most have only tens of feet of displacement (MDNR 1986a). The fractured limestone of the Watershed allows a direct conduit from surface water to ground water, making aquifers underlying the Watershed extremely susceptible to contamination (USGS 1996).

Most of the Interior Highlands in the White River Basin are within the Ozark Plateaus province. The basin includes parts of the Springfield-Salem Plateaus and Boston Mountains section. The Salem Plateau is underlain by rocks of Ordovician age or older. The Springfield Plateau is underlain by rocks of Mississippian age.

The upland parts of the plateaus are the remains of an old erosional surface. The surface has been modified by continued solution and erosion resulting in a somewhat lowered surface. Local relief of the upland surface generally does not exceed 50 feet. Valleys dividing the upland surfaces range in depth from 50 to 100 feet near their head, to as much 1,500 feet in the entrenched meanders of larger streams near their mouths.

The Boston Mountains are a dissected plateau approximately 200 miles long and 35 miles wide. This plateau is underlain by sedimentary rocks of Pennsylvanian age, and bounded on the north by a conspicuous escarpment. Toward the east and west, the summit level declines gradually to that of the surrounding surface. The summit slope is toward the south and is similar to the dip of the underlying formations. It is nearly flat close to the main crest and is steeper near the south edge. Along the southern boundary, the Boston Mountains merges with the hills of the Arkansas Valley section of the Ouachita province.

The Interior Highlands is separated abruptly from the Coastal Plain by the Fall Line. The Fall Line is the westernmost boundary of rocks of Cretaceous or younger age except for Recent alluvium in stream valleys of the Interior Highlands.

Coastal Plains

Approximately one-fourth of the White River basin is in the Mississippi Alluvial Plain section of the Coastal Plain province. Topography of the Coastal Plain is characterized by flat monotonous plains traversed by sluggish meandering streams. Crowley's Ridge, an important physiographic feature, forms part of the eastern border of the basin area and rises as much as 200 feet above the general level of the Coastal Plain. The land surface of the rest of the Coastal Plain is principally made up of Quaternary age terrace deposits and flood plain deposits of the Mississippi River and its tributaries. The land surface slopes southward from an altitude of about 300 feet above MSL at Poplar Bluff, Missouri, to about 150 feet at the mouth of the White River.

The Grand Prairie region, a low terrace, lies between the White River and Bayou Meto (Arkansas River basin) south of Wattensaw Bayou, and includes most of Arkansas County and parts of Lonoke, Prairie, and Monroe Counties.

In the lower parts of the White River basin, the drainage divides into the White River and other tributaries of the Mississippi River that are poorly defined and difficult to determine. In many places, the divide is formed by a levee or a dike.

See Figures 5 and 6 in the Maps Section of the nomination for a graphic representation of the eco-regions and geology of the Watershed.

Significance of River and Watershed Resources

Physiographic Features

The area contains two National Natural Landmarks: Mammoth Spring (3rd largest spring in the Ozarks) and White River Sugarberry Natural Area (partially virgin forest containing representative bottomland vegetation and animal communities).

Significant Ecological Values

The upper forks and tributaries of the White River provide typical Ozarkian stream habitats (high gradient, low turbidity, cool water, course substrate) and provide habitat for numerous species of minnows and darters (some endemic), a popular smallmouth bass fishery, and federally listed species such as the Ozark hellbender, speckled pocketbook, and yellowcheek darter. The mainstem of the White River as well as the North Fork and Little Red Rivers are dammed and provide cold water releases that support popular trout fisheries. The landscape surrounding most of this region is karst (limestone) and dotted with caves and springs that also support unique species such as federally listed bats, cave crayfishes, and cave fish. The landscape is generally characterized by mixed upland hardwood forests, pastureland, and urban areas.

The physical and ecological characteristics of the lower portion of the Watershed (generally the area east and south of the "fall line" that demarks the boundary between the OP and the MAV) differs dramatically from that described above. The streams are characterized by a much lower gradient, greater channel sinuosity, finer substrates, and much more extensive and frequent access to the floodplain. The ecology in this region is driven by the overriding force of the hydrologic cycle. In many years, winter and spring floods result in extensive floodplain inundation.

Natural Resources

Wintering waterfowl flock to this region to take advantage of the resources provided by these flood events. The many rivers and oxbow lakes in this region support both sport and commercial fisheries. Several species of commercial importance and conservation concern, such as paddlefish, shovelnose sturgeon, and alligator gar, occur in the lower White and Arkansas Rivers. The lower White River also supports several species of federally listed or candidate freshwater mussels including the fat pocketbook, pink mucket, scaleshell, and rabbitsfoot. The landscape in this region is largely converted to row crop agriculture. The habitat that remains is generally characterized as bottomland hardwoods with diverse vegetation communities dictated by the flooding regime. Some very small remnants of tallgrass prairie remain in this region as well. Much of the lower portion of the Watershed is designated a wetland of international importance under the Ramsar Convention.

Cultural Resources

There are more than 50 cultural and historic sites in the Watershed, most in the upper section. The most prevalent are Civil War historic sites, Native American sites affiliated with the Trail of Tears, and points of natural interest.

Recreational Resources
More than 18% of the Watershed is public land, and most of that is open to the public. The subsection below details the breakdown of federal, state and private conserved land. The Watershed's economy depends on the tourism and recreation economy. Arkansas is an international destination for waterfowl and deer hunting in the fall, and a year-round sport fishery.

Conservation Estate
The 17,800 square mile White River Watershed is located in two states – Arkansas (10,900± square miles) and Missouri (6,900± square miles) – and hosts a conservation estate in excess of 3.2 million acres (18% of the Watershed) consisting of a network of federal, state, and private lands. The conservation estate includes 23 U.S. Army Corps of Engineers Parks, three National Forests, two National Parks, three National Wildlife Refuges, ten Federally-designated wilderness areas, four National Wild and Scenic Rivers, a Ramsar Wetland of International Importance, the most important wintering area for Mallard ducks in North America, 92 state wildlife management areas, 73state natural areas, 19 state parks, 34 Nature Conservancy preserves/easements, more than 193 Wetlands Reserve Program easements, and 158 USFWS Partners for Fish and Wildlife projects. More than 1.2 million people reside in the Watershed.

VII. BASELINE RIVER INFORMATION

Water Quality

Concise, current water quality data for the Watershed is surprisingly hard to find. Web sites, phone calls and interviews with the U. S. Fish & Wildlife Service, The Nature Conservancy, the Environmental Protection Agency, the Corps of Engineers and the Arkansas Department of Environmental Quality yielded little in the way of meaningful data. The Corps of Engineers compiled a *White River Comprehensive Study*, updated annually until 2006 when funding for the program was lost. However, as of 2012, the United States Geological Survey is under contract to the U. S. Fish & Wildlife Service to build a hydrologic and landscape database for the Cache and White Rivers that will produce accurate management information on the health of the land and water resources in the lower Watershed. The results are expected to be somewhat predictable because the symptoms are easily observed – there is too much sediment in the water, and nobody wants water that looks like bad coffee. See water quality goals and objectives.

In the upper Watershed, Ozarks Water Watch completes and publishes an annual water quality report for the Upper White and its major tributaries. The 2011 report yielded the stream-by-stream results shown in Appendix 1.

Stream Flow Regime[3]

The upper White River Watershed in Arkansas and Missouri is highly regulated by dams. There are a total of six dams in Arkansas and two in Missouri. These dams have had a profound effect both in their immediate vicinity and throughout the entire Watershed. The areas impounded by the dams were converted from lotic to lentic habitat, thereby displacing many native aquatic riverine species. Many native species were displaced from the tailwaters below the high-head dams due to cold water temperatures. These lost natives were replaced with stocked trout and these tailwater fisheries constitute a significant tourism industry in the region.

Most of the dams in the upper White River Watershed are multipurpose. Flood control and power generation were the primary impetus for most dams, but many have other approved purposes including recreation (lake and tailwaters) and public water supply. The purposes are sometimes in conflict, and resulted in a recent U.S. Army Corps of Engineers project (White River Minimum Flows) to reallocate flows from flood storage and hydropower generation to increased tailwater releases. This project required the negotiation of several competing interests (Arkansas Game and Fish Commission, Southwest Power Administration, lakeside facilities such as marinas). The final result was the establishment of minimum flows below Norfork Lake (300 cfs) and Bull Shoals Lake (800 cfs). This will take away from power generation capacity and require the relocation of some lakeside facilities but will improve the temperature and dissolved oxygen conditions for trout in the tailwaters.

The effects of the dams in the upper Watershed radiate downstream to the mouth of the White River. The cold water effects in the tailwaters proceed downstream around 100 miles to a mixing zone where the river is again suitable for some warm water fishes. By the time the river reaches the Batesville area (near the "fall line" separating the Ozarks from the Mississippi Alluvial Plain) it is generally referred to as the lower White River. This stretch of river contains three low-head lock and dam structures that were built in the early 1900's and were intended to extend and improve navigation above Batesville. These three structures (and seven additional that were not built) never lived up to expectations and they were transferred to private ownership in the 1950's. The city of Batesville now owns all three dams and beginning in 2004 they were retrofitted to generate electricity. These dams have no flood control capabilities and hold back a relatively shallow pool of water. The major impact of these structures is reduced fish passage.

The impacts of the flood control system in the upper White River Watershed are felt throughout the lower Watershed. The frequency, duration, and depth of winter and spring floods are reduced due to the water storage capabilities of the upstream dams. The slow release of captured floodwaters results in flows that are higher than the naturally low flows of late summer and fall. There is little empirical data documenting the effects of these changes on the instream and floodplain resources of the lower White River, although there are undoubtedly negative effects. Reduced water temperatures and alterations of the hydrologic regime likely had negative effects on fisheries (reduced spawning opportunities

[3] This description of Stream Flow Regime, and the statistics contained in this sub-section, were compiled from the following source:
1) *Arkansas and Missouri Shared Water Resources* – Missouri Department of Natural Resources, Arkansas Depart of Natural Resources – January 2010

and success), wintering waterfowl (reduced flooded wintering habitat), and vegetation communities (timing and duration of floods largely dictates vegetation communities in the MAV). Additionally, the decrease in growing season floods helped facilitate the large-scale conversion of forested habitats to row-crop agriculture, thereby altering the terrestrial habitats and precipitating a decline in the water quality (turbidity, nutrient loads, sediment loads) of rivers throughout the lower Watershed.

There is one lock and dam structure near the mouth of the White River at Montgomery Point. Its purpose is to pool water in the lower ten miles of the White River to enhance the reliability of and reduce dredging associated with the McKlellen-Kerr Navigation System. This section of the White River is used to move barge traffic from the Mississippi River to the Arkansas River. A man-made canal connects these two rivers near river-mile ten on the White River. The dam at the mouth incorporates a non-traditional design that uses gates that lie flat on the bottom when not in use. Motor traffic, as well as fish, can freely pass through the dam during normal flows. The gates are only raised when low water conditions necessitate the pooling of the navigation reach.

Diversions from the lower White River and its tributaries for irrigation of crops were historically limited to riparian landowners. In recent decades there have been efforts to develop large-scale diversions of water from the White River and tributaries in order to deliver water over large areas through an irrigation delivery system. The first of these projects, and the only one far along in the planning or construction phase, is the Grand Prairie Area Demonstration Project. This Corps initiative is currently under construction and will divert up to 1,640 cfs from the White River near DeValls Bluff, Arkansas. This water will be distributed throughout over 250,000 acres of farm land via canals and pipelines.

As a result of existing and proposed diversions, the Arkansas Natural Resources Commission in 2009 established minimum flows for most of the White River basin (Bull Shoals Dam to the mouth). The river is divided into three sections (Bull Shoals to Calico Rock, Calico Rock to Newport, and Newport to the mouth). Monthly minimum flows were set based on the requirements for adequate water quality, navigation, and fish/wildlife habitat. The highest need for each month was established as the minimum flow. In the lowest section of the river, the minimum flows for the months of August, September, and October are dictated by navigation requirements (9,650 cfs). The remainder of the months are dictated by fish and wildlife habitat requirements, with the highest minimum flows required during the months of April and May (36,640 cfs).

Another impact to the flow regime of the lower White River basin is channelization. A significant portion of the upper reaches of the Cache River and Bayou DeView were channelized by local drainage districts in the early 1900's. The lower section of the Cache River below the confluence of Bayou DeView was channelized by the Corps in the 1970's. These straightened and enlarged channels originally have the effect of more quickly draining localized areas but actually increase flooding in downstream natural channels. They are also characterized by frequent headcutting and bank erosion and require frequent maintenance to maintain their designed flow capacities. The instream habitat in these reaches is highly degraded (more uniformly shallow and wide with little riparian cover) and they contribute heavy sediment loads and turbidity to the entire basin downstream. The Corps is currently

planning a project to restore the lower section of the Cache River back to its original meandering channel pattern.

Function and Continuity of the Riparian Zone, Floodplain, and River Channel[4]

The river channels and much of the riparian corridors are intact in the upper portion of the White River Watershed. The most highly altered areas are those inundated by the construction of dams. The headwater streams above these impoundments, as well as undammed tributaries, generally have channels unaltered by mechanical channelization. Aside from dams, the most significant impact to the riparian zone, and subsequently to channels via bank erosion, is the conversion of forests to pasture. Deforested riparian zones are highly susceptible to erosive forces and banks often collapse into the stream. Over time this results in a wider, shallower stream with much heavier sediment loads. Due to higher gradients, the upper White River and its tributaries have limited floodplains that are normally only accessed briefly during high water events.

Although much of the forested habitat in the lower portion of the Watershed has been converted to agriculture, the White River and Cache River National Wildlife Refuges occupy over 100 miles of riparian habitat on one or both sides of the lower White River. Most of this habitat consists of mature bottomland hardwood forests. Both refuges also manage significant acreages of forested riparian habitat along major tributaries (Cache River/Bayou DeView, Big Creek, LaGrue Bayou). State agencies (Arkansas Game and Fish Commission, Arkansas Natural Heritage Commission) also mange significant forested acres along the mainstem of the White River and its tributaries. Private forest holdings are common as well in frequently flooded areas, and many landowners enroll these marginal farming lands in conservation programs such as the Wetland Reserve Program. These portions of the alluvial floodplain with intact, extensive, contiguous forest provides the habitat necessary to support numerous and varied fish and wildlife. Bottomland and upland hardwoods forests, and wooded wetlands, especially large blocks, are important habitats in the lower White River basin because of the drastic loss of forested wetland in the Arkansas Delta (estimated to be as high as 89 percent).

Hydrology is one of the most critical elements controlling the structure and function of the lower White River's riparian ecosystem. Water moving through the ecosystem involves a complex interaction of precipitation, runoff, groundwater, evapotranspiration, and conditions on the mainstem Mississippi River. The riparian ecosystem is further complicated by the topography and elevation of adjacent lands, and land use changes that have occurred over the past century in the lower basin. The timing, duration, and height of flooding are directly responsible for establishing and maintaining the floral and faunal communities in the area. Floodplain features such as sloughs, backswamps, and ridges provide a conduit for water to move in and out of the floodplain and oxbow lakes, which is critical to the biological productivity of this wetland complex.

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[4] This description of Function and Continuity, and the statistics contained in this sub-section, were compiled from the following source:
1) *Natural Resources Inventory and Ecosystem Assessment of the Lower White River Basis* – U. S. Fish & Wildlife Service, Arkansas Field Office, Arkansas Delta Sub-office – unpublished draft, August 2004

Topographic variation and the interaction with annual and long term hydrologic cycles results in a habitat complex ranging from deeply flooded to isolated unflooded areas and a "moving edge" throughout the floodplain as flood waters rise and recede. This flood pulse provides spawning and foraging habitat, a medium for nutrient and organic material import, and biomass in the form of newly produced fish and invertebrates, which are funneled back into the main channel and backwaters.

The lower White River aquatic ecosystem is characterized by complex interactions between many physical and biotic elements. The overall health of the ecosystem, as well as that of the individual species that form its biotic component, are dependent upon the maintenance of suitable habitat, which in the lower Watershed is characterized by its heterogeneity. This portion of the White River basin experiences great seasonal fluctuations in water level during average years and its aquatic ecosystem is dependent on the winter/spring flood cycle. The interconnection of these organisms with their physical environment and one another is such that the alteration of one component (i.e. altered physical habitat or natural cycles, loss of a species, introduction of a species) may have undesirable affects upon one or many other elements. Despite these impacts, the current system as a whole still maintains many of its vital ecological functions; paramount among these is the annual winter/spring flood cycle.

VIII. Baseline Watershed Information

Land Use Profile

The upper portion of the Watershed is approximately 20,925 square miles in size, representing roughly three quarters of the Watershed's land area. Land cover mix in the upper portion is 59% hardwood forest, 30% pasture, 9% cropland and 2% other. The lower portion of the Watershed, roughly 6,975 square miles in size, has been largely converted from bottomland hardwood forest to agricultural use (Figure 4).

Water Use Profile

Water use was estimated from 2005 USGS water use data for the counties that contained at least 50% of their land area within the Watershed. The total water use in the designated Blueway was nearly 13,000 ac-ft/day. About 76% of the water use was groundwater. Within the groundwater category, over 95% of the use was for irrigation. The remaining groundwater use was divided among aquaculture (2%), public water supply (1.49%), domestic wells (0.49%), livestock (0.23%), industry (0.08%), power generation (0.01%), and other uses (0.19%). Irrigation also dominated the surface water category with over 76% going to this use. Other surface water uses included aquaculture (7.99%), power generation (6.75%), public water supply (4.53%), industry (3.55%), livestock (1.39%), and other uses (0.13%).

Condition of Fish, Wildlife and Plant Habitat

➢ Invasive Species in the Watershed

A partial list of common invasive plants includes Chinese privot (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), silktree (*Albizia julibrissin*), tree of heaven (*Ailanthus altissima*), multiflora rose (*Rosa multiflora*), kudzu (*Pueraria montana*), and chinaberrytree (*Melia azedarach*). Aquatic invasive species are most common in the Mississippi Alluvial Plain sections of the White, Arkansas, and Mississippi Rivers. Those of note include the zebra mussel (*Dreissena polymorpha*), Asian clam (*Corbicula fluminea*), common carp (*Cyprinus carpio*), grass carp (*Ctenopharyngodon idella*), silver carp (*Hypophthalmichthys molitrix*), bighead carp (*Hypophthalmichthys nobilis*), and black carp (*Mylopharyngodon piceus*).

➢ Threatened, Endangered, and Candidate Species in Watershed

Table 2

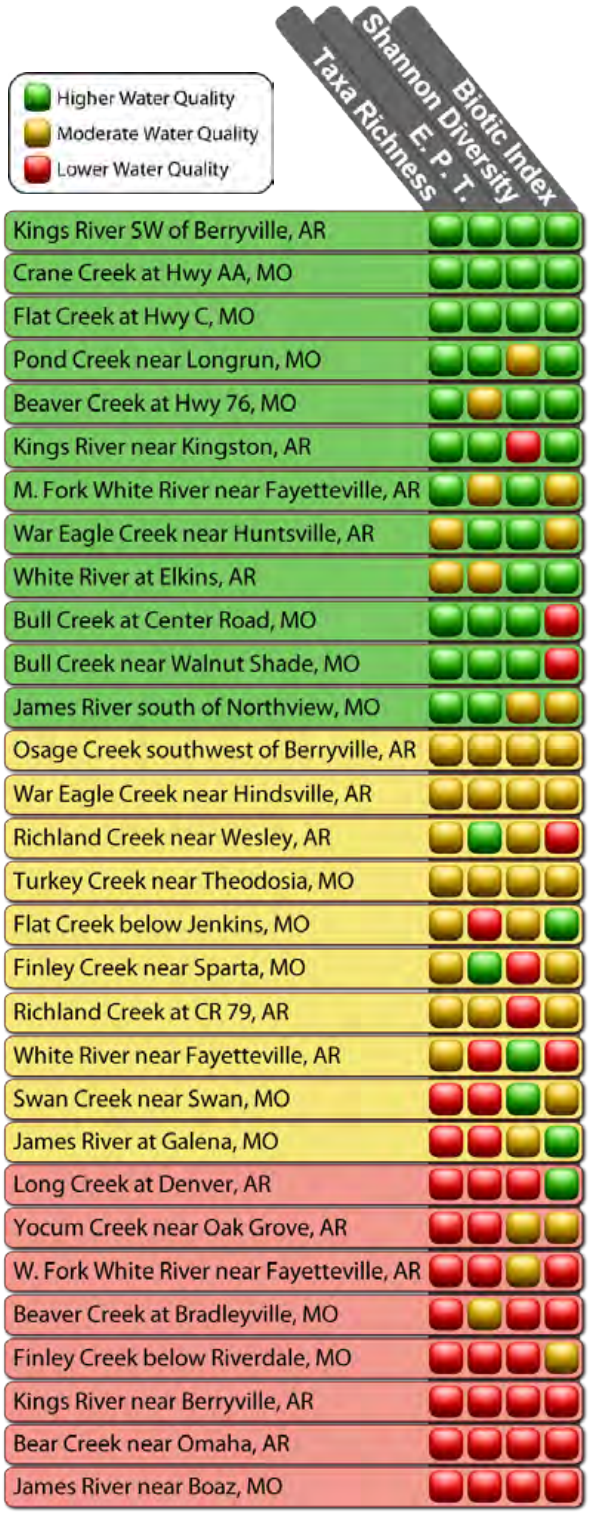
Birds	Mammals
Bald Eagle, *Haliaeetus leucocephalus* (recently delisted and still protected under BGEPA) Interior Least Tern, *Sterna antillarum athalassos* (LE) Ivory-billed Woodpecker, *Campephilus principalis* (LE) Piping Plover, *Charadrius melodus*, (LT) Red-cockaded Woodpecker, *Picoides borealis* (LE) Sprague's Pipit, Anthus spragueii (C)	Gray bat, *Myotis grisescens* (LE) Indiana bat, *Myotis sodalist* (LE) Ozark big-eared bat, *Corynorhinus townsendii ingens* (LE)
Fishes	**Amphibians**
Ozark cavefish, *Amblyopsis rosea* (LT) Pallid sturgeon, *Scaphirhynchus albus* (LE) Yellowcheek darter, *Etheostoma moorei* (LE)	Ozark Hellbender, *Cryptobranchus alleganiensis bishopi* (LE)
Invertebrates	**Plants**
Cave crayfish, *Cambarus zophonastes* (LE) Curtis pearlymussel, *Epioblasma florentina curtisi* (LE) Fat pocketbook, *Potamilus capax* (LE) Hine's emerald dragonfly, *Somatochlora hineana* (LE) Pink mucket, *Lampsilis abrupta* (LE) Rabbitsfoot, *Quadrula cylindrical cylindrical* (C) Snuffbox, *Epioblasma triquetra* (LE) Scaleshell, *Leptodea leptodon* (LE) Speckled pocketbook, *Lampsilis streckeri* (LE) Tumbling Creek cavesnail, *Antrobia culveri* (LE) Turgid blossom, *Epioblasma turgidula* (LE)	Decurrent false aster, *Boltonia decurrens* (LT) Eastern prairie fringed orchid, *Platanthera leucophaea* (LT) Geocarpon, *Geocarpon minimum* (LT) Mead's milkweed, *Asclepias meadi* (LT) Missouri bladderpod, *Physaria filiformis* (LE) Pondberry, *Lindera melissifolia* (LE) Running buffalo clover, *Trifolium stoloniferum* (LE) Virginia sneezeweed, *Helenium virginicum* (LT)

- **Diversity of Species in the Watershed**

The lower Watershed provides habitat for an impressive number and diversity of fish and wildlife including over 265 species of migratory and resident breeding birds, around 70 species of mammals, 58 species of reptiles, up to 24 species of amphibians, over 170 native species of fish, and at least 57 species of mussels. This section is especially renowned for its use by migrating and wintering waterfowl, with duck numbers ranging from 46 to 55 percent of the statewide duck population. The lower portion also includes some of the most productive deer habitat in the state, with densities estimated at 1 deer per 15 acres or better. The area around White River National Wildlife Refuge near the confluence of the White and Mississippi Rivers has a black bear population estimated at 500 individuals.

APPENDIX

1) UPPER WHITE RIVER WATERSHED WATER QUALITY TABLES
Source: *Status of the Watershed – A Report from the Ozarks Water Watch Foundation on Water Quality in the Upper White River Basin – December, 2011*



Taxa Richness:

This analysis estimates stream health by looking at the diversity within the invertebrate community. Streams with high water quality tend to have many types of aquatic invertebrates, while streams with poor water quality may be limited to a small number of pollution-tolerant invertebrate groups.

EPT:

The EPT analysis is similar to the Taxa Richness method except if focuses on only three major groups of invertebrates: mayflies (Ephemeroptera), stoneflies (Plecoptera) and caddis flies (Trichoptera). These three groups are generally sensitive to pollution.

Shannon's Diversity:

This index takes into account the "evenness" of the invertebrate community. Streams where one or two groups of invertebrates dominate the total number of individuals in the community generally have lower water quality than streams where there is balance among groups.

Biotic Index:

The Biotic Index estimates water quality by assigning each invertebrate group a score based on its sensitivity to pollution. Sites dominated by pollution-tolerant invertebrates have poor water quality, while sites with pollution-sensitive invertebrates have good water quality

Depending on where the samples were collected, invertebrate communities in the Kings River were among either the best or worst in the region.

Additional data received from the Beaver Water District show similar water quality at eight stream sites.

Dissolved Oxygen:

Aquatic life requires the correct amount of dissolved oxygen to breathe. Low levels can result from high inputs of organic material entering the stream or certain chemicals that reduce dissolved oxygen through chemical reactions. Extreme levels of dissolved oxygen can result from excessive algae growth.

E. coli:

E. coli are a group of bacteria associated with the fecal material of warm blooded animals, including livestock, wildlife and humans. While most E. coli are harmless, elevated levels of the bacteria indicate fecal contamination of the waterway and the possible presence of dangerous microbes.

Total Phosphorus and Total Nitrogen:

These two nutrients act as fertilizers in our waterways, promoting the growth of algae in streams and lakes. While phosphorus and nitrogen occur naturally, human activities in the basin can degrade water quality by contributing excess nutrients. Phosphorus and nitrogen are abundant in sewage effluent and runoff from city streets, residential yards and agricultural areas.

High nutrient concentrations are the primary cause of impairment in the watershed. Only Swan Creek met EPA recommended nutrient criteria at least 75% of the time.

LETTERS OF SUPPORT

DUCKS UNLIMITED

One Waterfowl Way
Memphis, TN 38120-2351
(901) 758-3825 fax (901) 758-3850
www.ducks.org

President
John W. Newman
Covington, Louisiana

Chairman of the Board
John R. Pope
Jacksonville, Florida

Chief Executive Officer
H. Dale Hall
Memphis, Tennessee

August 17, 2012

Ms. Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, D. C. 20240

Dear Ms. Wodder:

Ducks Unlimited is pleased to offer our support for designation of the White River (AR) watershed as a National Blueway under the America's Great Outdoors Initiative to establish a community-driven conservation and recreation agenda for the 21st century. The White River and its watershed comprise a portion of lower Mississippi Alluvial Valley (MAV), which is the most important wintering area for mallards in North America and one of Ducks Unlimited's highest priority conservation regions. Several million waterfowl winter in the region each year, offering tremendous hunting opportunities for people from all over the United States. To date, DU has conserved 305,448 acres in this MAV portion of Arkansas, much of which is within the White River watershed.

Hunting is an important element of the region's economy and is dependent upon a well managed watershed. Per the U. S. Fish and Wildlife Service 2006 report entitled "Economic Impact of Waterfowl Hunting in the United States", waterfowl hunting results in over $124 million dollars entering the economy of Arkansas annually, and the creation of at least 2,500 jobs. Hence in addition to being part of the region's unique and rich cultural heritage, waterfowl hunting is an extremely important activity with regard to the region's economy, and much of that activity occurs within the White River watershed. Furthermore, the region's forested wetlands offer important habitat to a host of other important wildlife that attract people for outdoor based tourism that creates jobs and stimulates the regional economy.

Clearly, the White River watershed is worthy of this special National Blueway designation. The National Blueways System recognizes river systems conserved through diverse stakeholder partnerships that use a comprehensive watershed approach to resource stewardship. Establishment of a National Blueways System helps coordinate federal, state, and local partners to promote best practices, share information and resources, and encourage active and collaborative stewardship of rivers and their watersheds across the country. As one example of an active partnership in place and working on conservation issues in the White River watershed, Ducks Unlimited participates in the North American Waterfowl Management Plan's Lower Mississippi Valley Joint Venture – a broad partnership effort to conserve important wetland habitats for waterfowl wintering in the region.

Thank you for considering the nomination of the White River for National Blueways designation. We strongly support the nomination.

Sincerely

H. Dale Hall
CEO

Audubon ARKANSAS

4500 Springer Blvd.
Little Rock, AR 72206
Tel: 501-244-2229
Fax: 501-244-2231
ar.audubon.org

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

15 August 2012

Dear Ms. Wodder,

I am writing to express Audubon Arkansas's support for Blueways designation for the White River Watershed. The effort to improve outdoor recreation opportunities and access, provide for better integration of land and water management, deliver natural resource restoration, and contribute to sustainable and compatible economic activity in the watershed is a cause that the National Audubon Society supports as it aligns well with our efforts to improve environmental quality in the Mississippi River Basin for birds and people. It also aligns with our efforts to promote bird conservation through our Important Bird Areas (IBA) program.

Audubon Arkansas, a state office of the National Audubon Society, has recognized four IBAs in the watershed (out of 29 in the state), totaling 258,000 acres that harbor birds of conservation concern. These IBAs are Cache-Lower White Rivers, Bald Knob National Wildlife Refuge (NWR), Pine City Natural Area, and Stuttgart Municipal Airport. The Cache-Lower White Rivers IBA, a.k.a The Big Woods, consists of Cache River and White River NWRs; and Black Swamp, Dagmar, and Trusten Holder Wildlife Management Areas. This is a **globally important** bird area for its globally significant concentrations of wintering waterfowl, as well as large numbers of raptors and Neotropical migrants.

Bald Knob NWR IBA is a critical stopover site for shorebirds and wading birds. Pine City Natural Area IBA supports the only population of Red-cockaded Woodpeckers left in Arkansas's Delta. Stuttgart Airport IBA hosts wintering Smith's Longspurs and a variety of tallgrass prairie birds. Bird watchers come from all over Arkansas and other states seek out these and other species at IBAs in the White River Watershed.

Audubon Arkansas hopes that Blueways designation will attract more attention to the watershed's rich avifauna, prioritize the region's conservation needs, and help make the connection between economic and environmental prosperity.

Sincerely,

Ellen M Fennell

Ellen Fennell
Vice President and Executive State Director
Audubon Arkansas

THE CONSERVATION FUND

812 PARK AVENUE, SUITE D
MANDEVILLE, LOUISIANA 70448
(985) 674-3332
FAX: (985) 626-1058

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Ms. Wodder:

The Conservation Fund appreciates the opportunity to support the nomination of the White River Watershed as a National Blueway. The National Blueway System, while yet in its infancy, is founded on much the same vision and goals that we embrace in our organization – healthy landscapes, sustainable economies, strong partnerships, and community involvement. We believe that one potential of the National Blueway System is to serve as a demonstration of conservation *in action*, and as such, will produce tangible benefits from implementing watershed-wise conservation actions.

The Fund works with partners to conserve land, train leaders, and invest in conservation across the country. We've saved land in all 50 states—more than 7 million acres of wild havens, working lands, vibrant communities and more. We partner with community, government, and corporate organizations to assist in fulfilling their conservation priorities. Everything we do has environmental and economic value, from protecting "working" forests and recreation destinations that provide local revenue to helping communities grow thoughtfully. We strive to balance environmental and economic goals and develop a relationship of trust and positive synergy among stakeholders.

We are committed to assisting in land and water conservation goals in the White River watershed through building and nurturing partner and community relations that will result in: land acquisition for White River and Cache River National Wildlife Refuges and other public lands; highlighting the benefits of watershed-wide conservation for the public and communities; promoting sustainable resource management and associated economic benefits; integrating land and water management projects; and fostering a more connected conservation constituency that functions across the lower and upper portions of the watershed. Rivers within the watershed such as the White, Cache, Buffalo, and Little Red, are vital to fish and wildlife, agriculture, commerce, recreation, cultural history, and community pride. Although much has already been accomplished in these river systems, there is still much more that needs to be realized in the areas of land conservation, water quality, sustainable use, public education, and recreational access and opportunity. Designating the White River Watershed as a National Blueway will help facilitate these endeavors.

Thank you for your consideration and support of the White River Watershed as a National Blueway.

Sincerely,

Ray Herndon
Director, Lower Mississippi Region

C: Keith Weaver, Project Leader – Central Arkansas Refuges

DEPARTMENT OF THE ARMY
MEMPHIS DISTRICT CORPS OF ENGINEERS
167 NORTH MAIN STREET B-202
MEMPHIS, TENNESSEE 38103-1894

Reply to
Attention of:
CEMVM-EX

23 AUG 12

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Ms. Wodder:

I am writing to express our strong support for the designation of the Cache River, Arkansas, as part of the National Blueways System. I believe that this designation will aid in the accomplishment of the conservation vision for the Cache River watershed and bring much deserved attention to this valuable regional, national, and international resource.

National Blueway designation for the Cache River is part of the overall strategy that is being developed for the conservation of the Cache and Lower White River Systems, Arkansas, as part of the America's Great Outdoors (AGO) initiative. In May and July of this year, U.S. Army Corps of Engineers (USACE) staff participated in AGO meetings in Little Rock; several key federal and state resource agencies as well as some key non-governmental organizations were in attendance. These workshops discussed the great potential of the watershed to contribute to this important Administration effort; and a unified vision statement, goals, and objectives were developed. National Blueway designation for the Cache River is one of the short-term objectives for the AGO initiative in Arkansas.

The intent of the Blueway designation is to improve outdoor recreation opportunities and access, improve the integration of land and water management, provide ecosystem restoration of our natural resources, and contribute to sustainable economic activity in the watershed that thrives within the ecosystem. This designation contributes significantly to the AGO initiative, and the USACE fully supports this designation for the Cache River Watershed.

The Corps has several mission areas that may support the federal National Blueways System and AGO Initiative. These are ecosystem restoration, flood risk management, and environmental compliance. Furthermore, the USACE will continue to work with its partners to use its existing authorities to promote the AGO initiative and facilitate better land and water conservation strategies.

Verne L. Reichling
Colonel, Corps of Engineers
District Commander

United States Department of Agriculture

NRCS

Natural Resources Conservation Service
Room 3416, Federal Building
700 West Capitol Avenue
Little Rock, Arkansas 72201-3215

Ms. Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, D.C. 20240

Dear Ms. Wodder:

Arkansas Natural Resources Conservation Service (NRCS) provides opportunities for voluntary private lands conservation to reduce nutrient and sediment delivery to the White River and its tributaries through a variety of Farm Bill Programs. The Wetlands Reserve Program (WRP) is utilized to restore wetlands to improve fish and wildlife habitat, reduce sediment delivery to surface waters, reduce flooding, and increase carbon sequestration. The Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Initiative Program (WHIP) are utilized to implement on-farm conservation practices to address many resource concerns including the reduction of soil erosion and the delivery of sediment and nutrients to surface waters.

The lower portion of the White River Watershed including the Cache River Watershed is part of the NRCS's Mississippi River Basin Initiative (MRBI). The MRBI program is focused on assisting private landowners to implement complete conservation systems that avoid, control, and trap sediments and nutrients before they enter surface water. There are 40 Arkansas counties the lie completely or partially within the boundary of the White River Watershed. In that 40 county area over $88 million dollars of conservation practices have been implemented using EQIP and WHIP funds since 1997. Over 115,000 acres of wetlands have been restored using WRP within the White River Watershed.

We are working with other federal agencies, state, and non-govermental partners in planning and implementing a rivers demonstration project within the Cache River and White River basins as part of America's Great Outdoors (AGO) Initiative. This coalition is developing goals and objectives for implementing conservation measures and programs within the project area. One of the highest priorities identified by the coalition is achieving National Blueway designation for the Cache-White River system. In light of NRCS's ongoing commitment to improving habitats for fish and wildlife in Arkansas, and in conjunction with the AGO coalition, we support the proposed designation of the White River watershed as a National Blueway.

This designation would highlight the significance of the watershed for the people of Arkansas in terms of clean and usable water for agriculture, fish and wildlife populations, recreation, and sustainable economic benefits for communities. The designation also would serve to strengthen existing partnerships and foster new relationships. Moreover, achieving National Blueway designation would help solidify a common vision among stakeholders for restoring a healthy, functioning watershed, and hopefully, increase the capacity and capability to achieve watershed-scale enhancement through technical and financial assistance that may accompany designation.

Thank you for the opportunity to support designation of the White River watershed as a National Blueway. Please contact Reed Cripps, Assistant State Conservationist for Easements, at (501) 301-3131 or reed.cripps@ar.usda.gov if you have any questions.

Sincerely,

MICHAEL E. SULLIVAN
State Conservationist

cc:
Reed Cripps, Assistant State Conservationist for Easements, Natural Resources Conservation Service, Room 3416, Federal Building, 700 West Capitol Avenue, Little Rock, Arkansas 72201

FINAL:NRCS:RCRIPPS:kkt:8/21/12

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Lower Mississippi Valley
JOINT VENTURE
www.lmvjv.org

Dear Ms. Wodder:

The Lower Mississippi Valley (LMV) Joint Venture supports designation of the White River watershed as a National Blueway and believes that this designation is complementary to the goals and objectives of the Joint Venture. The LMV Joint Venture is overseen and directed by a 16-member Management Board comprised of private, state, and federal organizations from Kentucky south to the Gulf of Mexico. Member organizations commit to sharing in the responsibility of implementing national and international bird conservation plans within the LMV region, working cooperatively to develop a shared vision of bird conservation for the LMV and coordinating their otherwise independent actions in the pursuit and refinement of that vision.

The White River watershed is crucially important to wildlife in the LMV, and this importance is realized at a national and international scale. This watershed encompasses a Wetland of International Importance, Important Bird Areas, National Rivers, federally-designated Wilderness areas, natural areas, and a mosaic of state-owned Wildlife Management Areas, National Wildlife Refuges, and private conserved lands. The lower White River and Cache River basins have been a successful demonstration area for habitat conservation, restoration, management and applied research programs. There are many existing public-private partnerships, and community support for wildlife conservation is strong. However, we feel that a National Blueway designation could serve as an important step to better linking conservation efforts in the upper and lower watershed and enlarging or complementing the partnerships that have served so well in the lower watershed. This outcome promises to be a model for watershed conservation efforts elsewhere in the nation. Increased public outreach and education concerning the need and value of watershed-scale conservation can be facilitated through this designation. There are many interests in the water-based resources of the LMV- National Blueway designation should benefit the goals of responsible and sustainable use of natural resources, sustainable economies, community and organizational partnerships, public recreation, and citizen awareness. We hope that the LMV Joint Venture can be a part of this worthy effort.

Again, we offer our support for the White River Watershed National Blueway. Thank you for this opportunity to comment.

Sincerely,

Ed Penny
Chair, Lower Mississippi Valley Joint Venture

CC: Badge Blackett, NWRA

Ron Pierce
Chairman
Mountain Home

Rick Watkins
Vice Chairman
Little Rock

Ron Duncan
Springdale

Emon Mahony
El Dorado

Fred Brown
Corning

Steve Cook
Malvern

Ford Overton
Little Rock

Fred Spiegel, Ph.D., Ex-Officio
University of Arkansas
Fayetteville

Keeping the Natural State natural.

Arkansas Game and Fish Commission

Loren Hitchcock
Director

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Ms. Wodder:

The mission of the Arkansas Game and Fish Commission (Commission) is to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people. The Commission plays an important role in keeping "The Natural State" true to its name. During the last 100 years, the Commission has overseen the protection, conservation and preservation of various species of fish and wildlife in Arkansas. To that end, we believe the designation of the White River watershed as a National Blueway would be a positive step toward facilitating fish and wildlife management, expanding public awareness of the value of conserving natural resources on a watershed scale, and strengthening partnerships among state, federal, and private organizations in concert with local communities, landowners, and the public.

The lands and waters comprising the White River watershed are of major importance to the state in terms of overall quality of life and significantly influence local recreational pursuits, tourism, and economics. The staff and administration of the Commission have consistently pursued the implementation of a minimum flow operational plan on U. S. Army Corps of Engineer lakes located on the White River for the past fourteen years, along with an investment of $3.6M to upgrade public use facilities to insure the continued success and enhancement of a world class trout fishery. The Commission has invested $300,000 and participated in a partnership with the National Fish and Wildlife Foundation, Bass Pro Shop and the State of Missouri to implement a National Fish Habitat Initiative project on Table Rock Lake on the upper White River to improve fish habitat for the benefit of the public. The Commission currently owns in excess of 127,155 acres associated with nine different Wildlife Management Areas within the five major tributary watersheds of the White River. These nine Wildlife Management Areas provide excellent public access and public use facilities to enhance a broad range of recreational activities within each of these watersheds. The Commission has invested $800,000 in a partnership with The Nature Conservancy, the USFWS and the USACOE with the City of Clarendon as the local sponsor to implement a historic restoration of the natural drainage along a seven mile stretch of the Lower Cache River. The Cache River watershed and it's confluence with the White River constitute the core of the "Big Woods" of Arkansas, a hardwood bottomland forest of international importance.

A healthy watershed not only meets the life requirements for fish and wildlife but also the requirements of the citizens within those watersheds. The AGFC maintains a staff of twelve Private Lands Biologists and cost-shares two additional positions with the Natural Resources Conservation Service to promote and implement critical conservation practices on working agricultural lands. The efforts of these agency personnel has resulted in the conservation of tens-of-thousands of acres of critical habitat while maintaining viable working farms to

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support local economies. A 2006 U.S. Department of Interior survey of wildlife-associated recreational activities in Arkansas revealed that 1.4 million people (residents and non-residents) 16 years and older hunted, fished, or observed wildlife in Arkansas. These participants spent $2.4 billion in Arkansas while engaging in these pursuits, including $569 million in trip-related expenses alone.

The White River watershed is a major destination for anglers, whether it be fly-fishing for trout in cool waters of the upper White River or jigging for crappie among the cypress knees of the lower White River. Hunters seek out an array of game species from turkeys and black bears in the mountainous habitats of the upper White River to ducks and deer in the bottomland hardwood forests of the lower Cache River and White Rivers. Wildlife watchers and photographers delight in adding another trophy to their life lists, whether a bugling elk in an Ozark mountain meadow or a Prothonotary Warbler in a backwater swamp. Boaters enjoy motoring around a clear, deep-water reservoir nestled in the highlands as well as paddling on a lazy bayou among ancient cypress and tupelo. Participation in these diverse outdoor recreational pursuits, and the associated economic benefits for the local communities, are directly influenced by the scenic beauty of clean waters; by healthy habitats characterized by an abundance and diversity of aquatic, wetland, and terrestrial species; and by natural landscapes affording easy, inexpensive public access to recreational areas where these favorite pastimes can be pursued.

We support National Blueway designation for the White River watershed as a means to enable potential technical and financial assistance to be secured in support of initiatives to benefit all citizens while conserving, restoring, and managing healthy watersheds and the fish and wildlife resources they contain. Our support of such designation also arises out of the pride we take in the Natural State's natural resources and our opinion that the White River watershed deserves national recognition in keeping with its significance to the citizens of Arkansas and the United States.

Thank you for your consideration of the designation of the White River watershed as a National Blueway.

Sincerely,

Loren Hitchcock

Loren Hitchcock,
Director

2 Natural Resources Drive • Little Rock, AR 72205 • www.agfc.com
Phone (800) 364-4263 • (501) 223-6300 • Fax (501) 223-6448

The mission of the Arkansas Game and Fish Commission is to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people.

THE DEPARTMENT OF ARKANSAS
HERITAGE

Mike Beebe
Governor

Cathie Matthews
Director

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•

Arkansas Historic
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•

Delta Cultural Center

•

Mosaic Templars
Cultural Center

•

Old State House Museum

•

Historic Arkansas Museum

Arkansas Natural Heritage
Commission
323 Center Street, Suite 1500
Little Rock, AR 72201
(501) 324-9619
fax: (501) 324-9618
tdd: (501) 324-9811
e-mail:
arkansas@naturalheritage..com
website:
www.naturalheritage.com

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August 22, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

RE: Letter of Support for the nomination of the White River watershed (Arkansas and Missouri) to be designated as a National Blueway

Dear Ms. Wodder:

The Arkansas Natural Heritage Commission (ANHC) supports the National Wildlife Refuge Association's nomination of the White River Watershed for designation as a National Blueway. The ANHC has worked with the U.S Fish and Wildlife Service, Arkansas Game and Fish Commission, The Nature Conservancy, private landowners, and other partners for nearly four decades to increase protection and restoration efforts throughout this watershed. Designation of the White River Watershed as a National Blueway would provide the framework to enhance collaboration among partners and potentially increase funding to achieve conservation and recreation goals.

Increased protection and restoration of the White River Watershed extends beyond our immediate region. A national emphasis on a "headwaters to mouth" approach that includes this watershed would reduce nutrient and sediment loads entering streams and rivers that empty into the Mississippi River, which eventually empties into the Gulf of Mexico. Increased water quality throughout these areas would have positive influences on biodiversity and recreation.

The White River Watershed supports a variety of natural communities ranging from extensive bottomland hardwood forests and swamps to open glades surrounded by dry oak woodlands. These communities in turn support a wide variety of biodiversity, some of which are rare and which ANHC targets for protection. We believe that designation of this watershed as a National Blueway would benefit these natural communities and rare species by focusing planning efforts amongst the various stakeholders.

The ANHC has worked to conserve Arkansas's natural landscape since 1973. The nomination is aligned with our mission and compliments other conservation actions already occurring in this watershed. We are excited to be a supporting partner in this project.

Sincerely,

Karen Smith

Karen Smith, Director
Arkansas Natural Heritage Commission

United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Arkansas Cooperative Fish and Wildlife Research Unit
Department of Biological Sciences
University of Arkansas
Fayetteville, AR 72701

(479) 575-6709
(479) 575-3330 (FAX)
coopunit@uark.edu

August 22, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dear Ms. Wodder:

As Unit Leader of the USGS Arkansas Cooperative Fish and Wildlife Research Unit (ACFWRU) I would like to support nomination of the White River Watershed as a National Blueway. During my 13 year tenure with the ACFWRU I have directed or participated in 11 research projects/surveys/Monitoring programs in both the Cache and White River regions of the watershed. Some of these projects were conducted in this watershed solely because it is such a special place; for example, it is the largest intact bottomland hardwood tract north of the Atchafalaya Basin in the United States.

Through these experiences I am continually impressed with the regional and national significance of the watershed, its natural resources, and the organizations and partnerships that are engaged in conservation, management, restoration of these watershed resources. However, I have observed that although conservation interest and productivity by stakeholders is strong in both the upper and lower watershed, there could be even greater benefits derived from enlarging the scope of those partnerships to connect across the landscapes in a truly watershed-wide collaborative approach. I surmise that National Blueway designation for the White River watershed could be the vehicle by which this interstate and intra-watershed effort could be promoted and established. The prestige of a national designation, the technical and financial assistance that could be received, and the increased awareness and valuation of the river systems within local communities across the watershed could only result in increased level of communication, cooperation, collaboration, and commitment among partners and incentive for new stakeholders to become involved. The White River Watershed is embedded in the geography for the Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative and for the Lower Mississippi Valley Joint Venture; Blueway designation would be a benefit to their programs as well in terms of recognition and competition for funding and prioritization of programs. In terms of the ACFWRU, I believe National Blueway status may enhance our potential for successfully competing for ever dwindling funding for fish and wildlife research programs in the watershed.

Again I am in full support of the National Blueway System and achieving that recognition for the White River watershed. I look forward to being a part of this progressive opportunity for fish and wildlife research, management, and conservation that will benefit natural resources and the public in Arkansas and Missouri.

Sincerely,

David G Krementz

David G. Krementz
Unit Leader

City of Augusta

Telephone
870-347-5656

210 Main Street • P.O. Box 502
AUGUSTA, ARKANSAS 72006

Fax
870-347-2436

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

RE: National Blueways Designation for the White River Watershed

Dear Ms. Wodder:

As mayor of the City of Augusta, Arkansas and as a local agri-businessman, I am writing in support of the nomination of the White River Watershed as a National Blueway.

The White and Cache Rivers are the environmental, economic, and recreational lifeblood of Central Arkansas, where our way of life is based primarily on agriculture, recreational activities such as fishing and duck hunting, and tourism. Our economy is clearly linked to the quality and quantity of the water that flows through these two rivers. The city of Augusta is situated on the banks of the White River and is just west of the Cache River's drainage basin, so you can understand why we have a personal stake in the welfare of these two rivers and the lands within their watersheds.

We know there are many agencies and organizations that also have a stake in these rivers. However, we support a National Blueway designation for the watershed because we see it as the best way to focus their attention and effort as partners in a unified vision that hopes to achieve long-term protection for the water resource. This is an outcome that is important to the viability of our community, and therefore a partnership effort that the City of Augusta expects to play an active role in.

Thank you for your consideration, and please do not hesitate to contact me if I can be of any further help.

Very truly yours,

Rocky Tidwell Mayor

Rocky Tidwell, Mayor

The Nature Conservancy
Protecting nature. Preserving life.™

Arkansas Field Office
601 N. University Avenue
Little Rock, AR 72205

Tel (501) 663-6699
Fax (501) 663-8332

nature.org

August 24, 2012

Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

RE: National Blueways Designation for the White River Watershed

Dear Ms. Wodder:

I am writing in support of the nomination of the White River Watershed as a National Blueway. This designation will bolster on-going conservation efforts in the basin including multiple public and private restoration initiatives.

Since the early 1980s, The Nature Conservancy (TNC) has been working to conserve the old growth forest and replant into trees priority lands in both the White and Cache River watersheds. This area of Arkansas is colloquially known as the Big Woods and I think you would agree that it is a National treasure.

TNC is a small part of a larger group of stakeholders in the White River basin. Here you will find that lines are blurred. Private, state, and federal conservation projects are put on the ground in a well-orchestrated and collaborative fashion. Our partnerships run deep.

The partnership remains committed to the conservation of both terrestrial and aquatic resources. Wetlands cannot function without clean and abundant water and our mission remains focused to protect ecological flows (quantity) that will provide water for forested wetlands, agriculture, and industry as well as improving water quality.

Thousands of people visit this area of Arkansas each and every year. The river is the lifeblood of the local community. The proposed Blueways designation will benefit the local economy and help the people that live in these historic river towns.

Thank you for your consideration and please do not hesitate to contact me if I can be of further assistance to you.

Many thanks,

Scott Simon, Director
The Nature Conservancy - Arkansas

THE CITY OF CLARENDON
270 MADISON STREET
CLARENDON, ARKANSAS 72029

Date: August 24, 2012

To: Rebecca Wodder
Senior Advisor to the Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

From: Honorable Jim Stinson – Mayor
City of Clarendon
270 Madison Street
Clarendon, AR 72029

RE: Letter – National Blueways Designation for the White River Watershed

Dear Ms. Wodder,

As the Mayor of a river town, I am writing to you in full support of designating the White River Watershed as a National Blueway. This designation will not only benefit the City of Clarendon, but it is also important for other river communities and livelihoods occurring within the basin.

Clarendon is located along the White River just south of the mouth of the Cache River. Clarendon's history and future are irrevocably linked to these two rivers. Our community is supported by agricultural and recreational dollars that rely on river water for irrigation, transportation of goods, hunting and wildlife habitat. Both water quality and quantity directly impact these uses. I believe the proposed National Blueways Designation will help protect, and promote wise-use, for the benefit of the rivers and the people that depend on them.

Currently, the City of Clarendon is the local sponsor for the restoration of the Lower Cache River for a U.S. Army Corps of Engineers Section 1135 project. The City and project partners are contributing more than $2 million dollars to this effort to ensure the river is reconnected to its historic meanders and floodplain. I believe this illustrates our city as an organized, committed, stakeholder in the health of the river, and I believe this project designation will only support the work we have already invested.

On the behalf of the City of Clarendon, our community, and other stakeholders throughout the greater White River basin, I appreciate your consider of this request.

Sincerely,

Jim Stinson
Honorable Mayor – City of Clarendon, Arkansas