

**Prospectus for the
Bayou Meto Drainage Basin Mitigation Bank
Pulaski County, Arkansas**

Arkansas State Highway and Transportation Department

June 2012

The Arkansas State Highway and Transportation Department (AHTD) proposes the establishment of a stream and wetland mitigation bank in Pulaski County, Arkansas. The mitigation area is located on Batesville Pike Road southwest of the Fortson Road intersection (Figure 1). The 60.95-acre site is located in section 31, Township 4 North, Range 11 West (Figure 2). The property was purchased by AHTD expressly to mitigate stream and wetland impacts resulting from highway construction and maintenance activities. The property would be used for compensatory mitigation for unavoidable impacts resulting from AHTD highway activities authorized under Section 404 of the Clean Water Act.

A. Management Goal and Objectives: The management goal for the mitigation bank is the restoration, enhancement, and protection of streams, wetlands and associated uplands. Objectives include the restoration of riparian buffers, preservation of stream channels, and the reforestation of uplands and wetlands. Approximately 6,765 linear feet of stream will be preserved and enhanced by the removal of an at-grade crossing for agricultural equipment as well as the removal of cattle, horses and the associated agricultural practices from the property. The 30.6 acres of riparian buffer restoration and 5.0 acres of wetland restoration will be reforested with bottomland hardwood trees (Figure 3). Nonnative vegetation will be removed in the stream restoration areas to promote the growth of bottomland hardwood trees.

B. Establishment and Operation: An Interagency Review Team (IRT) would facilitate the establishment of the mitigation bank or area. The IRT would allow review and seek consensus from Federal, state, and public entities on the Mitigation Banking Instrument (MBI). The US Army Corps of Engineers Little Rock District (SWL) and Vicksburg District (MVK) would serve as Chair of the IRT and will make final decisions regarding the terms and conditions of the MBI. AHTD would be the sponsor of the bank and owner of the mitigation property and would be responsible for all mitigation and monitoring actions.

Agencies invited to participate on the IRT include the U.S. Environmental Protection Agency, Region VI (EPA); the U.S. Fish and Wildlife Service, Region IV (FWS); the Federal Highway Administration, Arkansas Division (FHWA); the Natural Resources Conservation Service (NRCS), the Arkansas Department of Environmental Quality (ADEQ); the Arkansas Game and Fish Commission (AGFC); the Arkansas Natural Heritage Commission (ANHC); and the Arkansas Natural Resources Commission (ANRC).

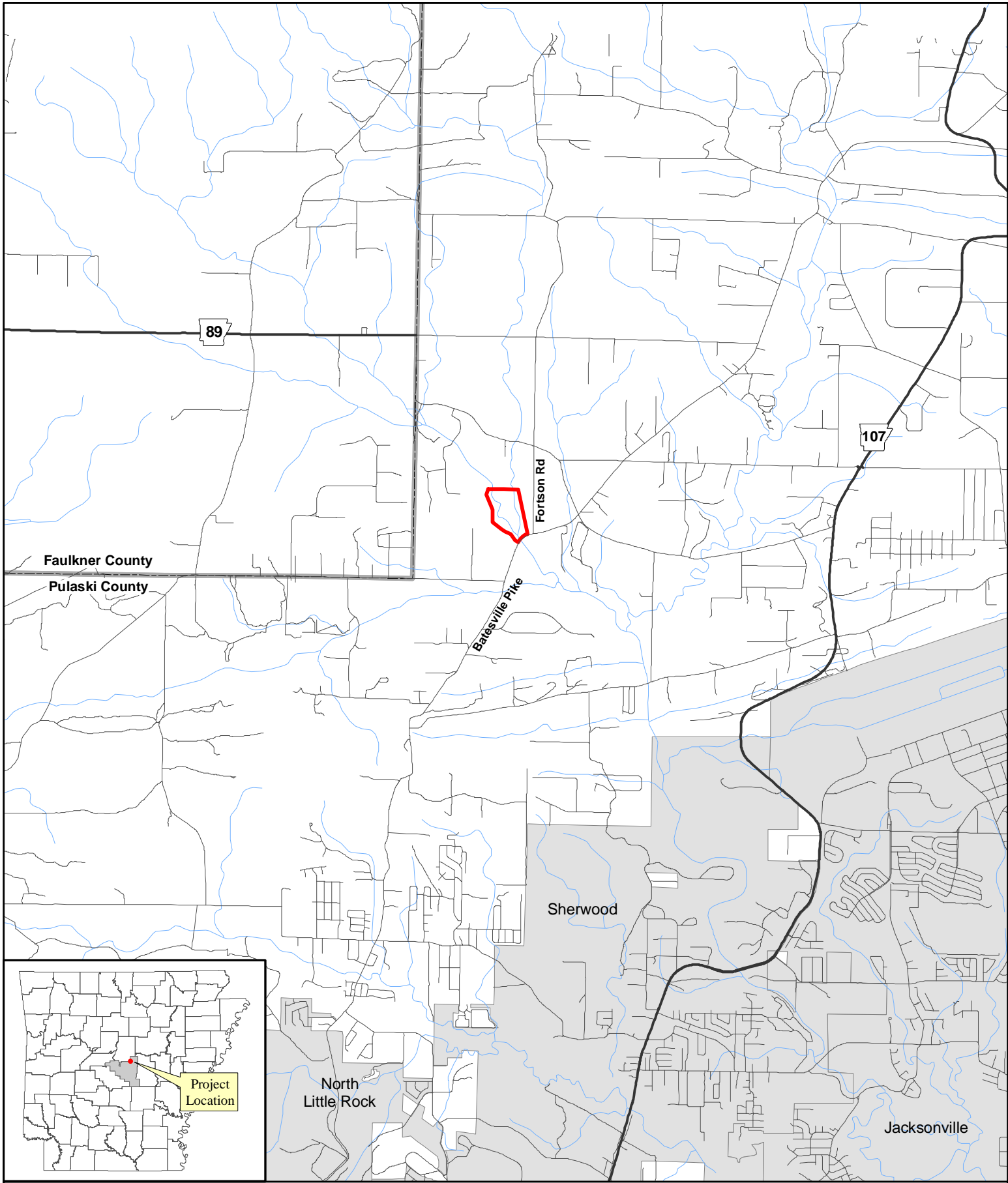
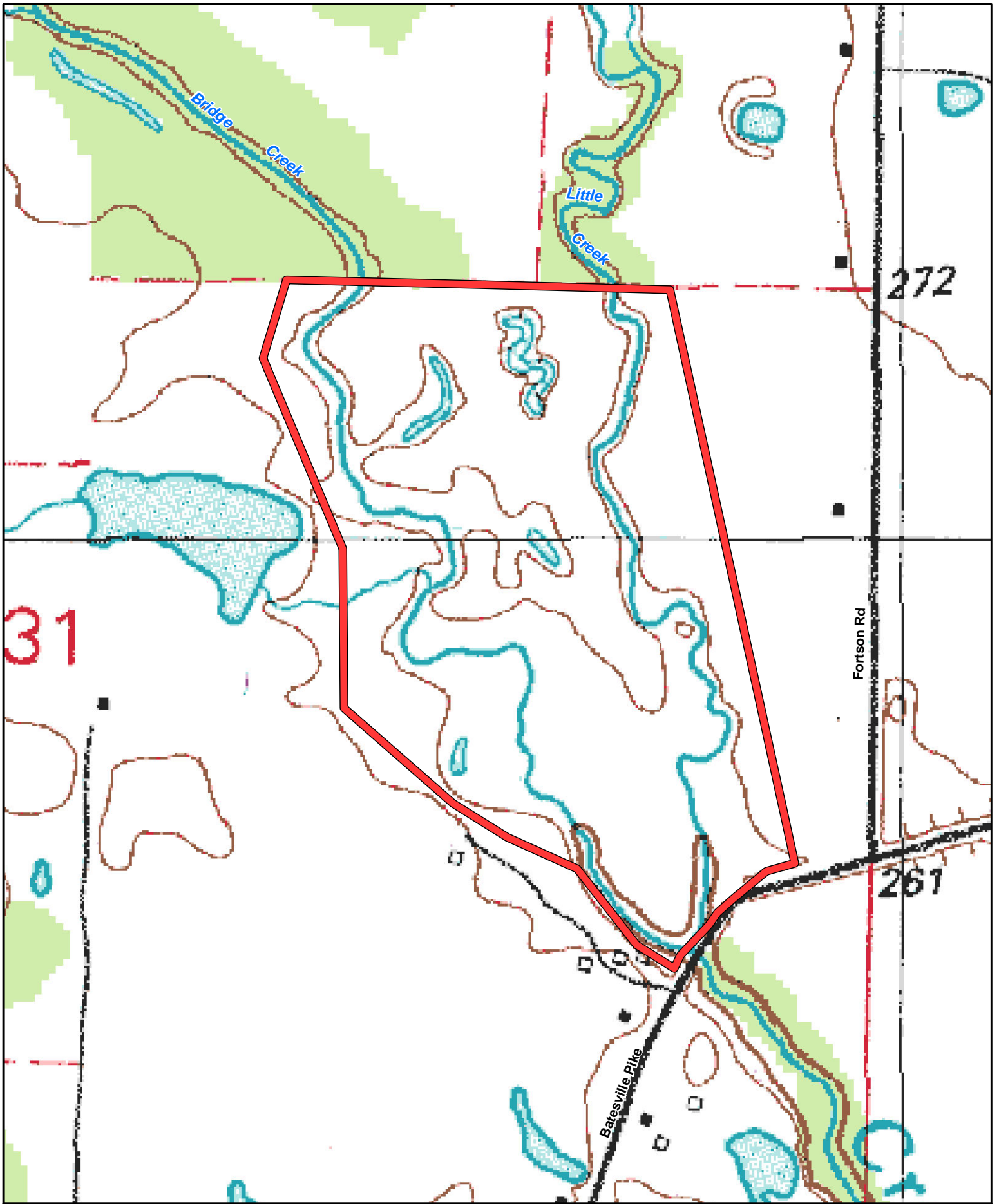


Figure 1
 Proposed Bayou Meto
 Mitigation Area





31

272

Fortson Rd

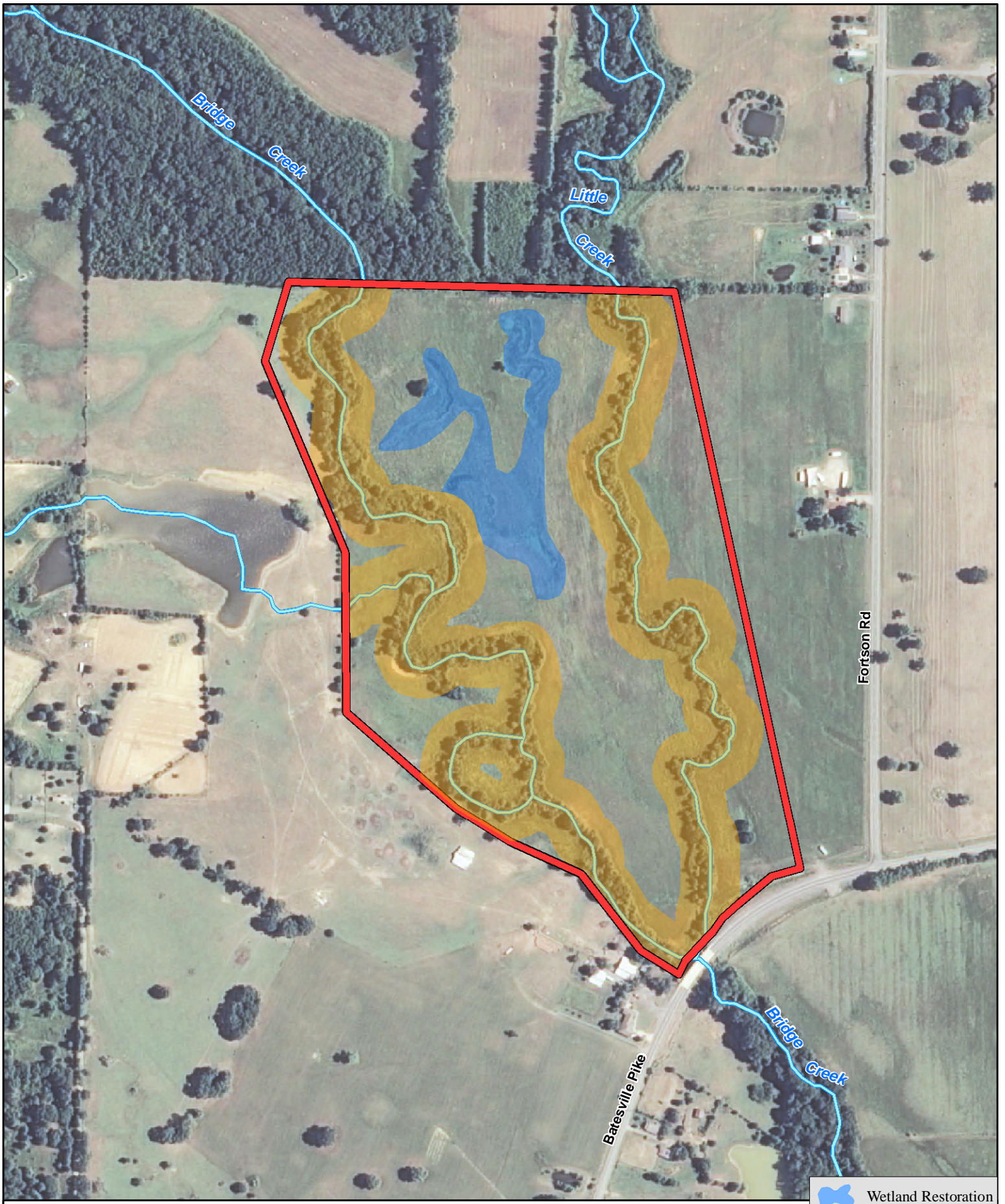
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Batesville Pike

0 125 250 Feet
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Figure 2
Topographic Map

Mitigation Area



-  Wetland Restoration
-  Riparian Buffer
-  Streams
-  Mitigation Area

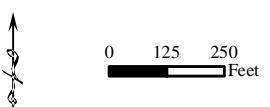


Figure 3
Restoration Plan

C. Proposed Service Area: The geographic service area (Figure 4) would include five sub-basins (8 digit HUCs). This includes the Bayou Meto (08020402), the Lower Arkansas (08020401), the Lake Conway – Point Remove (11110203), the Cadron (11110205), and the Lower Arkansas – Maumelle (11110207) sub-basins. These sub-basins are all tributaries to the Arkansas River. For accounting purposes, the corresponding USGS cataloging codes are listed below in Table 1.

Table 1
USGS Hydrologic Unit Codes
For Sub-Basins
In the Geographic Service Area

HUC	Sub-basin Name	Service Area
08020402	Bayou Meto	Primary
08020401	Lower Arkansas	Primary
11110203	Lake Conway – Point Remove	Secondary
11110205	Cadron	Secondary
11110207	Lower Arkansas – Maumelle	Secondary

D. General Need and Feasibility: AHTD is required to mitigate unavoidable losses to streams and wetlands due to highway construction projects in the proposed service area.

E. Ownership: AHTD is the owner of the property and has recorded a restriction on the Warranty Deed to the property. The restriction requires that any activity on the property complies with the terms of a mitigation plan or banking instrument. AHTD will manage the property for the operational life of the bank. The operational life of the bank terminates when compensatory mitigation credits have been exhausted and the bank site is self-sustaining. Subsequently, AHTD may deed the property to or enter into a management agreement with an appropriate state or Federal agency provided the agency manages the property in accordance with the provisions of the MBI.

F. Long-term management: AHTD is responsible for securing adequate funding to monitor and maintain the mitigation bank throughout its operational life, as well as beyond the operational life if not self-sustaining. AHTD would be responsible for securing sufficient funds to cover contingency actions in the event of default or failure. Additionally, AHTD would be responsible for providing alternative compensatory mitigation if it is determined necessary by the US Army Corps of Engineers.

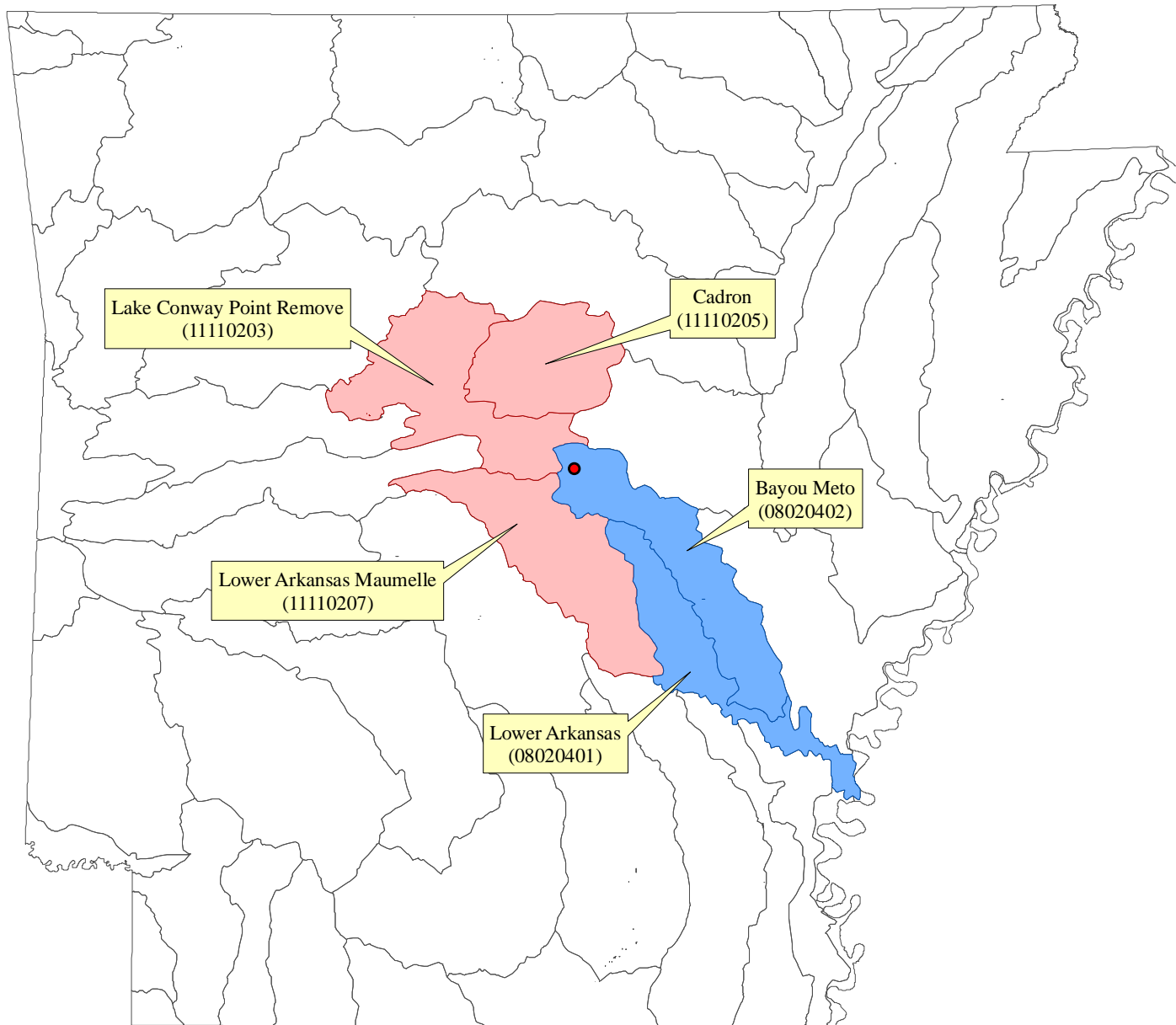
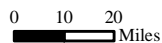
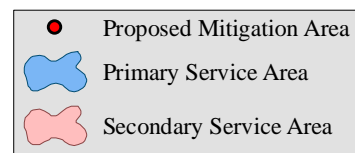


Figure 4
Proposed Service Area Watersheds



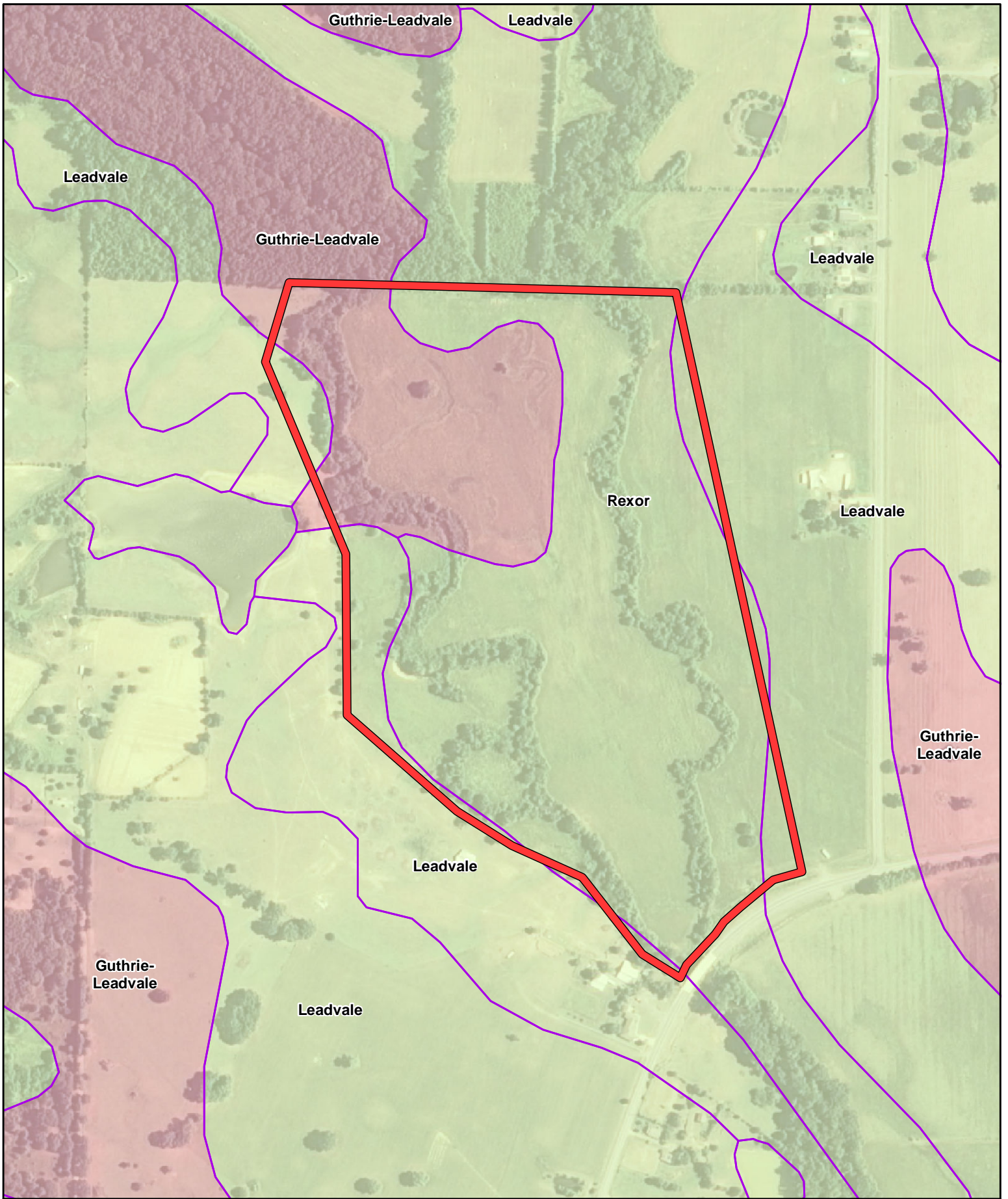
G. Qualifications of the sponsor: AHTD is presently the owner and sponsor of five mitigation banks, totaling 1,950 acres of wetland mitigation property managed according to approved banking instruments.

H. Ecological Suitability: The primary considerations for site selection were watershed needs, baseline conditions, and habitat connectivity. The proposed mitigation bank is located at the confluence of Bridge Creek and Little Creek. The property has been designated as a Special Flood Hazard Area (Zone A, areas of 100 year flood) by Federal Emergency Management Agency. Currently the site is utilized as pasture for hay production as well as grazing for cattle and horses.

Soils on the site are mapped (Figure 5) into three soil units by the USDA (*Soil Survey of Pulaski County, Arkansas 1975*). Leadvale silt loam, 1 to 3 percent slopes consist of moderately-well drained, nearly level and gently-sloping soils in valleys, on the top of low mountains in the Arkansas River Valley, and on the coastal plain. These soils, formed mainly in loamy sediment, washed from uplands consisting of weathered sandstone and shale. Native vegetation is mixed hardwoods and pines. Permeability is moderately slow, and available water capacity is medium. The firm, brittle layer in the subsoil restricts root penetration and slows movement of water. Included in this soil mapping are a few spots of Amy, Guthrie, Sallisaw, Smithdale and Wrightsville Soils.

Guthrie – Leadvale Complex, is described as a complex of Guthrie and Leadvale soils in valleys, depressions, on the top of low mountains, and on the coastal plain. Guthrie soils are found on the level areas between mounds and the Leadvale soils are on low, rounded mounds. Small areas of Amy soils are included in the mapping unit. Guthrie soils consist of poorly-drained, level soils formed in loamy sediment. Native vegetation is chiefly mixed hardwoods and pines. Permeability is slow, and available water capacity is medium. The firm brittle fragipan slows the movement of water through the soil. Leadvale soils are described above.

Rexor silt loam are frequently flooded soils that consist of well-drained soils on the floodplains of local drainageways. The hazard of flooding is severe, with floods likely to occur several times each year, generally at least once during the growing season. Permeability is moderate, and available water capacity is high. The native vegetation is mixed hardwoods and pines; however, most areas of these soils are cleared and are used for pasture.



Guthrie-Leadvale

Leadvale

Leadvale

Guthrie-Leadvale

Leadvale

Rexor

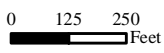
Leadvale

Guthrie-Leadvale

Leadvale




Guthrie-Leadvale

Leadvale



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Figure 5
Soil Map

	Mitigation Area
	Hydric
	Not Hydric

Photography Date: Summer 2010

Figure 6. Typical view of Little Creek (April 2012).



Figure 7. Typical view of Bridge Creek (April 2012).



Figure 8. View of wetland to be reforested (April 2012).



Figure 9. View of at grade stream crossing (April 2012).



Figure 10. View of eroding stream bank on Little Creek (April 2012).

