Prospectus for the
AHTD Upper Saline River Mitigation Bank
Saline County, Arkansas

Arkansas State Highway and Transportation Department

February 2012

The Arkansas State Highway and Transportation Department (AHTD) proposes the establishment of a stream and wetland mitigation bank in Saline County, Arkansas. The mitigation area is located on Narrows Road south of Highway 5 west of Benton (Figure 1). The 78.5-acre site consists of portions of sections 28, 29, 32, and 33, Township 1 South, Range 16 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 preservation of existing wetlands, the restoration of stream hydrology, and the reforestation of uplands and wetlands. Stream hydrology will be restored in approximately 8,032 linear feet of stream by the removal of pond levees and inadequately sized culverts. Cattle, horses and the associated agricultural practices will be removed from the property. The 48.5 acres of riparian buffer restoration and 94 acres of wetland restoration will be reforested with bottomland hardwood trees (Figure 3). Nonnative vegetation and pines will be removed in the wetland and stream restoration areas to promote the growth of bottomland hardwood trees. Approximately 11,585 linear feet of stream, 13 acres of riparian buffer, and 7 acres of wetlands will be preserved.

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 Insturment (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).

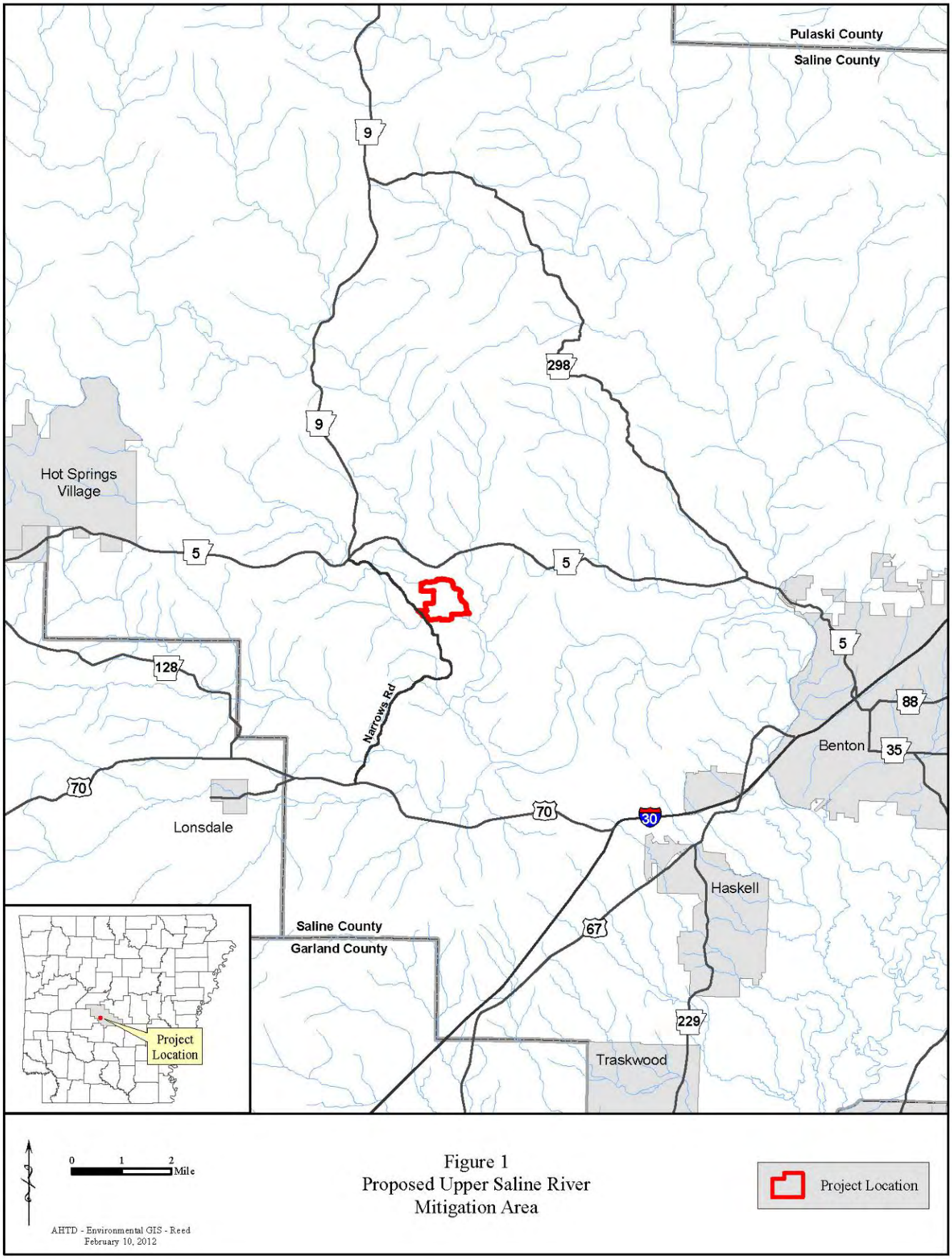

Figure 1
Proposed Upper Saline River
Mitigation Area

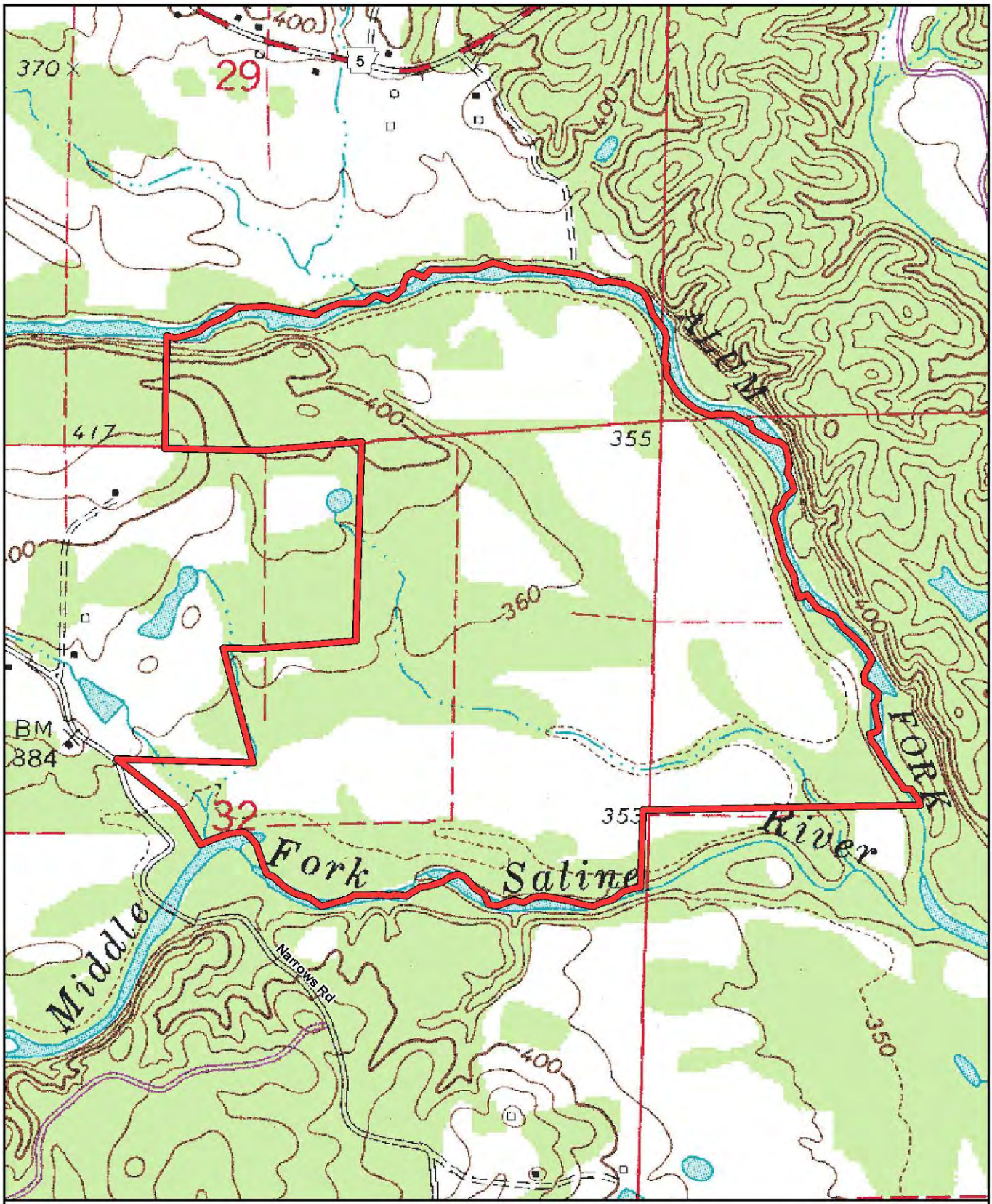

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Figure 2
Topographic Map

Mitigation Area

Haskell 1988 USGS Topographic Map

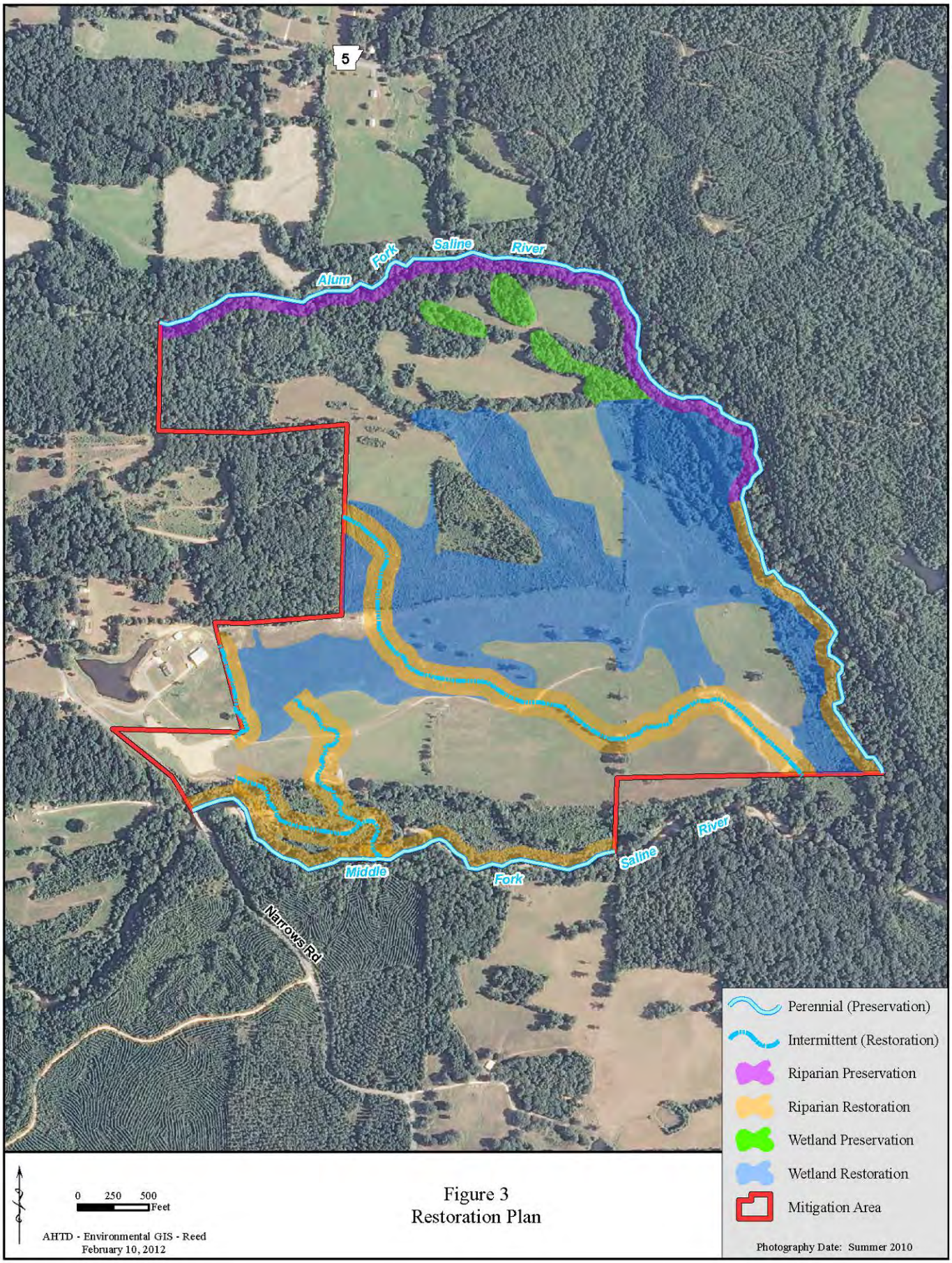


Figure 3
Restoration Plan

C. Proposed Service Area: The geographic service area (Figure 4) would include three sub-basins (8 digit HUCs). This includes the Upper Saline (08040203), the Lower Saline (08040204) and the Ouachita Headwaters (08040101). These sub-basins all are included in the Lower Red – Ouachita sub-region (0804). For accounting purposes, the corresponding USGS cataloging codes are listed below in Table 1.

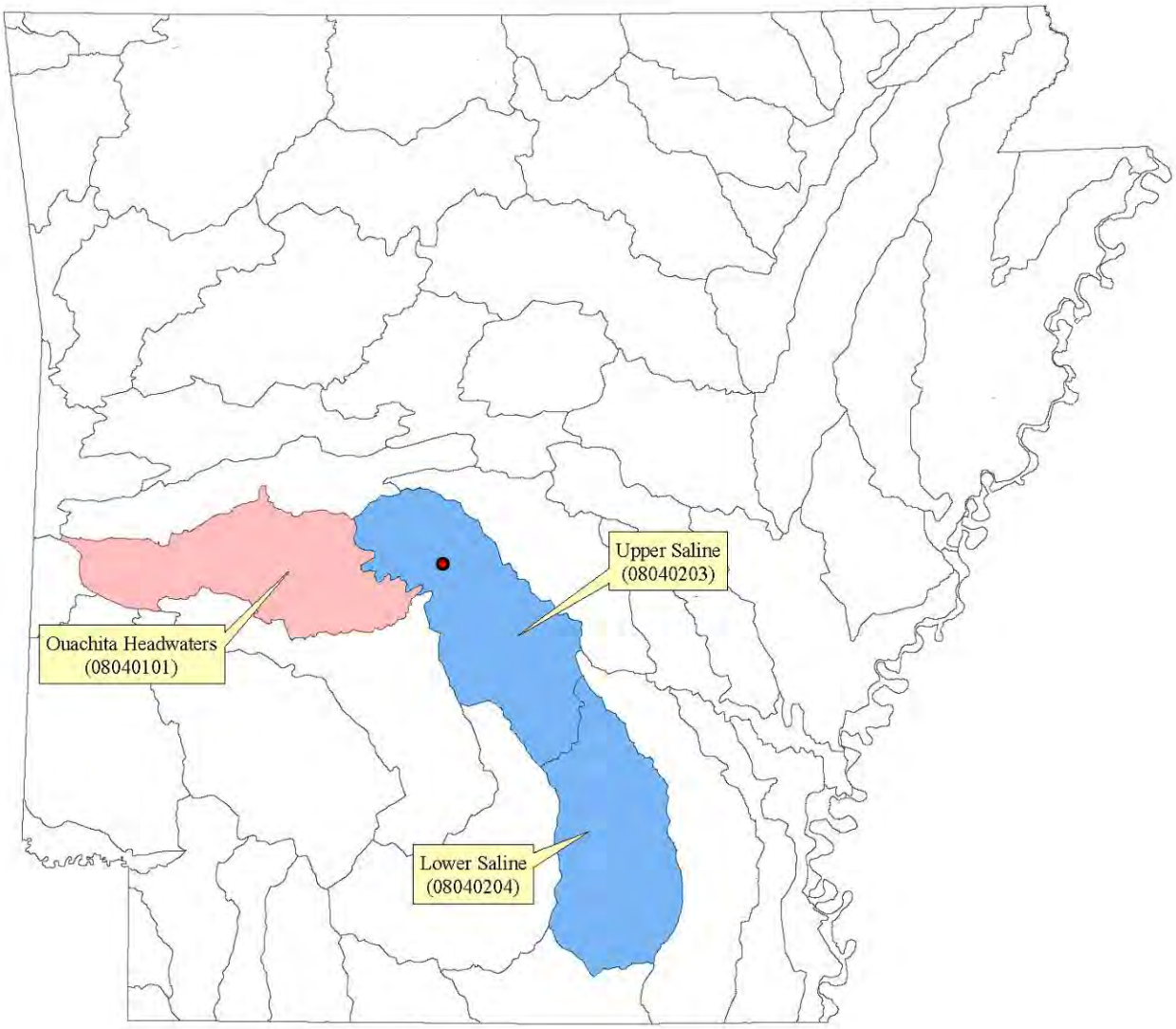
Table 1
USGS Hydrologic Unit Codes
For Sub-Basins
In the Geographic Service Area

HUC	Sub-basin Name	Service Area
08040203	Upper Saline	Primary
08040204	Lower Saline	Primary
08040101	Ouachita Headwaters	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.



0 10 20
Miles

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Figure 4
Proposed Service Area Watersheds

Proposed Mitigation Area
Primary Service Area
Secondary Service Area

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 the Middle and the Alum Forks of the Saline River. Both of these streams as well as their associated tributaries have been listed as Ecologically Sensitive Waterbodies. This designation is based on the presence of the Arkansas fatmucket (*Lampsilis powellii*), a federally listed threatened freshwater mussel, and the Ouachita madtom (*Noturus lachneri*), a rare Arkansas endemic fish. The property is home to a nesting pair of bald eagles (*Haliaeetus leucocephalus*). The Arkansas Department of Natural Heritage has records for several other rare species from the Middle Fork Saline River adjacent to the proposed mitigation bank including: the elktoe (*Alasmidonta marginata*), the flutedshell (*Lasmigona costata*), the Ouachita kidney shell (*Ptychobranchus occidentalis*), the purple lilliput (*Toxolasma lividum*), and the little spectaclecase (*Villosa lienosa*).

Much of the property lies within the 100 year floodplain of the Alum and Middle Forks of the Saline River. A 2001 areal image illustrates that the areas identified for wetland and riparian buffer restoration were forested (Figure 5). These areas were cleared to expand existing pastures for hay production as well as for cattle and horse grazing. Upland areas of the property will function as a buffer and wildlife sanctuary for terrestrial wildlife and migratory birds in times of flooding.

Soils on the site are mapped (Figure 6) into five soil units by the USDA (*Soil Survey of Saline County, Arkansas* 1979). Avilla silt loam, 3 to 8 percent slopes, is described as a well drained, gently sloping soil on stream terraces in the valleys of the Ouachita Mountains. Caddo Variant – Messer Variant complex consists of the poorly drained Caddo Variant in level intermound areas and the moderately drained well drained Messer Variant on the rounded mounds. They are formed in deep loamy material on stream terraces or broad upland flats in the Ouachita Mountains. The Caddo-Messer complex is listed as a hydric soil. The Carnasaw-Townley association, undulating is described as well drained soil formed in a thin layer of loamy material with an underlying clayey material weathered from shale. These soils are found in the Piedmont area of the Ouachita Mountains. The Carnasaw-Townley association, steep soils are similar to those previously discussed for the Carnasaw-Townley association, undulation but typical slopes range between 12 and 40 percent. Ouachita silt loam, frequently flooded is a well drained, deep, level and nearly level soil on the flood plains along streams and drainage ways.

Native upland vegetation is mixed shortleaf pine – upland deciduous forest. Native vegetation on the floodplains and low terraces includes southern red oak (*Quercus falcata*), willow (*Salix sp.*), elm (*Ulmus* sp.), river birch (*Betula nigra*), maple (Acer sp.), sweetgum (*Liquidambar styraciflua*), and sycamore (*Platanus occidentalis*).

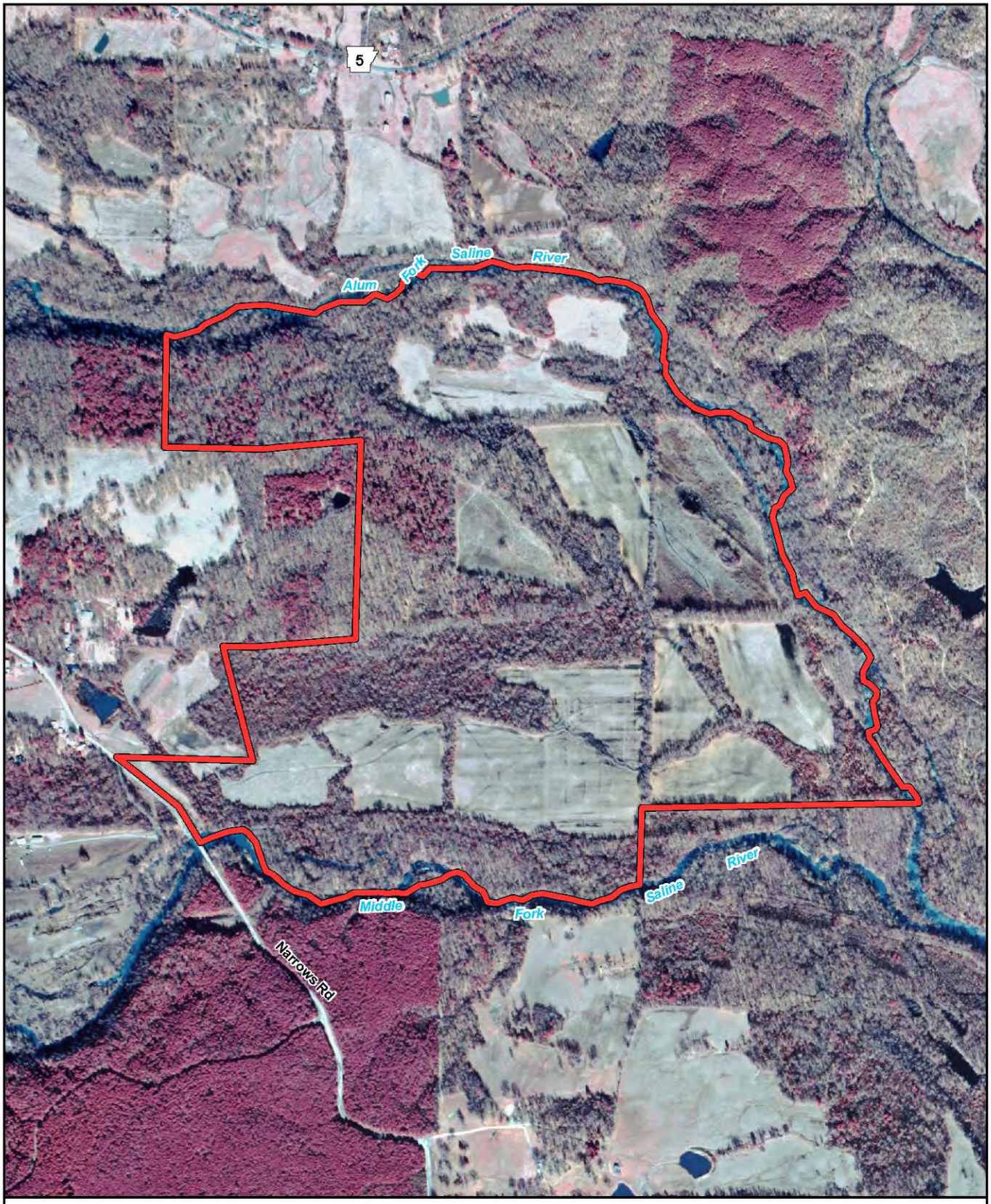

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Figure 5
Historic Imagery

Mitigation Area

Photography Date: January 30, 2001

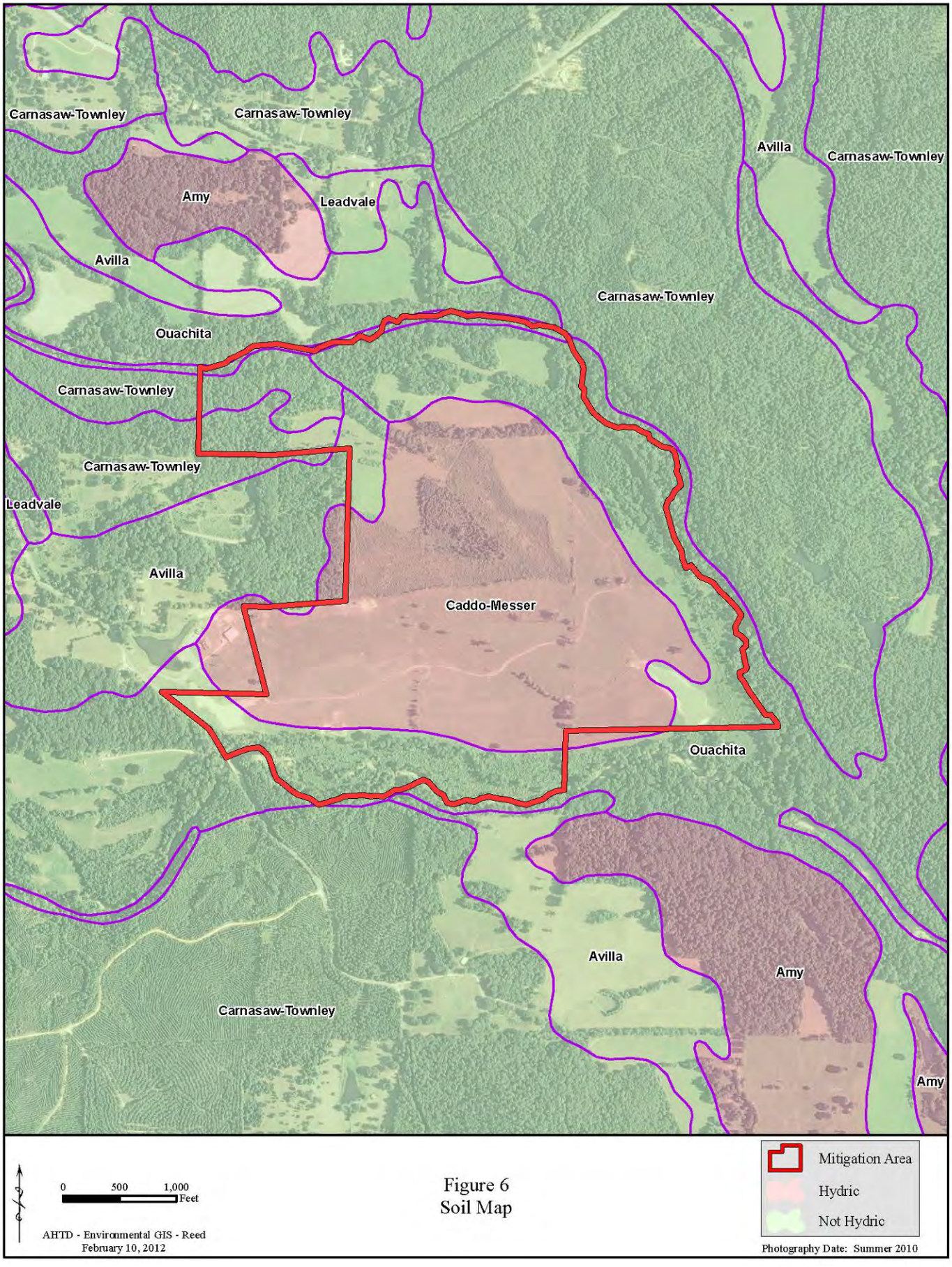

Figure 6
Soil Map

Figure 7. Typical view of the intermittent tributary and stream crossing (January 2012).

Figure 8. Typical view of the Alum Fork Saline River (January 2012).

Figure 9. View of Middle Fork Saline River downstream of Narrows Road (January 2012).

Figure 10. Typical view of the existing land use and agricultural practices of the site (January 2012).

Figure 11. Typical view of the wetland area to be restored.

Figure 12. Bald Eagle perched in pine tree adjacent to Middle Fork Saline River (January 2012).

Figure 13. Wilson’s snipe utilizing the wetlands currently in pasture (January 2012).