

**PROSPECTUS FOR THE
BAYOU DE LOUITRE MITIGATION SITE
UNION COUNTY, ARKANSAS**

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

FEBRUARY 2012

The Arkansas State Highway and Transportation Department (AHTD) proposes the establishment of a wetland and stream mitigation bank in Union County, Arkansas (Figure 1). The Bayou De Loutre mitigation area is located south of Highway 82 at Strong, Arkansas. The proposed site is eight miles west of Highway 129 on Aurelle Street. The 160-acre site is located in portions of sections 22 and 27, Township 19 South, Range 13 West (Figure 2). The AHTD is looking at the property to purchase expressly to mitigate wetland and stream 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 site is the restoration of wetlands, stream buffers, and associated uplands (Figure 3). The objective of the mitigation site is to restore bottomland hardwood timber back on the site. The site has been logged and the remaining timber has been thinned twice since 2004. Approximately 145-acres of wetlands would be restored to historic conditions with bottomland hardwood timber replanted back on the site. The existing streams have little to no wooded buffer remaining around them. The bottomland hardwood timber would re-establish wooded buffers along the perennial and intermittent streams.

B. Establishment and Operation: An Interagency Review Team (IRT) would facilitate the establishment of the bank. The IRT would allow review and seek consensus from Federal, state, and public entities on the Mitigation Banking Instrument (MBI). The Little Rock District 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; 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 Commissions (ANRC).

C. Proposed Service Area: The geographic service area (Figure 4) would include portions of the Lower Ouachita (080402) water basin. All streams are tributaries of the Ouachita River. For accounting purposes, the corresponding USGS cataloging codes are listed below.

Table 1

HUC	Sub-basin Name
08040202	Lower Ouachita-Bayou De Loutre
08040201	Lower Ouachita-Smackover
08040205	Bayou Bartholomew
08040206	Bayou D'arbonne

- D. General Need and Feasibility:** AHTD is required to mitigate unavoidable losses to wetlands and stream relocation due to highway construction projects in the proposed service area.
- E. Ownership:** AHTD will be the owner of the property and will record 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 are 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 bank default or failure. Additionally, AHTD would be responsible for providing alternative compensatory mitigation if it is determined necessary by the Corps of Engineers.
- G. Qualifications of the Sponsor:** AHTD is presently the owner and the 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 project area is within the South Central Plains ecoregion. The Tertiary Uplands are dominated by pine plantation that replaced the native oak-hickory-pine forests. The surrounding properties are primarily established pine plantations with scattered areas of oak-hickory-pine forests. Reforestation of the mitigation area would re-establish habitat connectivity with the surrounding forested areas. There are approximately 15-acres of uplands scattered on the northeast side and the southwest end of the property. These areas will function as a buffer and wildlife sanctuary for terrestrial wildlife and migratory birds.

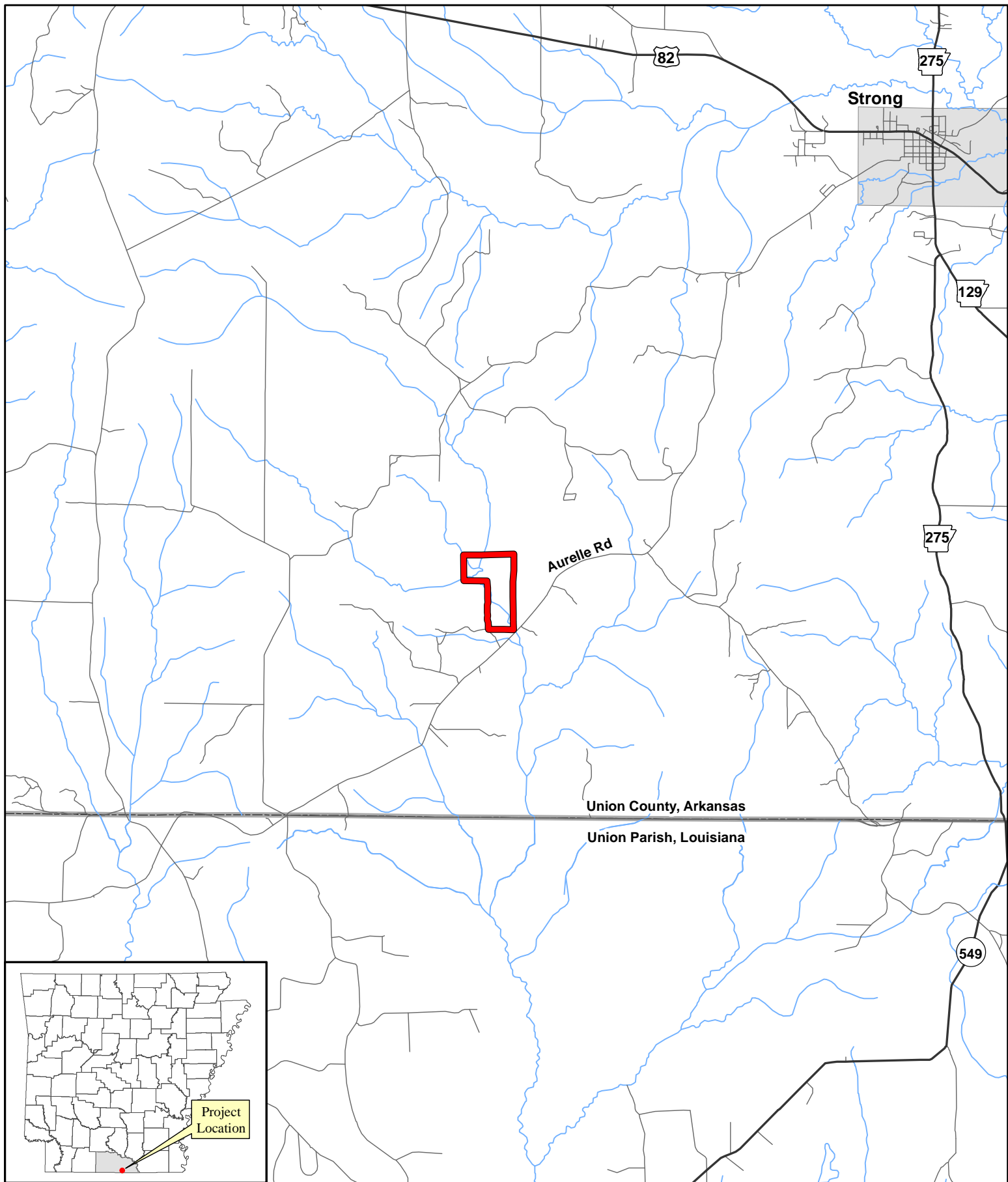
Soils on the site are mapped (Figure 5) into three soil units by the Natural Resource Conservation Service. The predominate soil type identified on the site is Guyton Silt Loam. Guyton is a very deep, poorly drained, slowly permeable soil formed in thick loamy sediments. These soils are on Southern Coastal Plain stream flood plains and in depressional areas on late Pleistocene age terraces. The second soil type identified is Harleston Sandy Loam. Harleston is a deep, moderately well drained, moderately permeable soil formed in marine or stream deposits consisting of thick beds of sandy loam. These soils are located on terraces and uplands of the Southern Coastal Plain. The third soil type identified is Smithdale Sandy Loam. Smithdale is a deep, well drained, moderately permeable soil that

formed in thick beds of loamy sediments. Soils are located on ridge tops and hillsides in dissected uplands of the Southern Coastal Plain.

Potential natural vegetation in the Tertiary Uplands is southern floodplain forests. Native vegetation includes overcup oak (*Quercus lyrata*), cherrybark oak (*Quercus pagoda*), water oak (*Quercus nigra*), willow oak (*Quercus phellos*), sweetgum (*Liquidambar styraciflua*), iron wood (*Carpinus caroliniana*), green ash (*Fraxinus pennsylvanica*), loblolly pine (*Pinus taeda*), swamp tupelo (*Nyssa aquatica*), and bald cypress (*Taxodium distichum*).

Vegetation on the proposed mitigation site is largely herbaceous and scrub species that have emerged since the property was logged. These species include: soft rush (*Juncus effusus*), cattail (*Typha* sp.), wool-grass (*Scirpus cyperinus*), bald cypress (*Taxodium distichum*), swamp tupelo (*Nyssa aquatica*), sweetgum (*Liquidambar styraciflua*), willow oak (*Quercus phellos*), American beech (*Fagus grandifolia*), iron wood (*Carpinus caroliniana*), smartweed (*Polygonum* sp.), dog fennel (*Eupatorium capillifolium*), broomsedge (*Andropogon virginicus*), plume grass (*Erianthus strictus*), salt bush (*Baccharis halimifolia*), redvine (*Brunnichia cirrhosa*), greenbrier (*Smilax rotundifolia*), deciduous holly (*Ilex decidua*), green ash (*Fraxinus pennsylvanica*), and various sedges (*Carex* spp.).

Most of the site was historically backwater, bottomland hardwood until the site was logged. The landform is level to nearly level along the floodplains of the streams and rolling in the upland areas. The land use on the proposed property was timber. There are approximately 145-acres of wetlands located on the proposed property. Multiple streams traverse the proposed property. Bayou De Loutre is the main channel located on the property. There are pockets of cypress/tupelo swamp located on the east and south sides of the proposed property. The majority of the hardwood timber on the site has been harvested. Natural re-forestation does not appear to be occurring throughout the proposed property. There is approximately 4,908 linear feet of perennial streams and 3,905 linear feet of intermittent streams located within the boundaries of the proposed property. The streams that traverse the property have little to no wooded buffer remaining around them.



0 0.5 1 Mile

AHTD - Environmental GIS - Reed
February 6, 2012

Figure 1
Bayou De Loutre Wetland
Mitigation Bank



Project Location

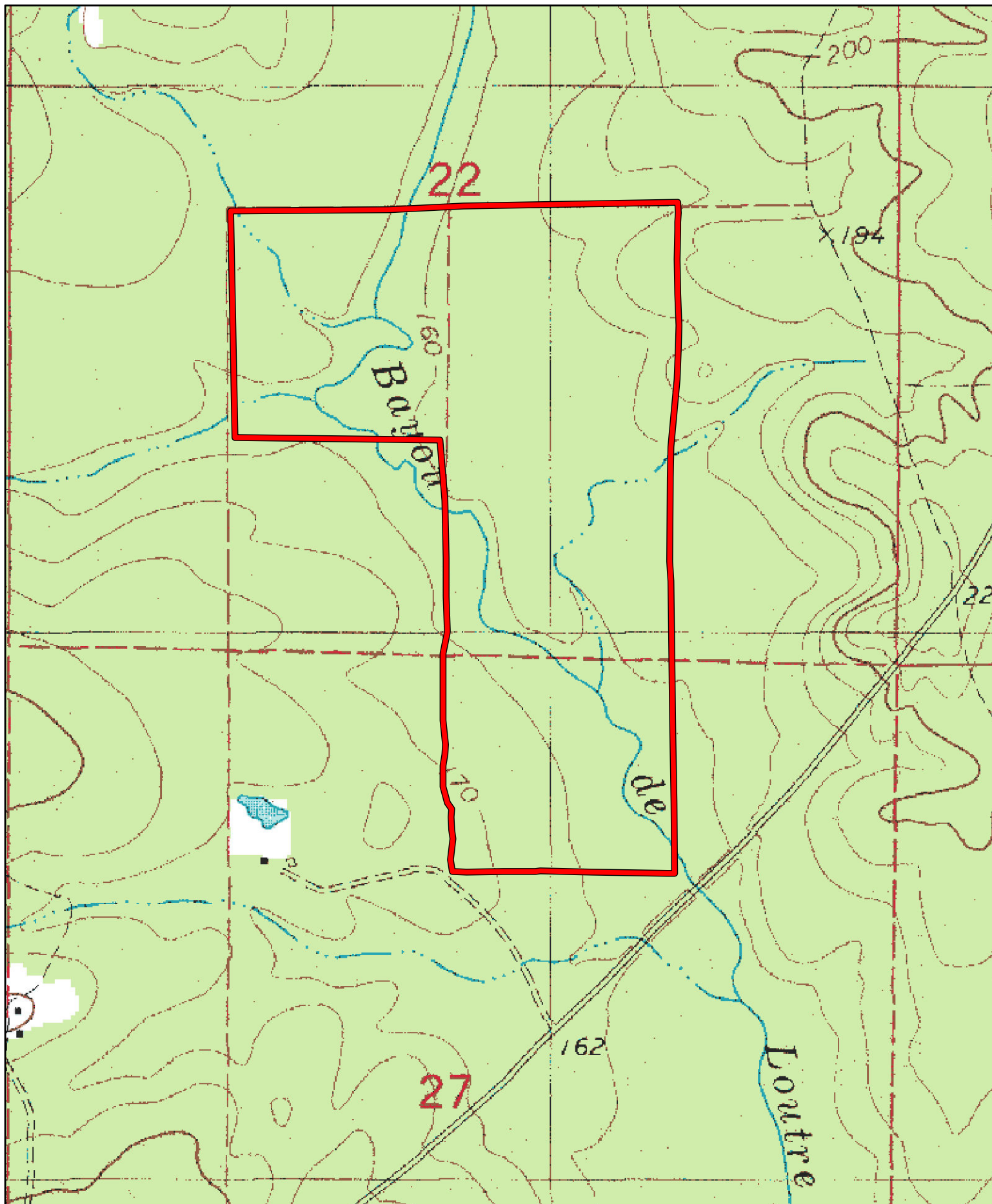


Figure 2
Topographic Map



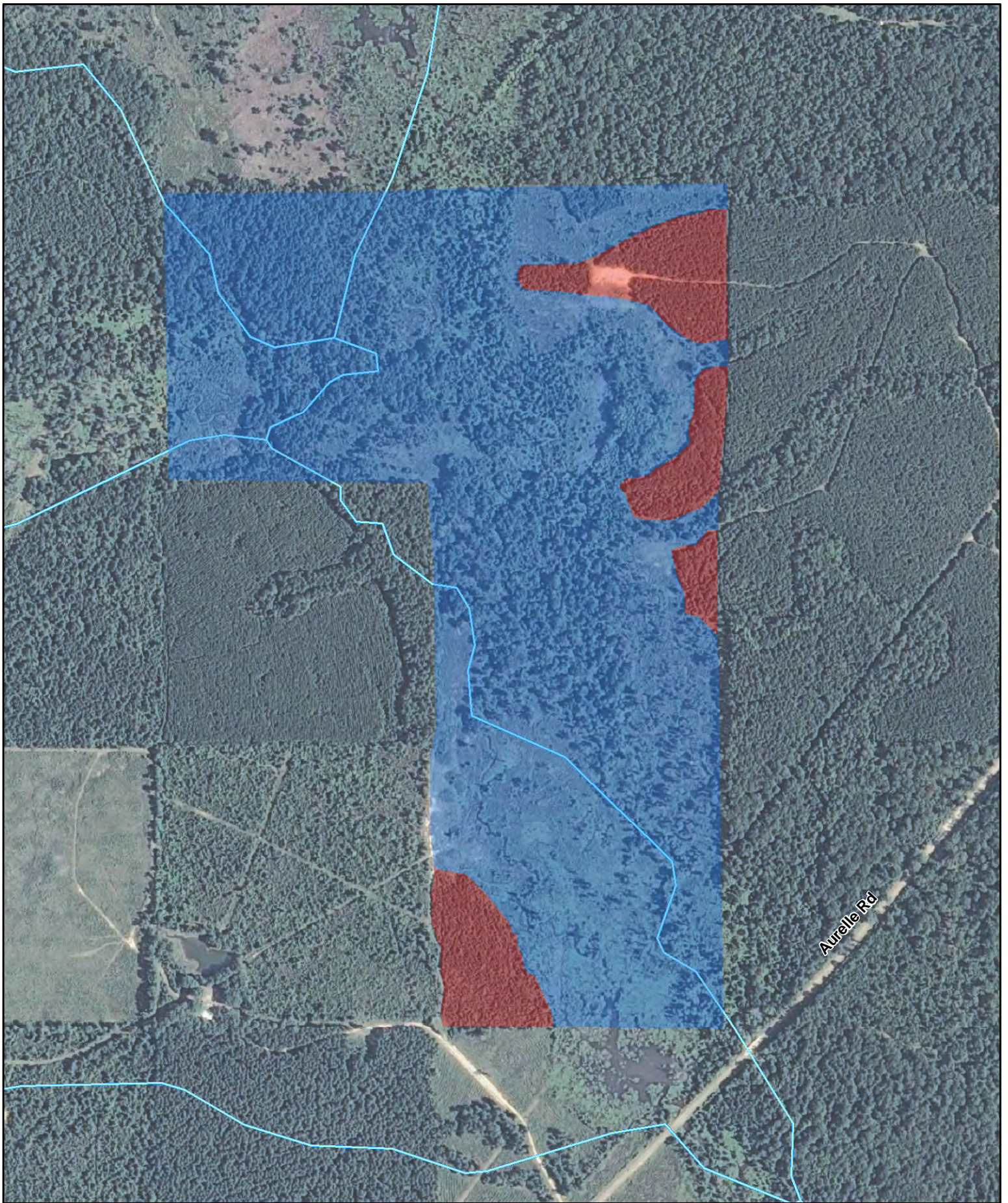
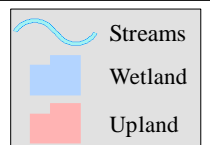


Figure 3
Wetland and Stream Locations



0 250 500
Feet

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Photography Date: Summer 2010

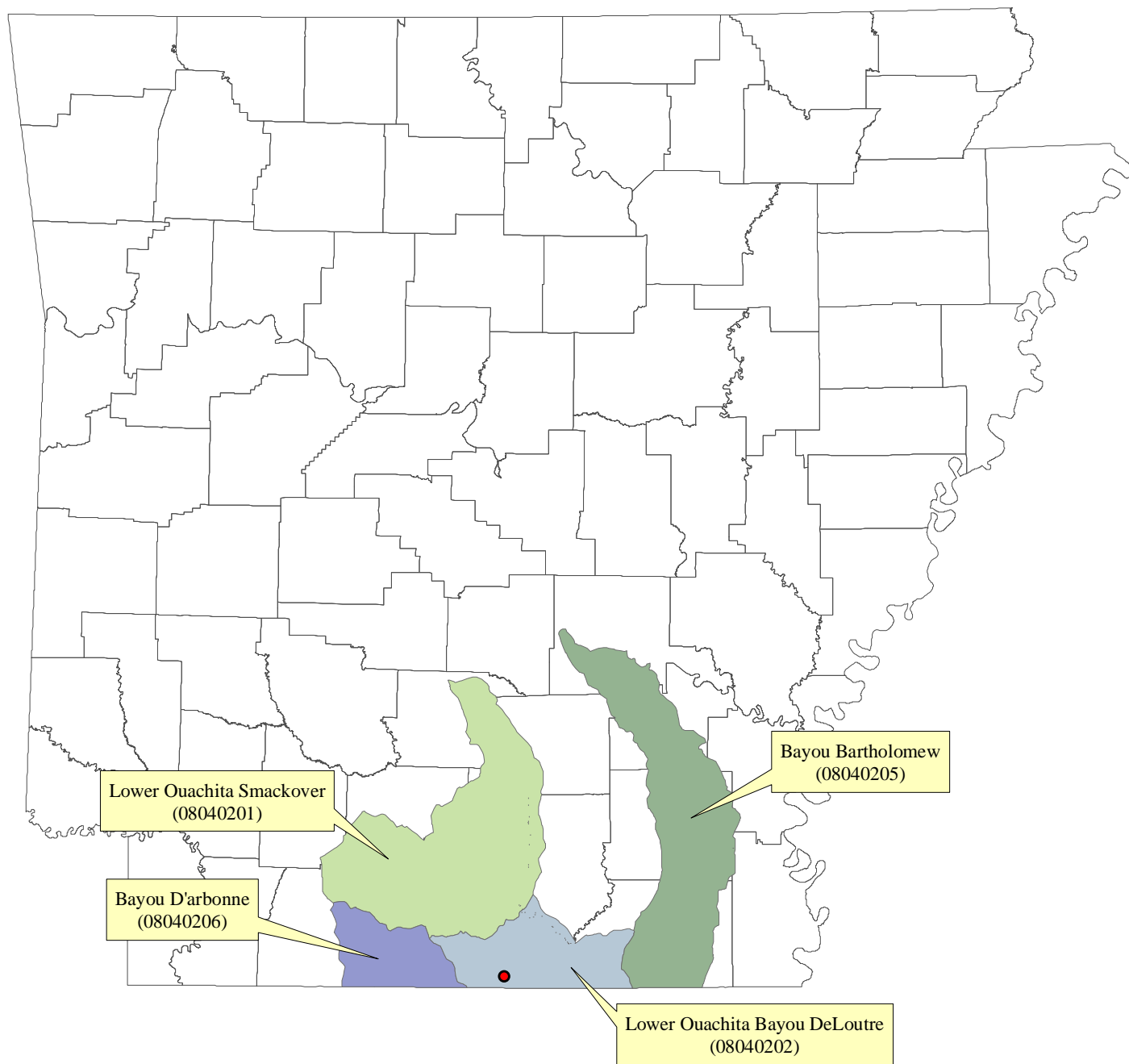
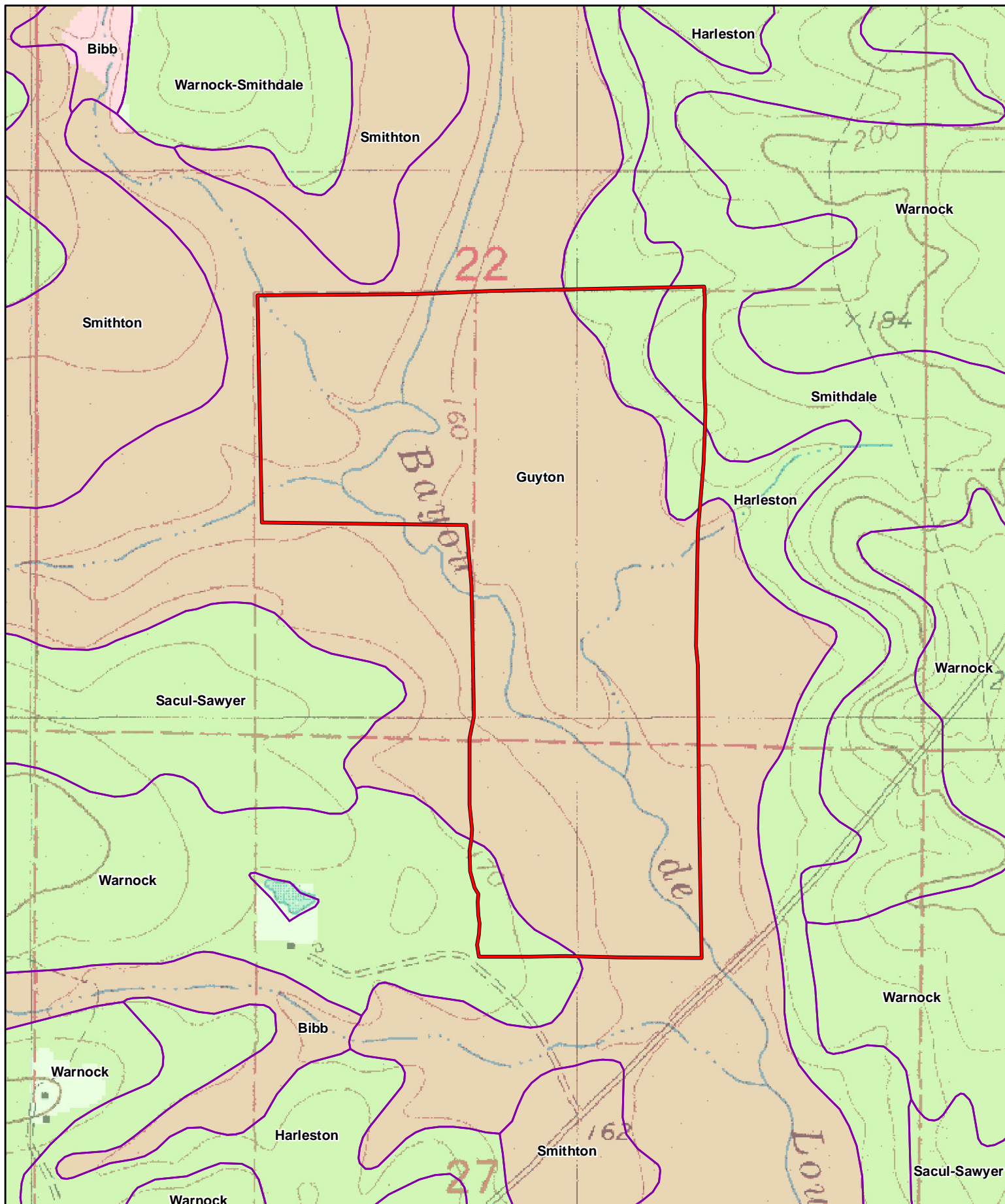


Figure 4
8-Digit HUC Location Map

● Proposed Mitigation Bank





Bayou De Loutre entering property from the west



Wetlands located near the northeast corner of the proposed property.



Wetlands near the north end of the proposed property.



Bayou De Loutre outside the west boundary of the proposed property.