



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
LITTLE ROCK DISTRICT, CORPS OF ENGINEERS
POST OFFICE BOX 867
LITTLE ROCK, ARKANSAS 72203-0867
www.swl.usace.army.mil/

CESWL-RD

February 09, 2012

APPLICATION NO. SWL 2011-00768

PUBLIC NOTICE
CORPS OF ENGINEERS
(30-Day Comment Period)
(Comment Expiration Date – March 09, 2012)

TO WHOM IT MAY CONCERN: Comments are invited on the work described below.
Please see the Public Involvement section for details on submitting comments.

Point of Contact. If additional information is desired, please contact the project manager, Mr. Johnny McLean, telephone number: (501) 324-5295, mailing address: Little Rock District Corps of Engineers, Regulatory Division, PO Box 867, Little Rock, Arkansas 72203-0867, e-mail address: Johnny.L.McLean@usace.army.mil. An electronic copy of the Little Horse Creek Mitigation Bank prospectus can be viewed on the Little Rock District's homepage at <http://www.swl.usace.army.mil/regulatory/notices.html> or a hard copy can be obtained from the Corps of Engineers through the contact information listed above.

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that the Natural State Streams (NSS), LLC has submitted their completed Little Horse Creek Mitigation Bank prospectus. The prospectus outlines the NSS proposal for developing and operating the bank which is known as the banking instrument. After public comments are received and any issues resolved on the prospectus, NSS will submit a draft banking instrument to the District Engineer of the Little Rock District. The District Engineer will distribute the draft banking instrument to the Interagency Review Team (IRT), which is made up of the Corps and the pertinent State and Federal resource agencies. The IRT will review the banking instrument and coordinate with the NSS on any issues until a final banking instrument is completed. Finally, the District Engineer will review the final instrument and make a decision to approve or not approve.

The primary purpose of this bank is to mitigate for unavoidable impacts to streams authorized under Section 404 of the Clean Water Act. Northwest Arkansas is experiencing rapid population growth. The population in Benton County has increased from 153,000 people in 2000 to over 221,000 people in 2010. Real estate development and highway improvements associated with population needs will continue to have significant impacts to streams and wetlands throughout this area. The goal of the bank is to restore, enhance and protect the streams and associated uplands. NSS will also investigate the potential to create some small wetland areas on the property.

The proposed project site is located on Little Horse Creek in section 34, T. 21 N., R. 33 W., approximately two miles south of the City of Sulphur Springs in Benton County, Arkansas. The site is 70 acres in size and is currently a homestead with approximately 30 acres of pasture located in the floodplain. The site has been cleared and managed for cattle for at least 35 years. The remainder of the property, approximately 40 acres, is primarily forested uplands that overlook the floodplain.

Streamflow on the site is primarily groundwater driven. Little Horse Creek is a typical Ozark Highland, spring-fed perennial stream that runs through the middle of the site. In addition to Little Horse Creek, there is a combination of unnamed perennial, intermittent and ephemeral tributaries located on the site. Little Horse flows eastward from the site into Horse Creek. Horse Creek flows northward into Butler Creek within the City of Sulphur Springs. Butler Creek continues to flow northward leaving Arkansas and enters the Elk River at Noel, Missouri. From Noel, the Elk flows northwesterly into Oklahoma to where it enters the Neosho River (Grand Lake of the Cherokees). The Neosho has been dammed several times in Oklahoma, but it eventually flows into the Arkansas River near the City of Muskogee.

The current condition of the streams on the site would be characterized as incised and degraded due to deforestation and cattle management. The streams are in various stages of degradation. The upper segment of Little Horse Creek is relatively stable and could serve as a reference reach, while the middle segment is deeply (as much as 5 feet in some places) incised and the lower segment is aggrading due to a concrete slab county road crossing. Hydrology on the site has been modified through dams, channelization, pipe diversions, etc., to support farming operations. Water is currently diverted through a series of pipes and man-made channels from a perennial on-site spring into two constructed cattle ponds. Converting the land into a mitigation bank will entail excluding cattle from the site, replanting riparian areas, stabilizing the streambanks, removing or lowering dams, and performing in-channel work where appropriate to abate and reverse channel incision and restore the stream network to a stable geomorphic condition. When complete, the project will encompass a fully functional stream network that remains in a long-term stable state of dynamic equilibrium (Rosgen 1996).

The proposed bank site lies within the Elk River 8-digit (11070298) hydrologic unit code (HUC) as designated by the U.S. Geologic Survey (USGS). The 8-digit HUC's in this corner of the state are bisected by the State line and typically credits would only be used for projects in Arkansas. Therefore, NSS proposes that the primary geographic service area for the bank include portions of the following 8-digit HUC's: Elk (11070208), Lake of the Cherokees (11070206), Lower Neosho (11070209), Illinois (11110103), and Robert S. Kerr Reservoir (11010104). Proposed secondary service areas include all of the Frog-Mulberry (11110201) and Dardanelle Reservoir (11110202) 8-digit HUC's.

The pastureland is comprised predominantly of tall fescue (*Festuca arundinacea*). The existing riparian trees include black willow (*Salix nigra*), sycamore (*Platanus occidentalis*), eastern red cedar (*Juniperus virginiana*), persimmon (*Diospyros virginiana*), and bur oak (*Quercus macrocarpa*). The forested upland vegetation consists of northern red oak (*Quercus rubra*), chinquapin oak (*Quercus muehlenbergii*), red maple (*Acer rubrum*), flowering dogwood (*Cornus florida*), black walnut (*Juglans nigra*), mockernut hickory (*Carya alba*), shagbark hickory

(*Carya ovate*), and American elm (*Ulmus americana*). Restoration of riparian and upland areas will attempt to mimic the historic natural vegetation populations to provide soil stabilization and habitat for native wildlife.

According to the Natural Resources Conservation Service's soil survey, the bank site is comprised of the following soils with their respective approximate area coverage in parenthesis: Esah (29.9%), Limestone (21.4%), Clarksville (20.5%), Nixa (15.3%), Summit (11.5%), Waben (1.5%), and Noark (0.1%). NSS proposes to further research the floodplain soils to determine the clay content and the potential to create wetlands.

According to the Arkansas Natural Heritage Commission (2011), Benton County has five Federally endangered and one Federally threatened species. None of these species have been identified on the site, but the Indiana, gray and/or Ozark big-eared bats might benefit from the restored riparian habitat to use as potential foraging areas. Exposed cave formations along the limestone bluff that borders the Little Horse Creek floodplain valley suggest a possible hydrologic connection with karst ecosystems that lie below the ground surface.

The IRT reviewed the draft prospectus and inspected the site in December 2011. They agreed that the site was an acceptable area for development of a bank and offered preliminary comments.

The location, figures and photos for the proposed work are shown on the enclosed Sheets 1 through 9 of 9.

Cultural Resources. The National Register of Historic Places has been consulted; and it has been determined that there are no properties currently listed in the Register, or eligible for inclusion therein, which would be affected by the proposed work. A Corps staff archeologist also will review topographic maps and data on reported sites in the area. If it is determined that further review is not warranted, these reviews will constitute the full extent of cultural resources investigation by this office unless we are made aware, as a result of comments received in response to this notice or by other means, of the existence of specific structures or sites which might be affected by the proposed work.

Endangered Species. Our preliminary determination is that the proposed activity will not affect listed Endangered Species or their critical habitat. A copy of this notice is being furnished to the U.S. Fish and Wildlife Service (USF&WS) and appropriate state agencies and constitutes a request to those agencies for information on whether any listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Flood Plain. We are providing copies of this notice to appropriate flood plain officials in accordance with 44 CFR Part 60 (Flood Plain Management Regulations Criteria for Land Management and Use) and Executive Order 11988 on Flood Plain Management.

Section 404(b)(1) Guidelines. Designation of the proposed disposal site for material associated with this Federal project shall be made through the application of guidelines promulgated by the

Administrator, Environmental Protection Agency (EPA), in conjunction with the Secretary of the Army. These guidelines are contained in 40 Code of Federal Regulations (CFR) 230.

If these guidelines alone prohibit the designation of the proposed disposal site, any potential impairment to the maintenance of navigation, including any economic impact on navigation and anchorage which would result from the failure to use this disposal site, will also be considered.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before March 09, 2012. Substantive comments, both favorable and unfavorable, will be accepted and made part of the record and will receive full consideration in the review of this work. The review will be based on an evaluation of the probable impact, including cumulative impacts of the proposed activity on the public interest. That review will reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing.

Any person may request in writing within the comment period specified in this notice that a public hearing be held in regard to this project. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

NOTE: The mailing list for this Public Notice is arranged by state and county(s) where the project is located, and also includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosures

Approximate Coordinates of Project Center

Latitude: **36.460696** Longitude: **-94.475735**

UTM Zone: **15** Northing: **4036061** Easting: **367769**

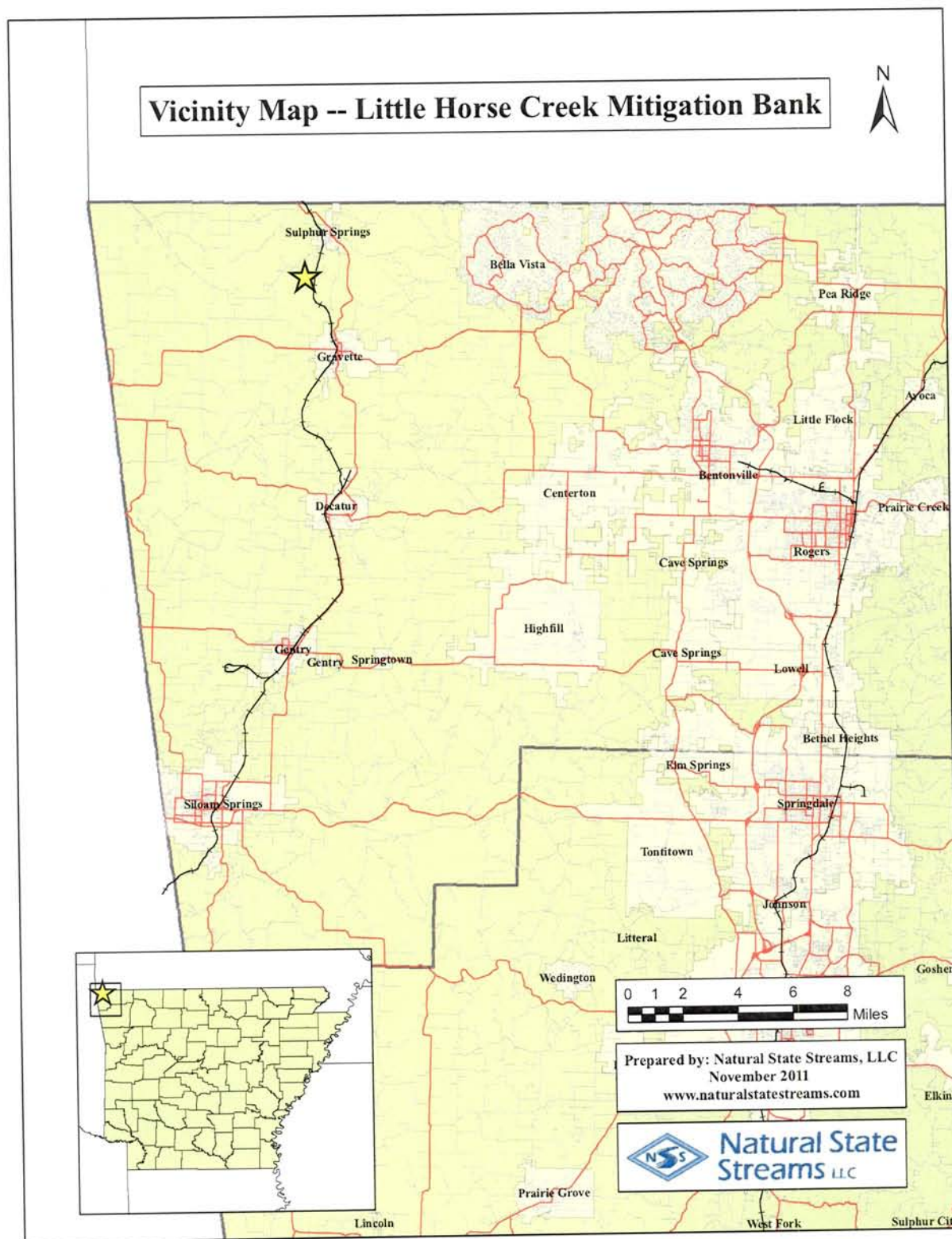


Figure 1. Vicinity Map, Little Horse Creek Mitigation Bank.

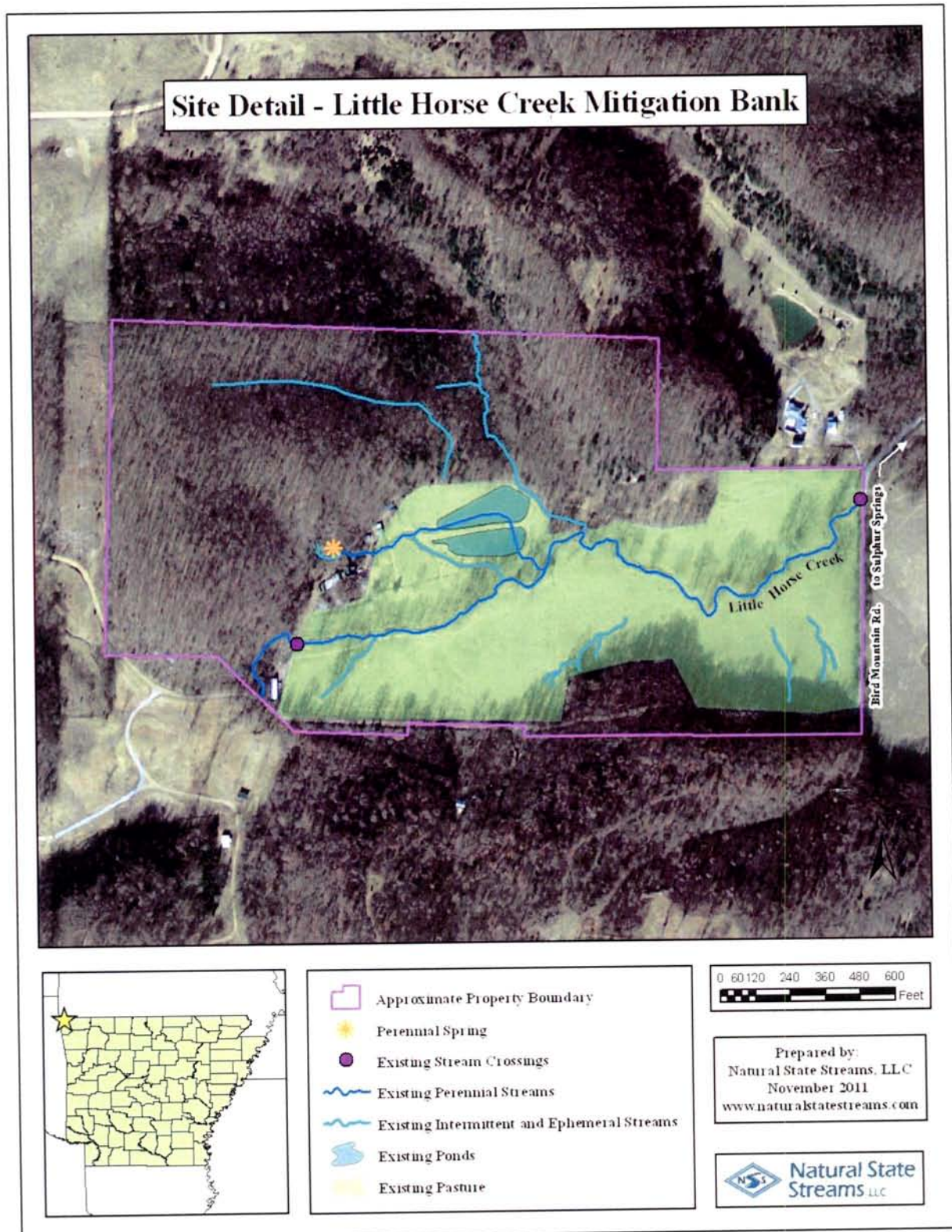


Figure 2. Site Detail, Little Horse Creek Mitigation Bank

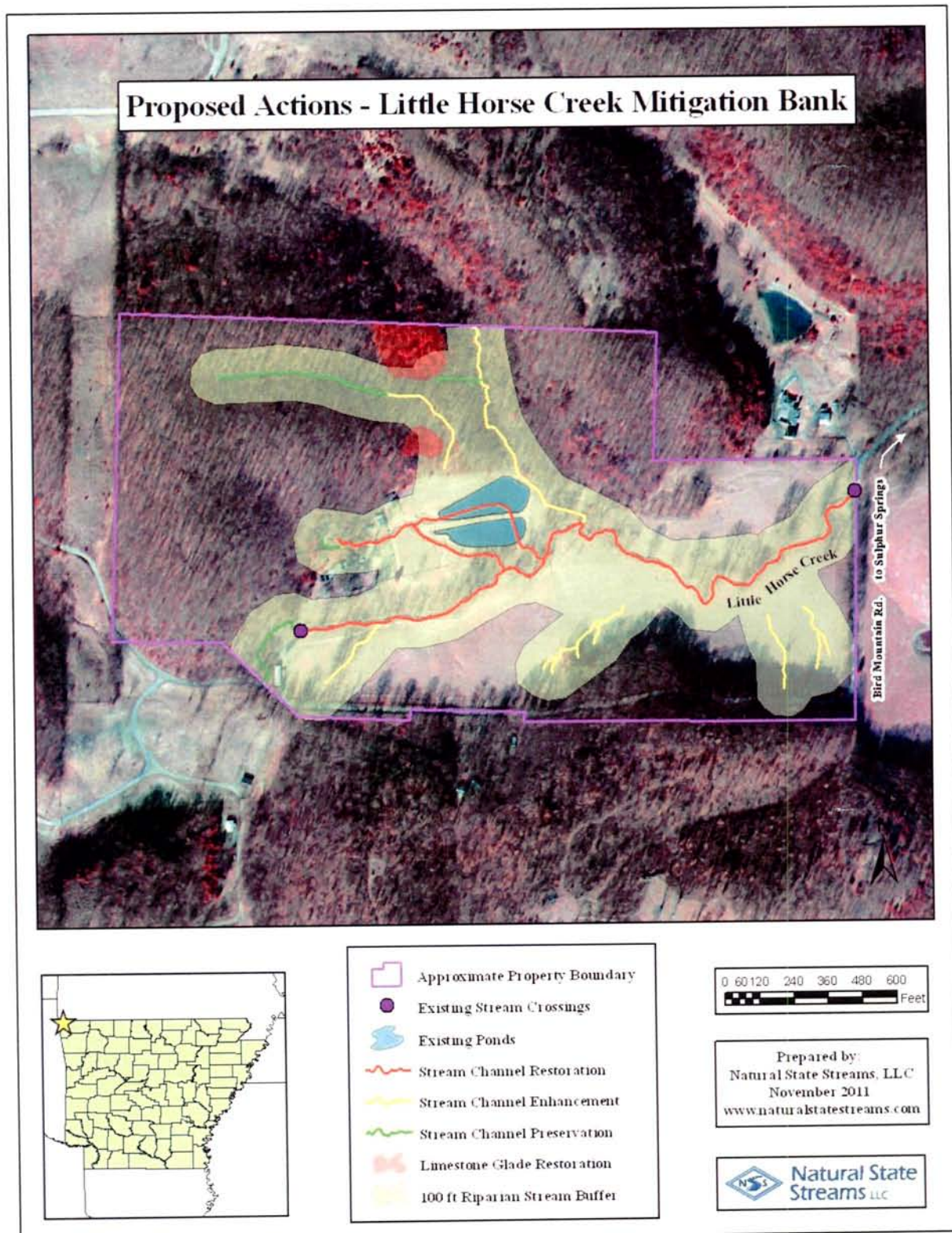


Figure 3. Proposed Actions, Little Horse Creek Mitigation Bank

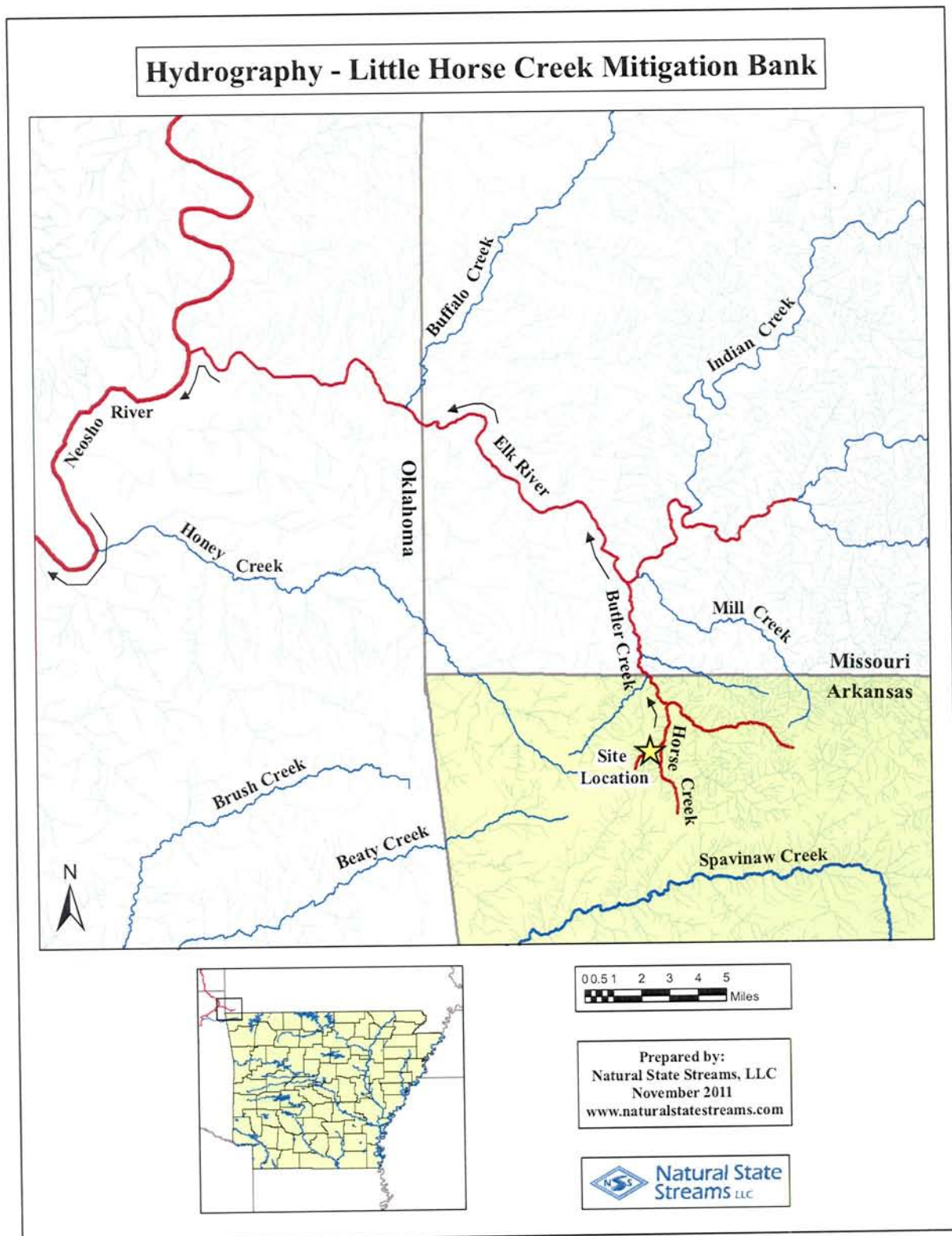


Figure 4. Hydrography, Little Horse Creek Mitigation Bank

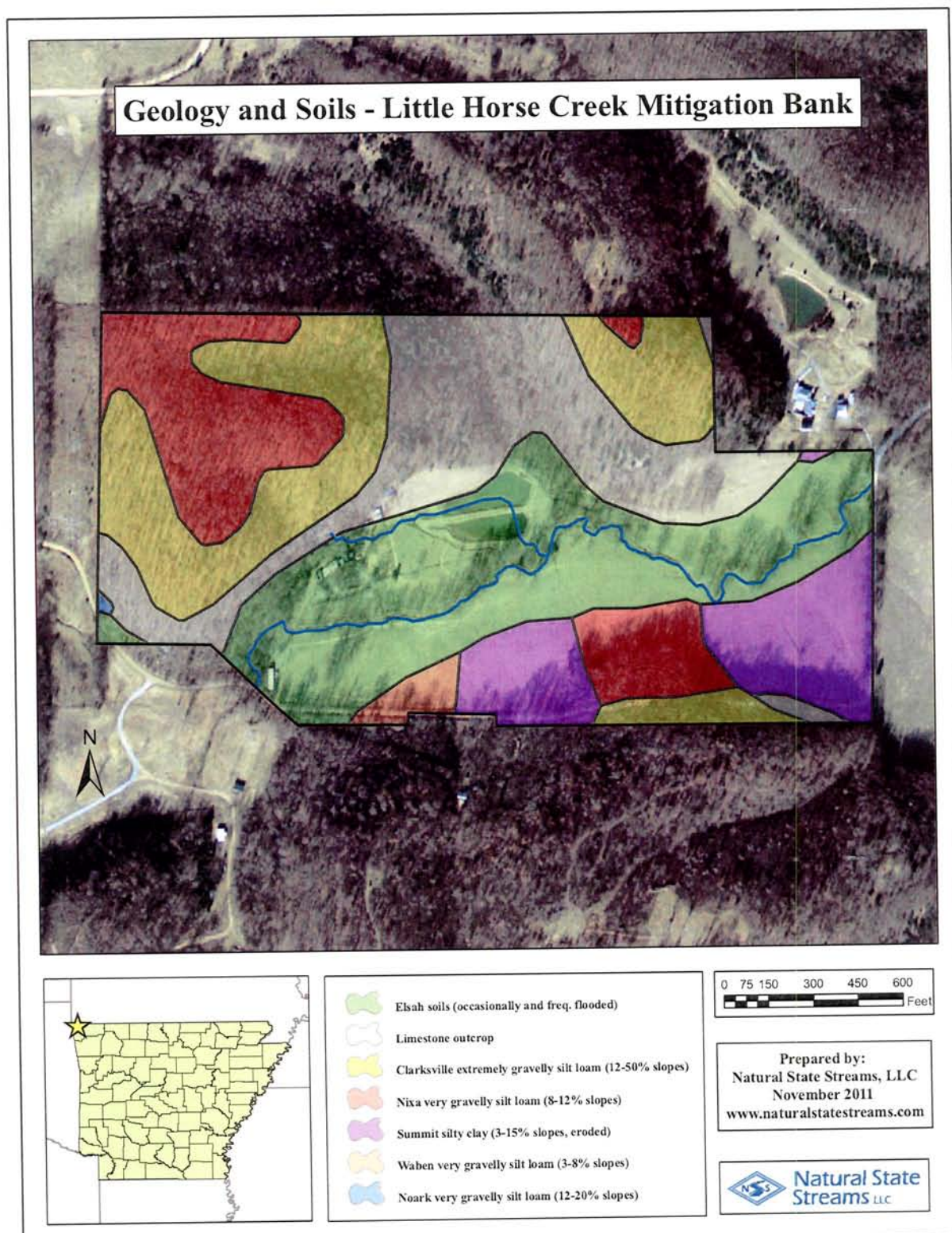


Figure 5. Geology and Soils, Little Horse Creek Mitigation Bank.

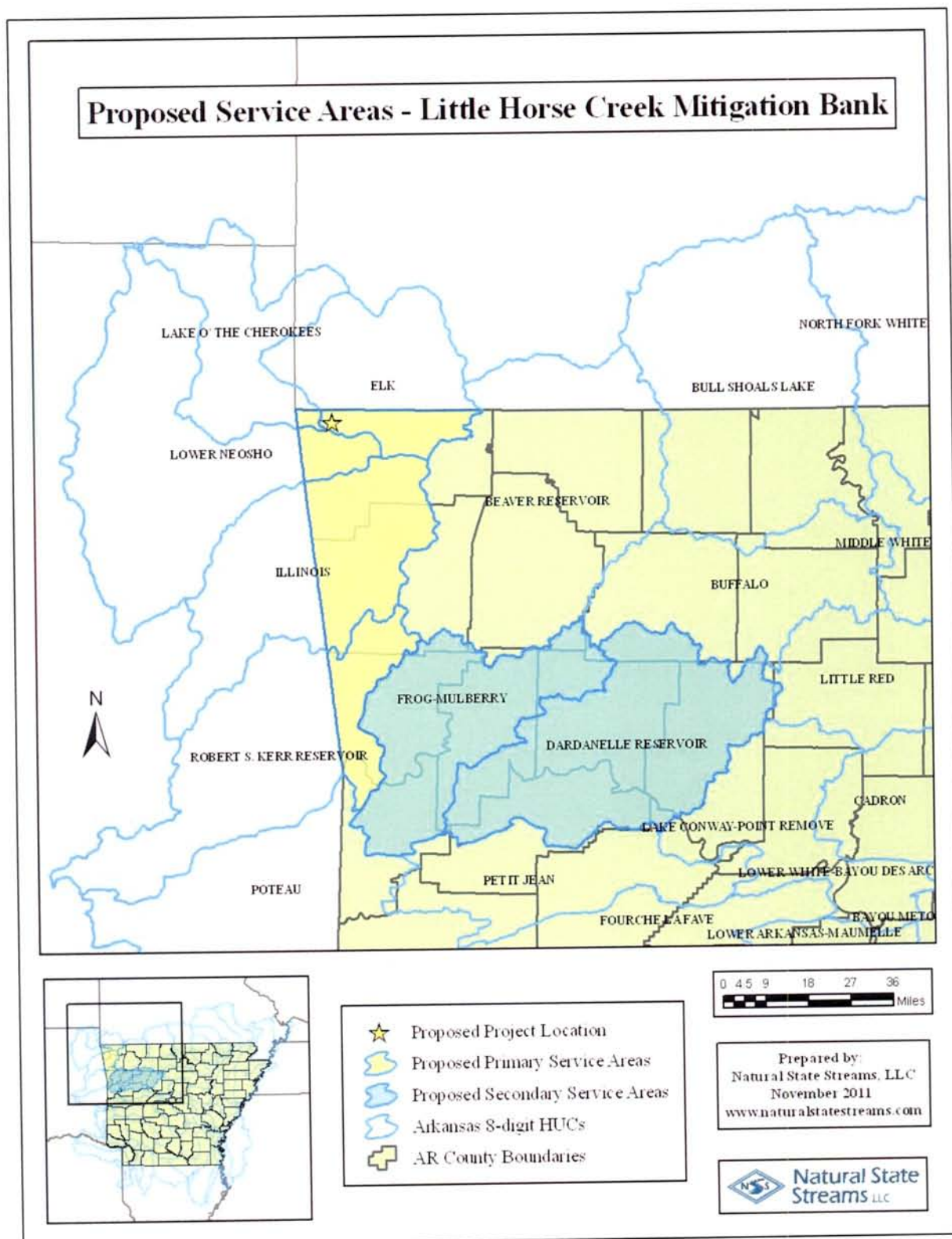


Figure 6. Proposed Service Areas, Little Horse Creek Mitigation Bank

LHCMB Soils		
Soil types	Description	Percent of site
Esah	occasionally and frequently flooded	29.9%
Limestone outcrop	rock	21.4%
Clarksville	extremely gravelly silt loam	20.5%
Nixa	very gravelly silt loam	15.3%
Summit	silty clay	11.5%
Waben	very gravelly silt loam	1.5%
Noark	very gravelly silt loam	0.1%

Table 1. Little Horse Creek Mitigation Bank Soils

Benton County Species of Concern				
Name	Common Name	Federally Listed	Global Ranking	State Ranking
<i>Cambarus aculabrum</i>	Cave crayfish	Endangered	G1	S1
<i>Nicrophorus americanus</i>	American burying beetle	Endangered	G2,G3	S1
<i>Amblyopsis rosae</i>	Ozark cavefish	Threatened	G3	S1
<i>Myotis grisescen</i>	Gray bat	Endangered	G3	S2,S3
<i>Myotis sodalist</i>	Indiana bat	Endangered	G2	S1
<i>Plecotus townsendii ingens</i>	Ozark big-eared bat	Endangered	G4T1	S1

Table 2. Federally-tracked Species in Benton County, Arkansas

LHCMB Proposed Service Areas				
Primary Service Area	HUC Unit	Total Square Miles	Total Square Miles in AR	HUC in AR
Elk	11070208	1036.7	224.1	21.6%
Lower Neosho	11070209	2213.7	144.1	6.5%
Illinois	11110103	1640.8	748.1	45.6%
Robert S. Kerr Reservoir	11010004	1808.7	360.4	19.9%
Lake O' the Cherokees	11070206	918.8	19.7	2.1%
Secondary Service Area				
Frog-Mulberry	11010003	1267.3	1267.3	100%
Dardanelle Reservoir	11110202	1858.2	1858.2	100%

Table 3. Little Horse Creek Mitigation Bank Proposed Service Areas



Upper Reach (Stable Segment) of Little Horse Creek on the NSS Property



Scour Hole and Channel Incision Immediately Below the Uppermost Road Crossing on the Property



Middle Reach of Little Horse Creek Showing Erosion, Incision, and Deforested Riparian Areas



Lower Reach of Little Horse Showing Deforestation and Aggradation Upstream from County Road

