

GROTTO SPRINGS RANCH, LLC.  
101 NEWNATA CUTOFF  
MOUNTAIN VIEW, ARKANSAS 72560

**RATTLESNAKE CREEK  
STREAM MITIGATION BANK  
DRAFT PROSPECTUS**



**DECEMBER 2011**

## **INTRODUCTION**

Grotto Springs Ranch, LLC., (Sponsor) proposes to establish the Rattlesnake Creek Stream Mitigation Bank (Bank) on an unnamed tributary to South Sylamore Creek in southwestern Stone County, Arkansas. The purpose of the Bank is to provide offsite compensation for the unavoidable loss of stream functions and values as a result of adverse aquatic resource effects resulting from development projects authorized under the Clean Water Act, provided such activities have met all applicable requirements and are authorized by the appropriate agencies.

## **ESTABLISHMENT OF THE BANK**

- A. Mitigation Banking Instrument (MBI): The bank Sponsor proposes the stream mitigation bank for administering mitigation projects. The forthcoming MBI and the development and operation of the Bank will be in accordance with the “Compensatory Mitigation for Losses of Aquatic Resources: Final Rule, 33 CFR 332” and will follow the most current version of the Mitigation Banking Template provided by the Little Rock District, U.S. Army Corps of Engineers (COE). The Sponsor proposes a combination of restoration, enhancement, and preservation of riparian systems and the associated streams for the purpose of generating compensation credits. The Sponsor will provide for the long-term preservation and management of the project areas included in the stream mitigation bank.
- B. Permits: The Bank Sponsor will obtain all documentation, permits, and other authorizations required to establish and maintain the Bank in accordance with applicable laws and regulations.
- C. Mitigation Plan: A MBI will be developed to provide the framework for the mitigation banking program. Mitigation sites included in the MBI will be designed by developing mitigation plan(s) that will be submitted to the Interagency Review Team (IRT) for review and approval. Development of the mitigation sites will begin with the submission of a conceptual mitigation plan to the IRT for evaluation. If the IRT’s review of the conceptual mitigation plan is favorable and the site is determined to be a feasible project, the Sponsor will proceed with preparing the final mitigation plan. Once developed, the final mitigation plan will be submitted to the IRT for review and approval. Upon approval, the final mitigation plan for the mitigation site will be attached to the MBI, and the mitigation bank site plan will be deemed a component of the MBI. Credits will be released consistent with the schedule of credit availability in accordance with the final mitigation plan. The approved mitigation bank site may be left undeveloped if no pre-sale or other credits have been debited from the site. In the event the final mitigation plan is not approved, the IRT will provide the Sponsor with specific reasons for not approving the submittal. The Bank Sponsor may resubmit a revised final mitigation plan with specific modifications or justifications that address the IRT concerns.

- D. Financial Assurance Requirements: The Bank Sponsor will provide financial assurance for the Bank as part of the mitigation plan. Acceptable forms of financial assurance will be established in the MBI.
- E. Real Estate Provisions: The Bank Sponsor will record a restrictive covenant, easement, or similar maintenance agreement for the Bank by amendment. This agreement may also be transferable to an acceptable conservation organization upon fulfillment of project objectives with Bank site ownership remaining with the titled owner. The Sponsor will provide for the perpetual protection and preservation of the mitigation bank through maintenance agreements, restrictive covenants or conservation easements. These provisions will conform to the current Little Rock District COE guidance with language to allow for acceptable agricultural practices, road easements, road/bridge crossings, hike/bike trails, or other activities. Each real estate instrument used must be approved by the IRT.

#### **OPERATION OF THE BANK**

- A. Conditions on Debiting (Credit Availability and Accounting Procedures): The Sponsor will establish and maintain a banking ledger which documents credits and debits to the mitigation bank account. The Sponsor will also generate an annual ledger report to be submitted to all members of the IRT. The ledger will be available for inspection upon written request by any participating agency.
- B. Use of Credits: Projects eligible to use the Bank include all activities regulated under Section 404 of the Clean Water Act located within the Geographic Service Area (GSA) of the stream Bank. Limited use of the Bank for projects outside of the GSA may be considered by the IRT on a case by case basis.

#### **MAINTENANCE AND MONITORING OF THE BANK**

- A. Maintenance, Monitoring and Success Criteria: The Bank Sponsor will provide the IRT 'as-built' drawings of the mitigation activities once construction is completed. The Bank Sponsor will provide maintenance and monitoring in accordance with terms and conditions outlined in the MBI and mitigation plan following the completion of construction and planting. Monitoring will include data collection for the indicators of success specified at the Bank site. Monitoring reports will be submitted to the IRT according to the schedule set forth in the mitigation plan and will be used to evaluate site performance relative to the performance criteria established in the mitigation plan. Remedial action may be necessary during the operational life of the Bank to meet the performance criteria. If the Sponsor does not follow the approved site development plan and as a result, the performance criteria are not achieved, the Sponsor will implement corrective measures to achieve performance criteria or identify other successful areas not previously monitored for compensation credit within the Bank. If

the Sponsor has followed the approved plan but the performance criteria are still not fully met, the IRT will work cooperatively to determine measures to achieve the performance criteria while minimizing additional costs.

- B. Long-Term Protection: Decisions concerning the operational life of the Bank, long-term monitoring/management, remedial actions, and financial assurances will be made in accordance with Section II.E. of the Federal Banking Guidance (November 28, 1995). These decisions will be agreed upon in the final Bank mitigation plan signed by the Bank Sponsor and the participating agencies.
- C. Long-Term Management and Maintenance Plan: The Long-Term Management and Maintenance Plan will contain specific objectives that address the long-term management of the Bank Site. The Long-Term Steward will document that it is achieving each objective or standard by submitting status reports to the IRT on a schedule approved by the IRT. A primary goal of the Bank is to create a self-sustaining natural aquatic system that achieves the intended level of aquatic ecosystem functionality with minimal human intervention, including long-term site maintenance. Natural changes to the vegetative community, other than changes caused by nonnative/invasive weeds, that occur after all Bank performance standards have been met are not expected to require remediation. The Long-Term Management Plan will include as appropriate the following provisions for:
  - 1) Periodic patrols of the Bank Site for signs of trespass and vandalism. Maintenance will include reasonable actions to deter trespass (*e.g. mark property boundaries*).
  - 2) Monitoring the condition of structural elements of the Bank such as fencing, stream rehabilitation structures, roads, and bridges. The Long-Term Management and Maintenance Plan will include provisions to maintain and repair these improvements as necessary to achieve the objectives of the Bank and comply with the provisions of the real estate instrument providing protection to the site. Improvements such as access roads, berms, or water control structures that are no longer needed to facilitate or protect the ecological function of the Bank Site may be removed or abandoned if consistent with the terms and conditions of the recorded real estate instrument.
  - 3) Inspection of the Bank annually to locate invasive species. Any invasive plant species discovered on the Bank and occupying more than 5% cover in any given cell, field, or block should be controlled. In the event the IRT determines that the watershed or drainage basin within which the Bank is located becomes infested with these species in the future, so that their effective control on the Bank is either no longer practicable or unreasonably expensive, the IRT will consider appropriate changes to the Long-Term Management Plan. Funds from the

Catastrophic Event & Long-Term Management Fund may be used for provisions (1)-(3) above.

### **RESPONSIBILITIES OF THE INTERAGENCY BANK REVIEW TEAM**

The IRT agrees to:

- A. Review and provide comments on conceptual and final mitigation plan submittals within 60 days of receipt.
- B. Review and provide comments on annual reports within 60 days of receipt.
- C. Review and provide comments on adaptive management plans and/or required remedial actions plans within 60 days of receipt.

### **RESPONSIBILITIES OF THE BANK SPONSOR**

The Sponsor agrees to:

- A. Establish and/or maintain the Bank until (1) credits have been exhausted and the debited Bank has satisfied all conditions in the approved mitigation plan, or (2) banking activity is voluntarily terminated through written notice by the Sponsor with approval of the IRT.
- B. Submit to the IRT an annual report describing the condition of the Bank site in relation to the success criteria outlined in the final mitigation plan, as well as relating the overall activity of the Sponsor.
- C. Develop a Long-Term Management and Maintenance Plan and/or implement appropriate remedial actions for mitigation sites in coordination with the IRT in the event the mitigation site fails to achieve the success criteria specified in the final mitigation plan.
- D. Assign its long-term management and maintenance responsibilities to the current landowner at the end of the active monitoring period, which will then serve as a Long-Term Steward (either the landowner or easement holder) in place of the Sponsor.

### **BANK SITE DETAILS**

- A. **Project Goals and Objectives:** The goal of the Bank is to restore and preserve self-sustaining, functional stream corridors to replace the functions and values lost from adverse effects to streams due to various authorized development projects within the

Middle White River Watershed (and other watersheds approved by the IRT). The Sponsor proposes to meet the Bank goals through the restoration, enhancement, and preservation of all perennial, intermittent and ephemeral stream channels onsite and the re-establishment and/or preservation of their associated riparian buffers. Some of the targeted aquatic functions to be restored or enhanced include improvements to wildlife habitat, water quality, flood conveyance, and erosion control through the implementation of natural channel design. Restoration modifications may include but are not limited to natural channel design techniques, channel cross section and pattern alterations, bank stabilization, in-stream structures, removal of impoundments, replacement of low water crossings with span bridges and establishment of forested/vegetated riparian buffers. The size of the riparian buffer may vary throughout the project site; however the Sponsor proposes to establish this buffer with a width no less than 50 feet and no more than 100 feet from the stream banks.

- B. Site Selection: The proposed Bank is located approximately eight miles southwest of Mountain View, Arkansas. A vicinity map showing the proposed bank location is included as Appendix 1. Driving directions from Timbo, Arkansas are as follows:

- Drive East on Highway 66 approximately 0.9 miles to Blue Mountain Road
- Turn right onto Blue Mountain Road and drive approximately 1.8 miles
- Turn right on Newnata Cutoff and drive approximately 2.1 miles to the end
- Newnata Cutoff ends at the property (101 Newnata Cutoff)

The primary Geographic Service Area (GSA) for the Bank is the Middle White Watershed as defined by Hydrologic Unit Code (HUC) 11010004. Proposed primary watersheds also include sub-watersheds of the adjacent Little Red River (HUC 11010014) that do not support threatened or endangered species and include Greers Ferry Lake (HUC 1101001406), Little Creek-Big Creek (HUC 1101001408) and Ten Mile Creek-Little Red River (HUC 1101001409), Wilburn Creek-Little Red River (HUC 110100140701), Sulphur Creek-Little Red River (HUC 110100140704), Cedar Branch-Little Red River (HUC 110100140706), Fourteen Mile Creek (HUC 110100140705), Pee Dee Creek-South Fork Little Red River (HUC 110100140205), Weaver Creek (HUC 110100140403), Wild Goose Creek-Middle Fork Little Red River (HUC 110100140405) and Little Red River-Greers Ferry Lake (HUC 110100140506). The proposed secondary GSA would include the adjacent Buffalo River Watershed (HUC 11010005). A HUC map illustrating the Geographic Service Area of the proposed project will be included in the forthcoming mitigation banking instrument.

- C. Landowner information and Sponsor qualifications: The proposed mitigation bank site is owned by Mitch Wine. The landowner owns 140 acres of the property with the remaining 25 acres under contract for purchase. The landowner will control all mineral rights.

Property Owner:

Mitch Wine  
101 Newnata Cutoff  
Mountain View, Arkansas 72560  
501-350-7663

Sponsor:

Grotto Springs Ranch, LLC.  
101 Newnata Cutoff  
Mountain View, Arkansas 72560  
501-350-7663

The Sponsor has trained in Rosgen Level I and II river morphology concepts and stream restoration techniques and has over seven years of experience reviewing mitigation bank development, construction and monitoring. The Sponsor will ensure that consultants contracted to remediate the Bank be properly licensed and bonded and possess the necessary stream restoration expertise. Additionally, the risk of site failure at the proposed Bank is considered very low due to the non-complex nature of the proposed restoration activities as well as the protected location upon the landscape.

- D. Baseline site conditions: The Bank contains first and second order unnamed spring fed tributaries to South Sylamore Creek in the Middle White River Watershed. A preliminary jurisdictional determination that streams found on the Bank site could be used for mitigation purposes was transmitted from the U.S. Army Corps of Engineers Little Rock District on August 17, 2011 (file number 2011-00428).

The approximately 165 acre property currently supports a livestock operation and was formerly used for rock harvesting operations. The property is situated on the border of the Ozark Highlands and Boston Mountains ecoregions in Rattlesnake Hollow within the Blue Mountain Range at the northern boundary of the Fayetteville Shale formation in karst topography. The property is approximately 30% Bermuda/fescue grass pasture in the lower lying areas with some honey locust and eastern red cedar. The remaining 70% is oak-hickory dominated steep valley walls that were heavily logged within the past 25 years. There are three known caves on the property, two of which are spring fed along with numerous springs, seeps and artesian wells. Cave surveys have identified several sensitive species including cave salamanders, grotto salamanders and several species of bats. ANABAT surveys have also indicated the presence of federally listed endangered gray bats and endangered Indiana bats on the property. Springs on the property provide year round water supplies for the occupying landowners.

The property encompasses more than 8,700 linear feet of perennial, intermittent and ephemeral streams many of which have been detrimentally affected by livestock grazing, rock harvest operations and timber harvest. Several of the springs and streams

have been impounded and livestock granted full access to ponds, streams and riparian areas. Riparian areas are inadequate or extremely limited (< 10 feet) along many of the stream reaches. Low water fords and culverts along the road servicing the property also contribute to erosion and present aquatic organism movement barriers. Clearing of pasture land resulted in rock levees along portions of the streams that impede floodplain function and cause erosion and instability in the stream channel. Site photographs are included in Appendix 2. Additional conditions include:

Soils: According to the U.S. Department of Agriculture Natural Resource Conservation Service online soils database, the Bank site is primarily characterized by Nella-Enders complex (8-20% slopes) in the lower lying elevations and Eden-Moko associations (very steep slopes) on the valley walls. Nella-Enders being a well-drained gravelly fine sandy loam and Eden-Moko a well-drained silty clay loam.

Stream assessments: Over 8,700 linear feet of perennial, intermittent and ephemeral streams have been delineated on the property (Appendix 3) using GPS enabled field surveys along with historical and current aerial imagery and topographic maps. Further assessment of stream types and functions will be provided in the mitigation banking instrument and mitigation plan, following IRT field investigations.

Adjacent properties: Adjacent properties include a hunting club and mostly rural livestock operations. The Bank site is isolated from other properties due to the rugged topography and the fact that the county road ends at the property boundary with no other access points available.

Threatened and endangered species: The Arkansas Natural Heritage Commission database does not indicate that federally listed species inhabit the property. However, U.S. Fish and Wildlife Service personnel have detected the presence of two federally endangered bat species, gray bats and Indiana bats, via ANABAT acoustic technologies on two separate field investigations at the property. Proper consultation will be undertaken to ensure that establishment of the Bank does not adversely affect listed species.

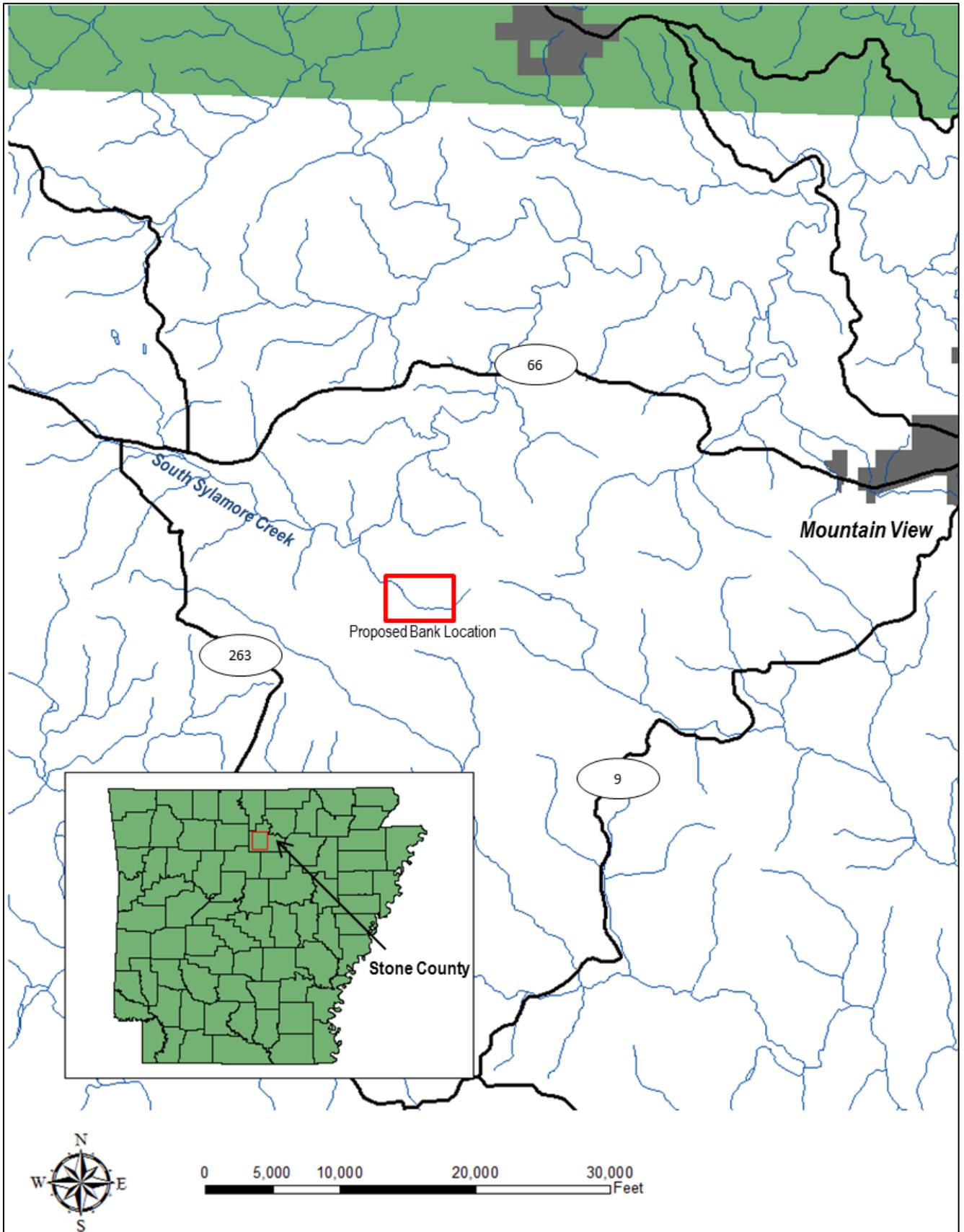
Cultural resources: The Bank site shows signs of use by Native Americans, such as grindstones and arrowheads. However, most superficially salvageable artifacts have been removed from the property by previous owners. Proposed remediation of the site requires minimum ground disturbance and should not adversely affect cultural resources.

The Sponsor proposes to restore and enhance these degraded resources in an effort to improve water quality and increase wildlife habitat. Restoration and protection of these stream resources will safeguard them from potential unsustainable development and detrimental agricultural practices. Streams and riparian buffers onsite will continue to

provide important ecological benefits to fish and wildlife habitat within the sensitive karst landscape through enhancement and protection of water quality.

- E. Establishment and use of credits: Preliminary stream credit determination will be calculated according to the *Little Rock District Stream Method* using field data collection along with aerial imagery and topographic maps. These preliminary values will be subject to revision following a final stream delineation and assessment.

Appendix 1: Vicinity Map  
Proposed Rattlesnake Creek Mitigation Bank, Stone County, Arkansas

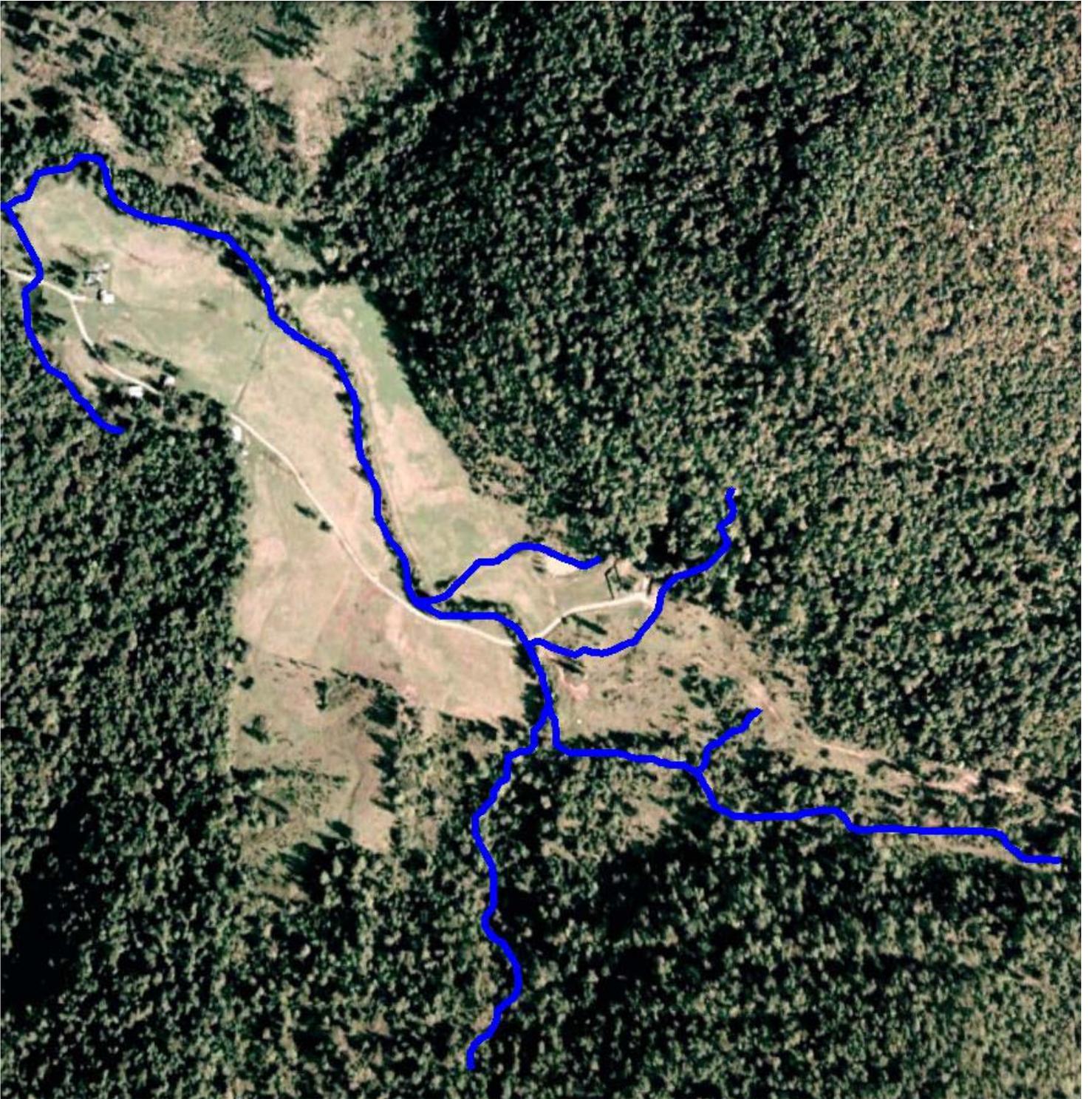


Appendix 2: Site Photos  
Proposed Rattlesnake Creek Mitigation Bank, Stone County, Arkansas



Top left: spring pond with cattle access fed by cave spring  
Top right: cattle in outflow of spring pond  
Middle left: eroding gravel road leading to stream crossing  
Middle right: cattle in main tributary  
Bottom left: spring box to 1.5 mile long cave

Appendix 3: Delineated Streams  
Proposed Rattlesnake Creek Mitigation Bank, Stone County, Arkansas



Appendix 4: Stream Restoration, Enhancement and Preservation Activities  
 Proposed Rattlesnake Creek Mitigation Bank, Stone County, Arkansas

