

# Falcon SP Mitigation Bank Prospectus



Prepared by:



**GBM & ASSOCIATES**  
SUSTAINABLE ENVIRONMENTAL CONSULTING

*Prepared for:*  
*WYCAR Land Company, LLC*

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## **APPENDICES**

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- Appendix A - Preliminary Jurisdictional Determination Map
- Appendix B - Site Photos
- Appendix C - Proposed Restoration and Enhancement Map

## **1.0 INTRODUCTION**

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The following report summarizes the mitigation potential on approximately 557 +/- acres located in Sections 7/12/13/18, Township 16 South, Ranges 22/23 West, in Lafayette and Nevada Counties, Arkansas (Figures 1 and 2). The property is centered at Latitude 33.443234°N, Longitude 93.434255°W.

The purpose of this report is to summarize the existing conditions for the proposed Falcon SP Mitigation Bank (“FMB”) and assess the potential for establishing a mitigation bank to provide compensatory credits for unavoidable impacts to wetlands and streams associated with the Department of the Army (DA) permits authorized under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act issued by the US Army Corps of Engineers (USACE), in the Vicksburg District.

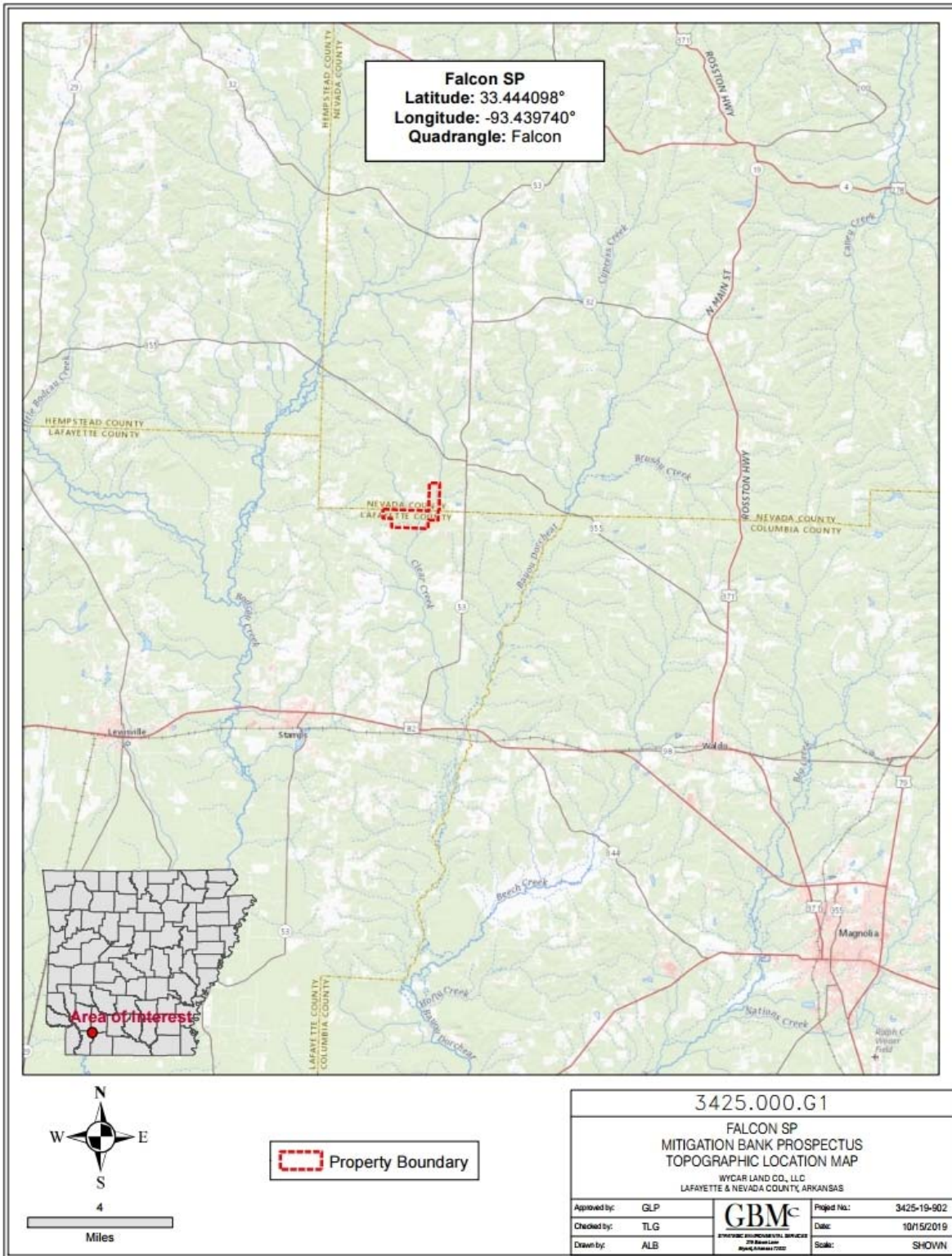


Figure 1. Location Map.

## 2.0 GOALS AND OBJECTIVES

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The proposed FMB will encompass approximately 557 +/- acres. The goal of WYCAR Land Company, L.L.C. (“WYCAR”) is to create and establish a sustainable bottomland hardwood and stream restoration ecosystem on the 557 +/- acres as defined in this report.

WYCAR, the bank Sponsor, proposes to create 557 +/- acres as a sustainable bottomland and stream ecosystem by restoring and/or enhancing the streams, stream buffers, and wetlands on the property. Currently there are approximately 30,950 linear feet of streams and 214 acres of wetlands on the property.

The preliminary fluvial morphology characterizations are based upon visual observations, made along the existing reaches of streams during a preliminary field investigation, desktop analysis of the stream plan forms and drainage areas, and hydraulic geometry relationships, often referred to as Regional Curves, developed for streams in the region. The intent of this preliminary assessment was not to implement a full fluvial geomorphological assessment of the streams for the purposes of establishing the baseline conditions required for restoration design. Rather, the intent was to confirm visual observations of numerous indicators that the streams located at the site are impaired in their dimension, pattern and profile, and that as such they are in need of re-establishment and/or enhancement/rehabilitation.

Prior to development of the Draft Mitigation Bank Instrument (“DMBI”), all stream reaches on the site will be surveyed by qualified stream restoration engineers and scientists to document their existing baseline conditions. These assessments will include full fluvial geomorphological stream characterization and classification assessments in accordance with the protocols set forth by Rosgen (1996 and 2006). The full fluvial geomorphological assessment will yield the exact levels of impairment and the appropriate form of restoration to be implemented on each separate and discernable stream reach on the site.

WYCAR intends for the FMB to serve as a stream restoration and bottomland hardwood mitigation bank offering for sale, wetland mitigation and stream credits for unavoidable impacts to wetlands and streams associated with Department of the Army (“DA”) Section 404 permits. A conservation servitude will be executed for both types of the mitigation implemented. Through a contractual agreement with permit recipients, WYCAR will, for a fee to be paid by permittees, commit to implementing the mitigation specified in DA Section 404 permits and incur the responsibility of the long-term maintenance, management, protection and overall success of the FMB.

## **3.0 PROPERTY OWNERSHIP**

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**a. Ownership**

The sponsor for the project is WYCAR Land Company LLC, and they hold the legal mitigation rights of the land in the proposed Falcon Mitigation Bank.

**b. Servitudes/Easements**

A county road with potential easements transects the site.

**c. Liens/Encumbrances/Restrictions**

Currently there are no known liens, encumbrances, or restrictions on the property proposed for the mitigation bank.

## **4.0 SITE LOCATION**

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The tract is located approximately 6.50 miles northeast of Stamps, AR (Figure 1). Access to the tract is gained via County Road 41, which transects the western portion of the tract. The FMB is centered at Latitude 33.443234°N, Longitude 93.434255°W in Sections 7/12/13/18, Township 16 South, Ranges 22/23 West, in Lafayette and Nevada Counties, Arkansas (Figure 1). Lafayette and Nevada Counties have a humid, subtropical climate characterized by relatively high rainfall (52.6 inches) in average years. The average frost free period is 229 days a year, (<https://websoilsurvey.sc.egov.usda.gov>).

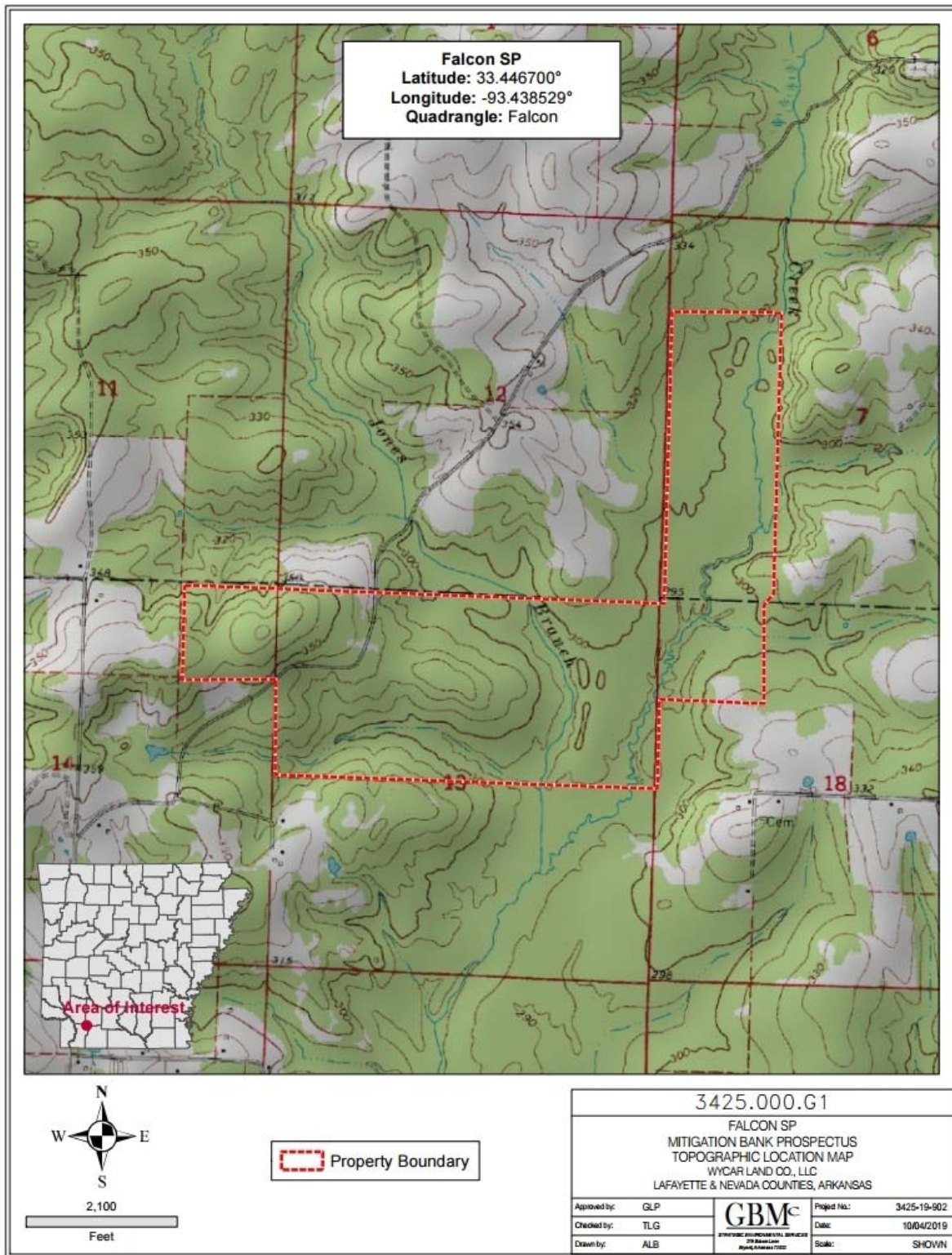


Figure 2. Topo map of site.



## 5.0 EXISTING LAND USE

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The property makes up approximately 0.84 mi<sup>2</sup> of the 10.43 mi<sup>2</sup> watershed. The tract is located within the Clear Creek-Bayou Dorcheat watershed. Land uses within the property boundary consist of forest land (86.4%), wetlands (11.1%), scrub/shrub (1.3%), development (1.1%), and open water habitat (0.1%). Surrounding land uses within the watershed consist mainly of forested land, pasture/hay, and grassland/herbaceous (Figure 3).

The subject property is entirely maintained as forest land, excluding County Road 41 and its right-of-way, which transects the western portion of the property. Intermittent and perennial stream reaches are present on the property. Non-riparian areas are maintained for silviculture activities. Clear Creek (an intermittent/perennial stream) flows in a general north to south direction along much of the eastern portion of the property. Jones Branch (a perennial stream) flows from north to south across the central portion of the site. An unnamed intermittent tributary flows from west to east into Jones Branch across the southern portion of the site. Forested wetlands account for much of the riparian areas along the streams. The water and land features on the site provide a variety of uses including aquatic habitat diversity, habitat connectivity for fish and wildlife, and as well as other biological and hydrological functions.

### a. Existing Plant Communities

Dominant habitats associated with the wetlands on the tract consisted of forested and scrub-shrub areas. Upland areas consisted predominantly of loblolly pine (*Pinus taeda*) managed by silviculture activities. Dominant species identified within the forested wetlands included willow oak (*Quercus phellos*), American holly (*Ilex opaca*), water hickory (*Carya aquatica*), and green ash (*Fraxinus pennsylvanica*). The scrub-shrub areas are dominated by button bush (*Cephalanthus occidentalis*). American hornbeam (*Carpinus caroliniana*) was common in hardwood forested stream corridors.

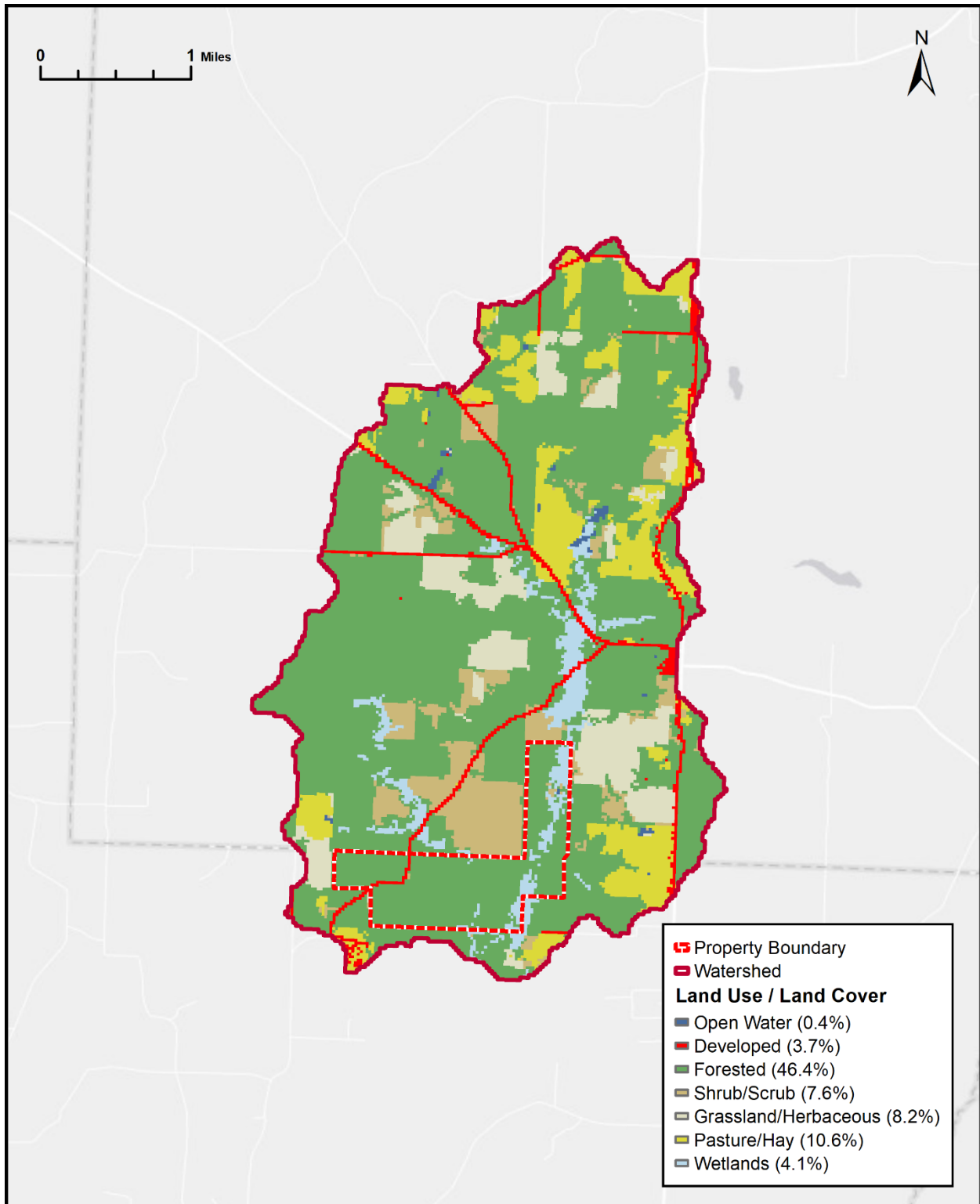


Figure 3. Land use map of the site.

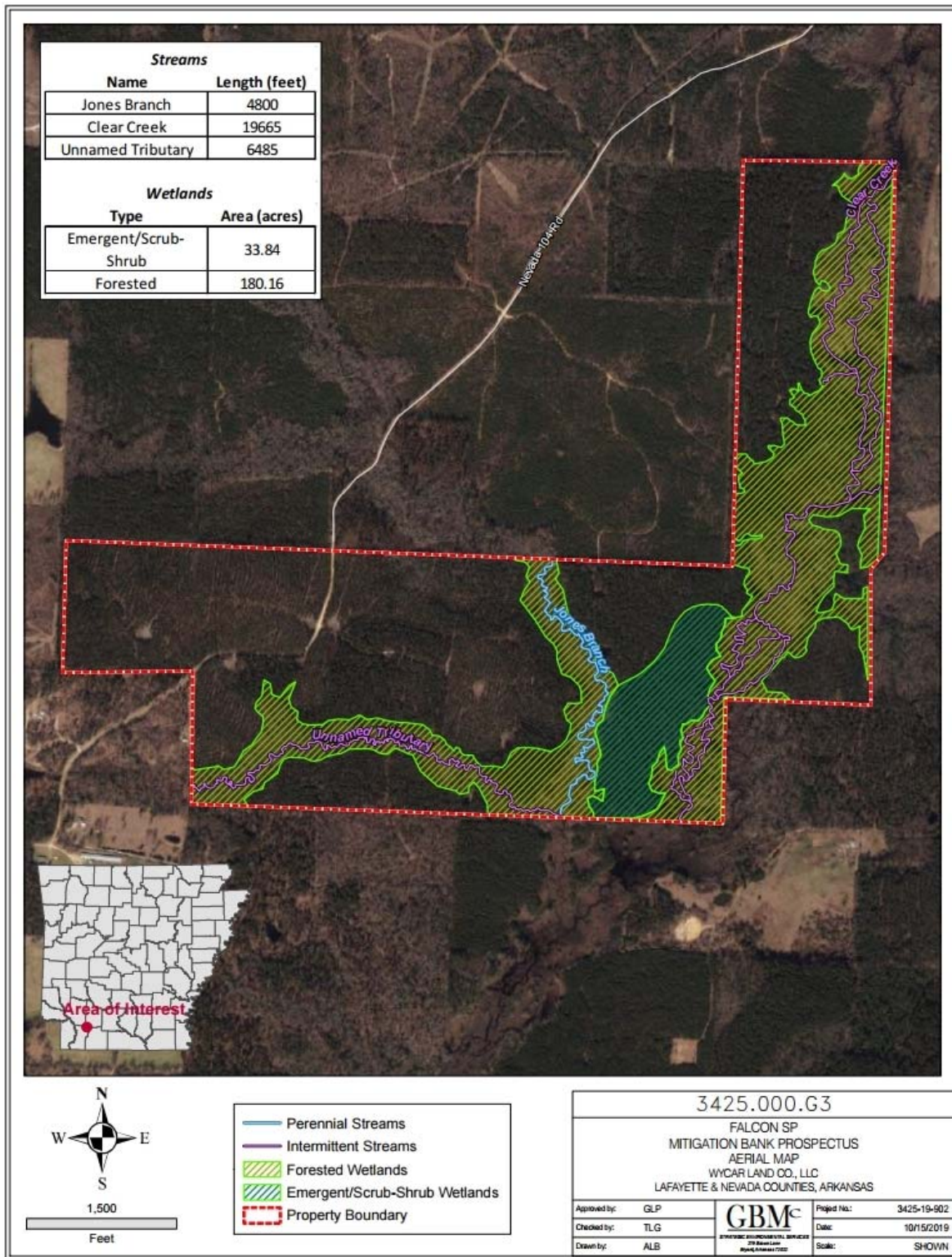


Figure 4. Overall Aerial.

## b. Soils

The Natural Resource Conservation Service (“NRCS”) Web Soil Survey shows that the tract may be underlain by a composite of soils dominated by two primary types (fine sandy loam and silt loam). The soil survey includes thirteen map units within the approximately 557-acre site. The soil properties vary across the site, ranging from poorly drained, predominantly hydric soils to well drained, predominantly non-hydric soils. Additional soil information is provided in Figure 5.

<b>Lafayette and Nevada Counties, Arkansas</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
9	Bowie fine sandy loam, 1 to 3 percent slopes	121.9	22.5%
29	Guyton silt loam, 0 to 1 percent slopes, frequently flooded	126.4	23.4%
30	Harleston fine sandy loam, 1 to 3 percent slopes	55.7	10.3%
57	Ruston fine sandy loam, 1 to 5 percent slopes	27.1	5.0%
58	Sacul fine sandy loam, 1 to 3 percent slopes	3.9	0.7%
59	Sacul fine sandy loam, 3 to 8 percent slopes	32.5	6.0%
74	Smithdale fine sandy loam, 5 to 8 percent slopes	35.6	6.6%
BbA	Bibb fine sandy loam, 0 to 1 percent slopes, frequently flooded	0.1	0.0%
BoC	Bowie fine sandy loam, 3 to 8 percent slopes	2.4	0.5%
GyB	Guyton silt loam 0 to 2 percent slopes, frequently flooded	81.2	15.0%
HaC	Harleston fine sandy loam, 1 to 8 percent slopes	8.6	1.6%
StC	Smithdale fine sandy loam, 3 to 8 percent slopes	5.4	1.0%
SuB	Smithton fine sandy loam, 0 to 2 percent slopes	40.0	7.4%
<b>Totals for Area of Interest</b>		<b>540.6</b>	<b>100.0%</b>

### c. Existing Hydrology

The Falcon SP tract is located in the Clear Creek-Bayou Dorcheat 12 digit sub-watershed, within the USGS Hydrologic Cataloguing Unit 10 digit code, Big Creek-Bayou Dorcheat, as 1114020301. Sources of hydrology are rainfall, sheet flow, and drainage from north of the tract. Perennial streams likely receive some groundwater, at least seasonally. Topographic elevations on the tracts range from 380 to 290 feet above the National Geodetic Vertical Datum (NGVD) for mean sea level.

The hydrology predominately drains through the site from the north to the south. Jones Branch, Clear Creek, and one unnamed tributary traverse through the site with flows eventually reaching Bayou Dorcheat approximately 6.0 miles south of the site. A Jurisdictional Determination, mapping all Waters of the U.S. on the site, was completed in November 2018. The USACE Vicksburg District completed a Preliminary Jurisdictional Determination on the site in June 2019 (Appendix A).

The property consists of a total of approximately 30,950 linear feet of stream. Two intermittent streams (totaling approximately 26,150 linear feet) and one perennial stream (totaling approximately 4,800 linear feet) exist on the property (Figure 4). Additionally, approximately 33.9 acres of emergent/scrub-shrub wetlands and 180.2 acres of forested wetlands exist on the property. Stream reach identifiers and lengths are provided below in Table 1.

**TABLE 1: PRE-RESTORATION STREAM HABITAT SUMMARY**

Stream Name	Existing Length (Linear Feet)	Stream Type
Jones Branch	4,800	Perennial
Clear Creek	19,665	Intermittent (Upper), Perennial (Lower)
Unnamed tributary of Jones Branch	6,485	Intermittent
Total:	30,950	

## **6.0 TYPE OF MITIGATION BANK**

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The Bank will be a commercial use mitigation bank containing stream and wetland credits. More than 50% of mitigation credits generated by this project will be from stream and wetland restoration or enhancement including stream channel restoration, riparian buffer restoration/enhancement and wetland restoration/enhancement.

### **a. Stream Restoration and Enhancement**

Streams on the FMB site range from moderately stable to moderately unstable. The more stable channels are found on the perennial stream Clear Creek which is a bayou like pool dominated swampy stream system, with wetlands bordering each side. Several reaches of Clear Creek have riparian buffer composed of almost exclusively of button bush and channels filled with smart weed. These riparian areas will be enhanced through planting of supplementary hardwoods to improve diversity and wildlife habitat. The channel edges will be planted with cypress trees to establish a more bayou like character and enhance the stability of the channel.

The other two stream systems on the site, the intermittent unnamed tributary and the perennial Jones Branch, are displaying signs of both degradation and aggradation. They have moderate levels of bank erosion in a significant number of bends and the channel is aggrading in some areas and incising in others. Jones Branch is also suffering from impacts to the riparian area on the eastern side due to a recent clear cut. This clear cut has likely further destabilized the Jones Branch channel. These channels will be restored mostly in place (according to natural channel design Priority 2 and 3 methodology), with a combination of cross veins and bank stabilization using bioengineering techniques. Floodplain connections will be restored as needed, and sediment transport capability renewed. The riparian areas will be restored where tree density is low (or absent) and enhanced in other areas to return the area to a natural bottomland hardwood forest. Since the majority of the riparian areas are wetlands the replanting will follow similar pattern to the wetland's restoration/enhancement discussed below.

Overall, approximately 8,000 linear feet of stream channel will be restored/enhanced and over 25,000 feet of riparian buffer will be either restored or enhanced.

### **b. Wetlands Restoration and Enhancement**

The Sponsor proposes to restore and/or enhance and protect approximately 214 acres

of bottomland hardwood and emergent wetlands by planting desirable species of native vegetation and removing/controlling invasive species such as Chinese privet. Appendix A contains maps of proposed enhancement areas.

Approximately 34 acres of wetlands (mostly emergent) near the south east corner of the site, occur in a recent cutover. This area will be restored to mostly bottomland hardwood wetlands through native tree plantings and invasive species control. The majority of forested wetlands along the unnamed intermittent tributary and Jones Branch will be enhanced as part of riparian buffer enhancement for stream credits. Any additional wetlands that are not included as riparian buffer, will be enhanced through planting of native hardwoods and invasive species control. The riparian corridor and adjacent wetlands along Clear Creek will be enhanced through planting of suitable wetland hardwood species to improve the diversity of the site and increase wildlife usage. The southern portion of these wetlands are very swampy and the corridors near the creeks are dominated by smartweed. These areas will be planted with cypress and other obligate and facultative wet tree species appropriate to the region. The wetland corridor along Clear Creek on the north side of the site have large areas dominated by buttonbush. These areas will be thinned, and native hardwood species planted according to the hydrologic regime.

A mixture of at least 4 new native bottomland hardwood species will be planted in each wetland during the standard planting season (December-March). Planting rates will vary according to level of restoration, required thinning of unwanted species and current hardwood canopy cover. Native seedlings will be selected from regional sources and species will vary based on availability but will likely include, bald cypress, black gum, willow oak, red maple, sweetbay, laurel oak, over cup oak, etc.

In the process of the stream restoration phase of this project, flood plain connection will be re-established in both the unnamed tributary and Jones Branch. This will improve the frequency of flooding into these wetlands which will improve functions and make them more sustainable.

### **c. Stream and Wetland Preservation**

Existing streams, wetlands, and associated riparian buffers within the boundaries of the area controlled by the FMB will be preserved in perpetuity through the establishment of a restrictive covenant, conservation easement, or similar maintenance agreement on the property. Maps are provided in Appendix C that depict proposed mitigation areas.

## **7.0 METHODS FOR DETERMINING CREDITS, RELEASE OF CREDITS AND ACCOUNTING PROCEDURES**

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The Sponsor proposes that approximately 214 acres of the FMB can be used as compensatory mitigation through the restoration of streams, riparian buffer corridors and bottomland hardwood wetlands. Within this 214 acres, the sponsor proposes that approximately 8,000 linear feet of stream channel and over 25,000 feet of riparian buffer can be either restored or enhanced and used as compensatory mitigation.

The Vicksburg District uses the Charleston Method (revision - 2010) to estimate impacts and mitigation credits to both wetlands and linear systems (streams). During preparation of the Mitigation Banking instrument (MBI) credits will be calculated for each type of restoration and specific accounting into categories for restoration, enhancement, riparian buffer enhancement and preservation will be determined. It is anticipated that the credits will be released for mitigation, incrementally upon achievement of certain milestones such as, but not limited to, approval of the MBI, completion of phases of the restoration/enhancement which will include tree planting, exotic species control, hydrology restoration; etc.

The Sponsor will be responsible for keeping an up-to-date ledger of all transactions within the FMB. The Sponsor shall post debits of credits to the Regulatory In-lieu Fee and Bank Information Tracking System (“RIBBITS”) ledger maintained by the USACE Vicksburg District. Vicksburg District will then distribute the ledger to other IRT members. Additionally, the Sponsor shall submit a statement on any or all transactions to the USACE, within 10 days of the transaction.

## **8.0 FINANCIAL ASSURANCES**

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Financial assurance will be in the form of an escrow account or bond approved by an adequately capitalized, federally insured depository. Specified percentages of this assurance shall be released back to the Sponsor incrementally in accordance with the achievement of milestones specified in the initial contract.



## **9.0 SITE PROTECTION AND LONG-TERM MANAGEMENT**

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### **a. Contact Information**

Mark Carter ([mark@wycarland.com](mailto:mark@wycarland.com)) or  
Jeff Wyatt ([jeff@wycarland.com](mailto:jeff@wycarland.com))  
315 Texas St., Bossier City, LA 71111

### **b. Site Protection**

To ensure long-term protection of all lands included in the compensatory mitigation contract, the Sponsor, its heirs, assigns or successors, will be responsible for maintaining and protecting the lands contained within the restored portions of the FMB in perpetuity, unless the lands are transferred to a state or federal resource agency, non-profit conservation organization, or this responsibility is contractually conveyed to another person, all of which will be subject to approval by the Vicksburg District. A conservation servitude will be prepared for the bank site. This conservation servitude specifically prohibits activities that would reduce the quality of the restored wetlands and stream corridors. The conservation servitude also specifies permissible activities such as hunting, fishing, and recreational use given the activity causes no negative effect on the functions and values of the restored resources. Forest management within the conservation servitude could be allowed provided that this activity is performed to maintain or improve the overall ecological function of the tracts. Impacts that adversely affect the function and value of the tracts which are caused by permissible activities will require permitting and subsequent mitigation.

### **c. Success Criteria**

In order for the FMB to be considered an acceptable mechanism for mitigating wetland impacts and stream impacts associated with DA permits, habitat created or restored in the area must satisfy wetland criteria described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (US Army Corps of Engineers, Wetland Regulatory Assistance Program 2010).

In order to be considered fully successful, the efforts within the FMB must result in the restoration of viable wetlands and streams capable of performing the important functions lost as a result of the projects it is intended to mitigate. The success of the mitigation effort will be assessed at both short-term and long-term intervals. The MBI will lay out specific targets for success criteria for both stream and wetland mitigation.

#### **d. Monitoring and Long-Term Management**

The Sponsor agrees to perform all necessary work to monitor the FMB annually or semi-annually during the required monitoring period, and to demonstrate compliance with the success criteria established for the bank. The Sponsor will maintain and protect the restored portions of the FMB for the operational life of the bank, as well as beyond the operating life if it is not self-sustaining according to the guidelines in the MBI. The sponsor would be responsible for securing additional funds to cover contingency actions in the event of bank default or failure. The MBI will include a specific and detailed monitoring plan for the bank.

## **10.0 WATER AND MINERAL RIGHTS**

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Hydrology on the site will continue to be precipitation-driven with no pumping or artificial hydrology required. The property owners have intact water rights and the proposed project will not result in a loss of downstream water quantity.

The property owners have all the surface and subsurface mineral rights. Therefore, no third party has the right to disturb the surface of the FMB to access potential mineral or hydrocarbon resources.

## **11.0 NEED AND FEASIBILITY OF BANK SITE**

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There are no existing mitigation banks in the primary service area of this proposed mitigation bank. Future development in the area would be delayed without stream and/or wetland credits available for mitigation of unavoidable impacts. In addition, anticipated future industrial development in the region will require pipelines that will result in impacts to jurisdictional Waters of the US, including streams.

## **12.0 PROPOSED SERVICE AREA**

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The FMB's primary service area is located within United States Geological Survey (USGS) Hydrologic Cataloging Unit Loggy Bayou, as 11140203. One secondary service area is identified as HUC 11140205, Bodcau Bayou (Figure 5).

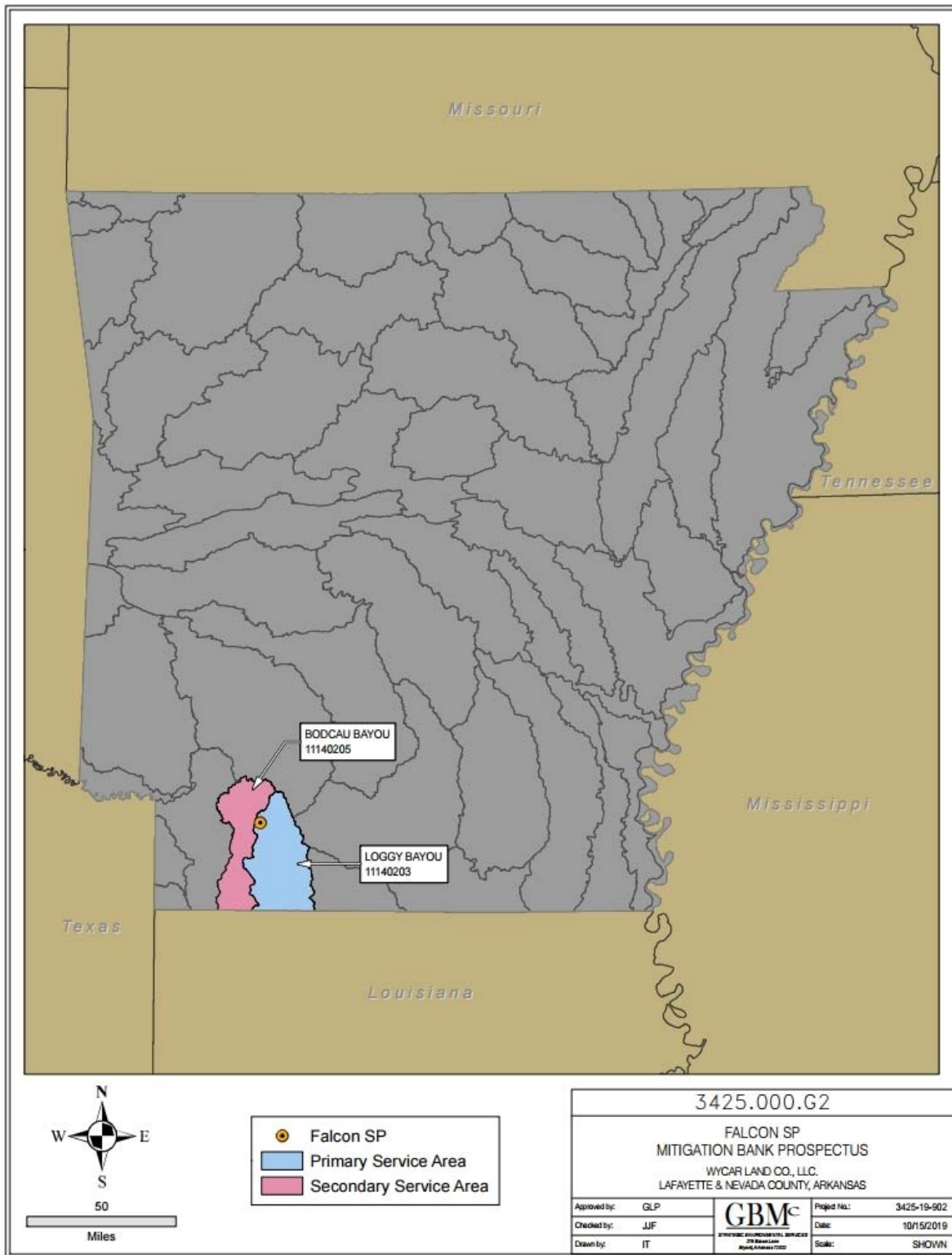


Figure 5. Proposed service areas.

## 13.0 QUALIFICATIONS OF THE SPONSOR

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**Falcon Mitigation Bank** is a partnership made up of the property owners and WYCAR Land Company, LLC. The consultants contracted by WYCAR to prepare the Prospectus and MBI are experienced in establishing and operating mitigation banks throughout the United States and have extensive experience with several successful mitigation banks in numerous Army Corps Districts. Stream Restoration Concepts, LLC and GBMc & Associates are the technical consultants to the bank sponsor, and each has experience in wetland ecology, wetland and stream restoration, hydrology, mitigation bank establishment, operation, and compliance. The technical consultants will provide all required technical documents, general mitigation banking consultation, stream restoration design, wetland/buffer design, construction oversight and monitoring assistance.

## 14.0 REFERENCES

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- a. Soil Survey, Natural Resources Conservation Service, United States Department of Agriculture. *Web Soil Survey*  
<http://websoilsurvey.nrcs.usda.gov>.
- b. United States Army Corps of Engineers, Compensatory Mitigation Guidelines Working Draft, Subject to Change Last Revised October 7, 2010, Guidelines for Preparing a Compensatory Mitigation Plan.
- c. Arkansas Natural Heritage Commission, Falcon Bottoms Natural Area, Columbia, Little River and Nevada Counties, Arkansas.