

Woodlands Edge Community Association, Inc c/o Peak Properties, LLC

Woodlands Edge Mitigation Bank Prospectus

June 27, 2016



Woodlands Edge Mitigation Bank Prospectus

Prepared for:

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1.0 INTRODUCTION

1.1 Project Description

Woodlands Edge Property Owners Association (WEPOA) proposes to establish the Woodlands Edge Mitigation Bank (WEMB) in Little Rock, Arkansas. The Bank proposed in this prospectus includes property along Brodie Creek, Panther Branch, and associated tributaries within the Woodlands Edge residential neighborhood area and will be called the Woodlands Edge Mitigation Bank (Figure 1). Creation of this bank will provide for guaranteed protection of over 40,000 linear feet of stream corridor in what is a mostly developed and urbanizing area of west Little Rock.

1.2 Project Purpose

The purpose of this project is to protect, enhance, and restore stream corridors in the Woodlands Edge property area for use as a stream mitigation bank. The WEMB will provide compensatory mitigation for unavoidable adverse impacts to Waters of the United States that result from activities authorized under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, provided such activities have met all applicable requirements and are authorized by the United States Army Corps of Engineers. The WEMB will be developed utilizing standards set forth in the Compensatory Mitigation for Losses of Aquatic Resources; Final Rule (DOD & EPA, April 2008) under the guidance of the US Army Corps of Engineers - Little Rock District (USACE) and the Interagency Review Team (IRT).

The WEMB will consist of protection, enhancement, and/or restoration of approximately 7,300 linear feet of perennial stream, 15,318 linear feet of intermittent stream and 20,472 linear feet of ephemeral stream.

Table 1. Summary of background information of the proposed Woodlands Edge Mitigation Bank.

Project Name	Woodlands Edge Mitigation Bank
Project Sponsor	Woodlands Edge POA
Site Location	Pulaski County, Little Rock, Arkansas
8-digit HUC	11110207
12-digit HUC	111102070204
Ecoregions	Ouachita Mountains
Protected Area	~150 acres
Stream Length	~43,000 feet of perennial, intermittent, and
Protected/Enhanced/Restored	ephemeral channels

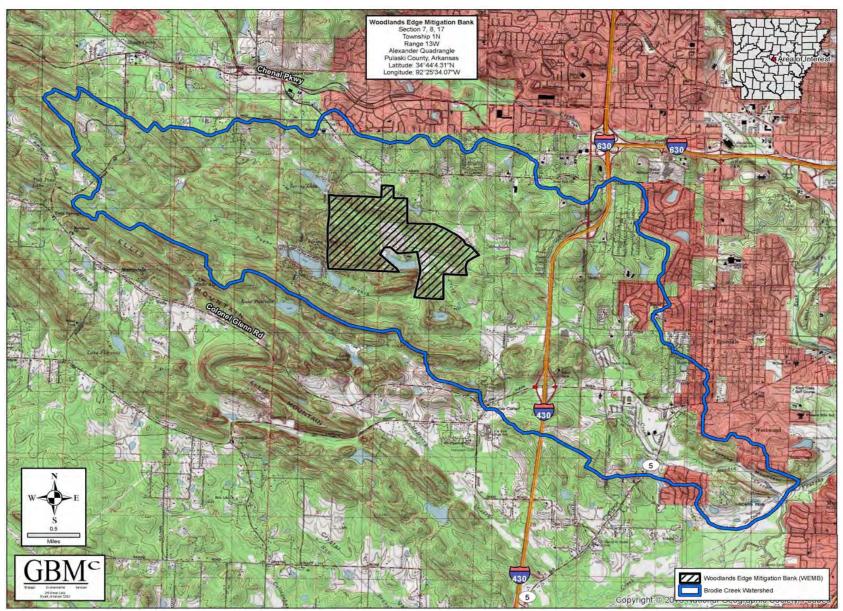


Figure 1. Woodlands Edge Topographic Map.

1.3 Watershed Description

The WEMB would consist of one perennial stream (Brodie Creek), several intermittent streams (including sections of Panther Branch), and numerous ephemeral tributaries located in a mostly sub-urban watershed (twelve digit HUC 111102070204). These drainages serve as tributaries to Fourche Creek which lies within the Lower Arkansas – Maumelle Watershed (eight digit HUC 11110207). Overall the Fourche Creek watershed is a highly urbanized watershed and drains approximately 98% of the Little Rock area according to Audubon Arkansas www.fourchecreek.org/Information_description.html.

Brodie Creek is considered one of the major tributaries in the Fourche Creek watershed (Figure 2.) and provides a variety of uses including aquatic habitat diversity, habitat connectivity for fish and wildlife, and as well as other biological and hydrological functions. The WEMB contains approximately 0.85 mi² of the 12.4 mi² Brodie Creek watershed and drains portions of west Little Rock, Pulaski County, Arkansas. Currently the WEMB area is dominated by forest (48%) and developed urban and suburban (47%) land uses (Figure 3).

Prior to 2003 this tract of land consisted mostly of undeveloped upland forest types and open pasture land. As the area was developed sustainable development practices were employed and the majority of the stream corridors and other waters were avoided to provide "green areas" to the development. These "green areas" are mostly in the form of riparian buffers along the streams, lakes, and pond features. During development stages some of those riparian areas were generally unaffected while others were cleared to allow space for construction of buildings and utilities. Since that time areas that were cleared have developed into privet thickets.

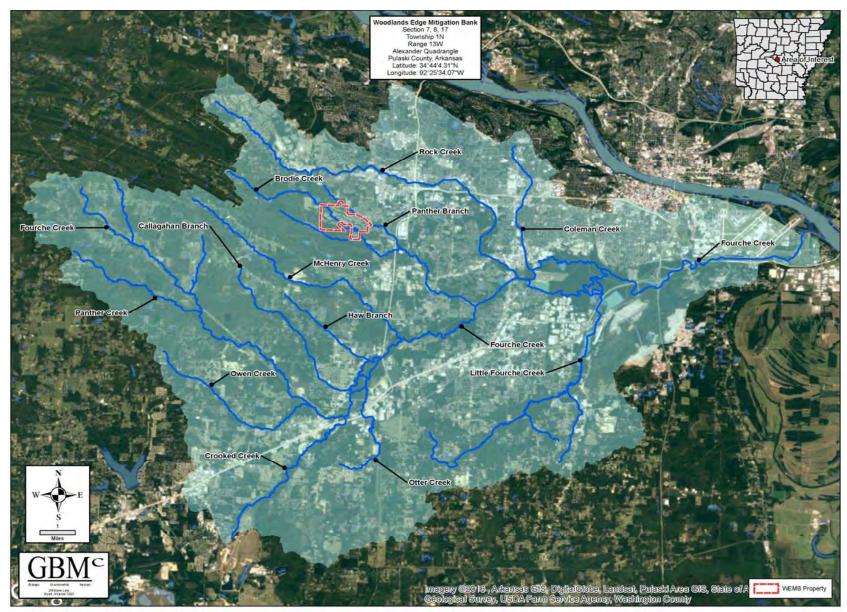


Figure 2. Fourche Creek Watershed.

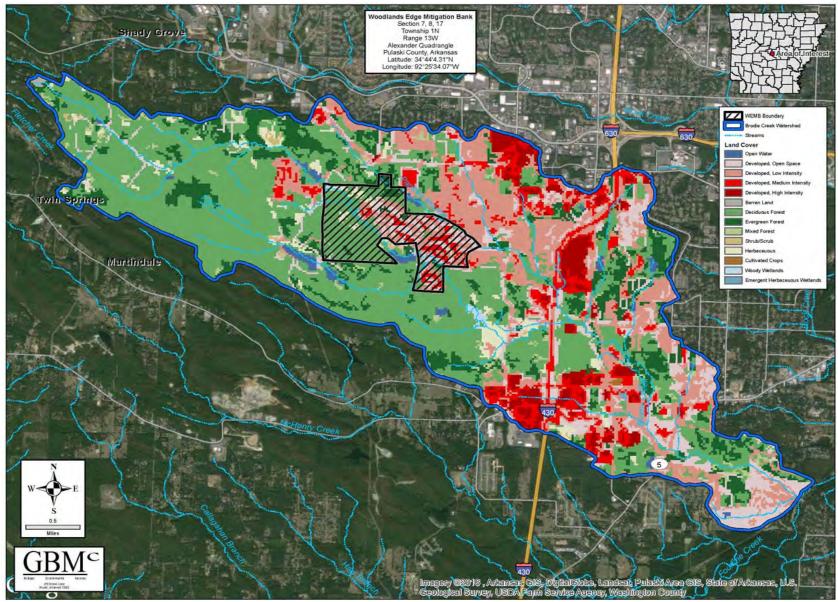


Figure 3. Brodie Creek Land Cover Map.

2.0 GOALS AND OBJECTIVES

The goal of the WEMB is to preserve, enhance, and restore streams and their associated riparian corridors to maximize their form and function. Once completed, the Bank will provide compensatory mitigation alternatives for impairments of streams associated with authorized (permitted) impacts within the approved bank service area. The goals of the bank will be met by preservation, enhancement, and restoration of existing aquatic and riparian resources. Specific compensation goals and objectives include:

- Preservation and protection of existing stream channels and their riparian buffer corridors,
- · Buffer enhancement in stream corridors, and
- Enhancement/restoration of destabilized stream channels.

While the goal is to create ecologically self-sustaining stream corridors, a long-term monitoring and maintenance plan will be implemented to promote success of the preservation and enhancement efforts. The WEMB would connect on the downstream end of Brodie Creek to properties already protected as mitigation areas or planned for protection as mitigation areas. Creation of WEMB along with these areas will provide a protected corridor along Brodie Creek of approximately 2.1 miles in length right in the midst of a mostly urban/suburban area of west Little Rock.

3.0 ESTABLISHMENT AND OPERATION

3.1 Location

The WEMB consists of approximately 150 acres of property located within the Woodlands Edge neighborhood (approximately 547 acres) off Bowman Road in Little Rock, Arkansas (Figure 3). Specifically, the sites are located in Section 11, Township 1 North, Range 14 West, as mapped on USGS topographic quadrangle Alexander, AR, 7.5-minute series.

3.2 Type of Mitigation Bank

The Bank will be a commercial use mitigation bank containing stream credits. Approximately 48% of stream mitigation credits generated by this project would be from stream channel protection, 10% from stream channel restoration and 42% from riparian buffer enhancement or restoration.

3.2.1 Stream Preservation

Existing streams and associated riparian buffers within the boundaries of the area controlled by the WEPOA will be preserved in perpetuity through the establishment of a restrictive covenant, conservation easement, or similar maintenance agreeement on the property. Sections of Woodlands Edge continues to be developed following the same suitable development philosophy that allows existing streams and riparian corridors within the neighborhood boundary to be retained. Many of the existing streams have had minimal impacts throughout development stages and will not require any channel alterations to maintain a stable dimension, pattern, and profile. However, some channels or sections of channels, are beginning to de-stabilize and will need to be restored to prevent further degradation. Approximately 3,600 feet of stream channel will be restored and protected and approximately 39,000 feet of stream channel will be protected. Maps of the protected stream corridors and a table summarizing stream lengths protected in each area is included in Appendix A.

3.2.2 Riparian Buffer Enhancement

Riparian buffers will be enhanced through invasive species removal and supplemental plantings. Supplemental plantings of native tree/shrub or herbaceous vegetation species will be completed, as appropriate to buffer vegetative type, to reach desired diversity and density. Tree and/or shrub planting will be mostly in the form of seedlings and herbaceous plantings will be in the form of plugs or seed. In some cases larger native trees may be planted to meet the aesthetic goals of the WEPOA. The majority of the 150 acres of protected stream corridor (Appendix A) will have riparian buffers enhanced (approximately 140 acres).

3.2.3 Restoration

One of the major tributaries to Brodie Creek (Stream 3) has significant ongoing bank erosion and needs to be stabilized to prevent further sediment transport to Brodie Creek. Sections of Brodie Creek and other large tributaries also show moderate levels of bank erosion in major bends. Where streams are unstable and/or showing signs of destabilization, sections will be restored or enhanced to prevent further degradation. Natural channel design techniques will be utilized to restore stream channel stability. Approximately 3,600 feet of stream channel will be restored.

Some riparian areas are composed mostly of privet and will need a significant level of restoration. These restoration plantings may be completed using seedlings, plugs, or seeding, as appropriate. Approximately 9 acres of riparian buffer will be restored for this project.

3.3 Credit Generation

Stream mitigation credits will be calculated utilizing the USACE – Little Rock District Stream Method (USACE-LRD, 2011). Credits will be calculated with the assistance of the USACE and will be approved by the IRT with the Mitigation Banking Instrument (MBI). Approximately 48% of stream mitigation credits generated by this project would be from stream channel protection, 10% from stream channel restoration and 42% from riparian buffer enhancement or restoration.

3.4 Bank Management

The Bank Sponsor shall prepare a MBI that will describe the following features:

- 1. Mitigation Work Plan
- 2. Maintenance
- 3. Monitoring
- 4. Performance Standards
- 5. Credit Accounting
- 6. Long-term management planning
- 7. Adaptive management

This Instrument will be submitted to the USACE and the IRT for review. Upon approval of the Banking Instrument and the Mitigation Bank itself, the guidelines provided in the Instrument will be used to construct and manage the bank.

4.0 GEOGRAPHIC SERVICE AREA

4.1 Geographic Service Area

The proposed Primary Geographic Service Area includes the Lower Arkansas-Maumelle HUC (11110207), and the Fourche la Fave (HUC 11110206) (Figure 4). The proposed Secondary Geographic Service Area includes the Lake Conway – Point Remove HUC (11110203) (Figure 4).

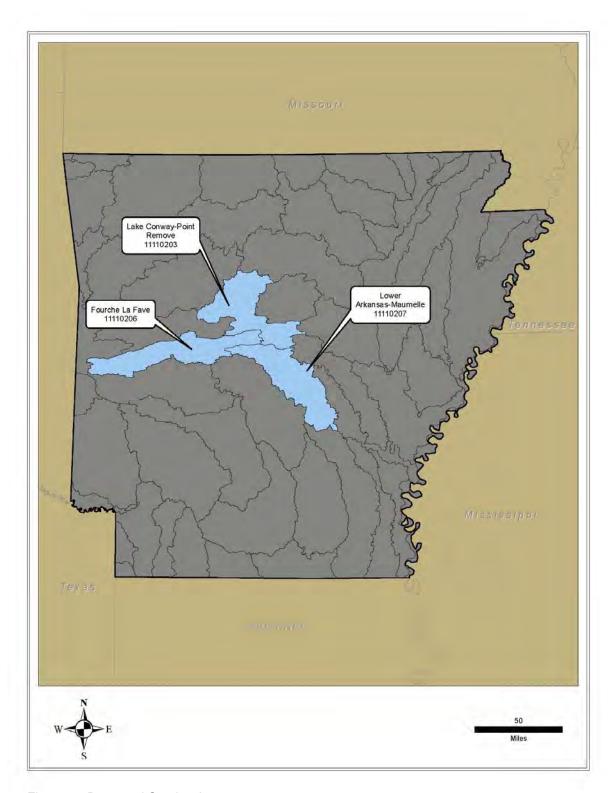


Figure 4. Proposed Service Area.

4.2 Service Area Rationale

The proposed Geographic Service Area was chosen based on a set of factors including:

- proximity to the site,
- position within the watershed,
- possible similarity of bank streams and wetlands to those in the service area, and
- size or extent of previously approved banks within the USACE Little Rock
 District.

5.0 SITE SELECTION

The sites for the mitigation bank were selected based on potential need for mitigation credits in the region, land availability, natural area size and potential for maximum stream credits, and quality of streams. As mentioned before, Brodie Creek and the other WEMB tributaries are part of the greater Fourche Creek watershed which is considered one of the most imperative urban watersheds in Arkansas. Fourche Creek (Reach 022 in ADEQ Planning Segment 3C) is listed as an impaired water body due to water quality concerns with dissolved oxygen, siltation and pathogens.

With Brodie Creek being one of the major contributors to the Fourche Creek watershed and the continued growth of west Little Rock, the WEMB has committed to the sustainability of natural resources associated with the Bank. The WEMB would connect on the downstream end of Brodie Creek to properties already protected as mitigation areas or planned for protection as mitigation areas. Creation of WEMB along with these areas will provide a protected corridor along Brodie Creek of approximately 11,300 feet (2.1 miles). Furthermore, the Fourche Creek watershed acts as an urban restoration area for education and demonstration while providing both economic and social importance to central Arkansas.

6.0 OWNERSHIP AND LONG-TERM MANAGEMENT

6.1 Contact Information

Owner and Sponsor of this Bank is, Woodlands Edge Property Owners Association. Contact person and address is as follows: Greg Jones, Woodlands Edge Communities Association, Inc. c/o Peak Properties, LLC 11711 Hermitage Road, Suite 7, Little Rock, Arkansas, 72211; Phone number (501) 353-0368.

6.2 Site Protection Instrument

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 USACE - Little Rock District guidance with language to allow for acceptable forestry management practices, utility easements, hike/bike trails, or other low impact recreational activities. Each land-use practice allowed must be approved by the USACE and IRT.

6.3 Long-Term Management

As Sponsor, Woodlands Edge Property Owners Association is responsible for all monitoring and long term maintenance of the Bank. The Sponsor will maintain and protect the restored portions of the WEMB 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.

Long-term monitoring will be necessary to ensure that the Bank ecological form and functions are maintained. The operational life of the bank terminates when compensatory mitigation credits have been exhausted and the bank is self-sustaining.

The Sponsor will make available, as appropriate and if necessary, adequate financial assurances in the form of a trust, bond, endowment or escrow account with an adequately capitalized, federally insured depository as determined by the sponsor in coordination with the District Engineer.

7.0 SPONSOR QUALIFICATIONS

Principals of Woodlands Edge POA include engineers with experience in designing and managing natural resources such as hiking and nature trails, lakes, and land management practices associated with the Woodlands Edge neighborhood. Furthermore the POA manages the business of the community and all facilities owned by the Association. Woodlands Edge has received numerous awards for sustainability and ongoing green initiatives since development including the following:

- 2009 Green Development of the Year the National Association of Home Builders (NAHB)
- 2008 Developer Award American Trails
- 2007 American Society of Landscape Architects Honor Award
- 2005 & 2007 Little Rock City Beautiful Award
- 2005 Building With Trees Award the National Arbor Day Foundation
- 2002 Outstanding Developer Arkansas Urban Forestry Council

Woodlands Edge POA has retained the services of GBM^c & Associates (GBM^c) to assist with development of the Bank. GBM^c has assisted several Arkansas companies develop mitigation projects and has designed and implemented several ecological restoration projects throughout the state including projects on Sager Creek, Mud Cat Creek, Rock Creek, Lake Dupree, Tributaries to Little Maumelle River and large wetland, transitional and upland habitats in the Ouachita River drainage.

The Woodlands Edge POA team is well qualified to successfully implement this mitigation bank.

8.0 ECOLOGICAL SUITABILITY

8.1 Description of Aquatic Resources

WEMB makes up approximately 150 acres of riparian and upland habitat, most of which will be preserved in the WEMB. Approximately 50 tributaries to Brodie Creek and Panther Branch lie within the Woodland Edge subdivision area accounting for a total of approximately 43,000 feet of stream channel (Figure 5). The main channel of Brodie Creek is approximately 7,300 linear feet and consists of a meandering riffle/run/pool system that provides functions and aquatic resources throughout the year. Average width of Brodie Creek is approximately 15 feet (much wider in some areas) with average depths between 1 and 3 feet. The width of the riparian corridor varies but averages at least 200 feet in most areas. Intermittent stream channels account for approximately 15,318 linear feet and ephemeral stream channels account for approximately 20,472 linear feet. These streams vary in dimension and consist of riparian buffer corridors of at least 90 feet wide on average. Photographs of several of the streams are provided in Appendix B.

All streams will have some level of associated riparian buffers (most with at least 50 feet of buffer on both sides) totaling nearly 150 acres of protected stream corridor. A few isolated wetlands exist within the Woodlands Edge neighborhood mostly in riparian areas and will be preserved as riparian buffer for the stream system.

8.2 Baseline Conditions

Most reaches of Brodie Creek, Panther Branch and their tributaries are relatively unimpaired, have stable banks, little incision, and largely intact riparian buffers. The presence of these riparian buffers is likely one of the reasons the streams remain generally stable. In addition, several impoundments in the upper watershed and adjacent properties serve as detention and act as grade control structures and have likely reduced stream bed degradation on the property. The most notable impact noted to these streams is bank stability in channel bends. Some of these bends are evident of erosion that needs to be addressed. Riparian buffers are generally intact but frequently contain large strands of privet which can shade out native tree and plant species.



Figure 5. Woodlands Edge Stream ID Map.

8.3 Regulatory Floodway/Floodplain

According to Pulaski County's FEMA Flood Insurance Rate Map (FIRM), the main stream corridor along Brodie Creek has been designated as a 100 year floodplain and also includes mapped regulatory floodway within the lower reaches of the WEMB boundary. The main stream corridor along Panther Branch has been designated as a 100 year floodplain and regulatory floodway.

8.4 Soils

Soils throughout the majority of the Woodlands Edge neighborhood consist of Carnasaw-Mountainburg association, steep and undulating. Mapped soils along Brodie Creek consist mostly of Sallisaw-Leadvale association, undulating and soils mapped along Panther Creek consists mostly of Leadvale silt loam.

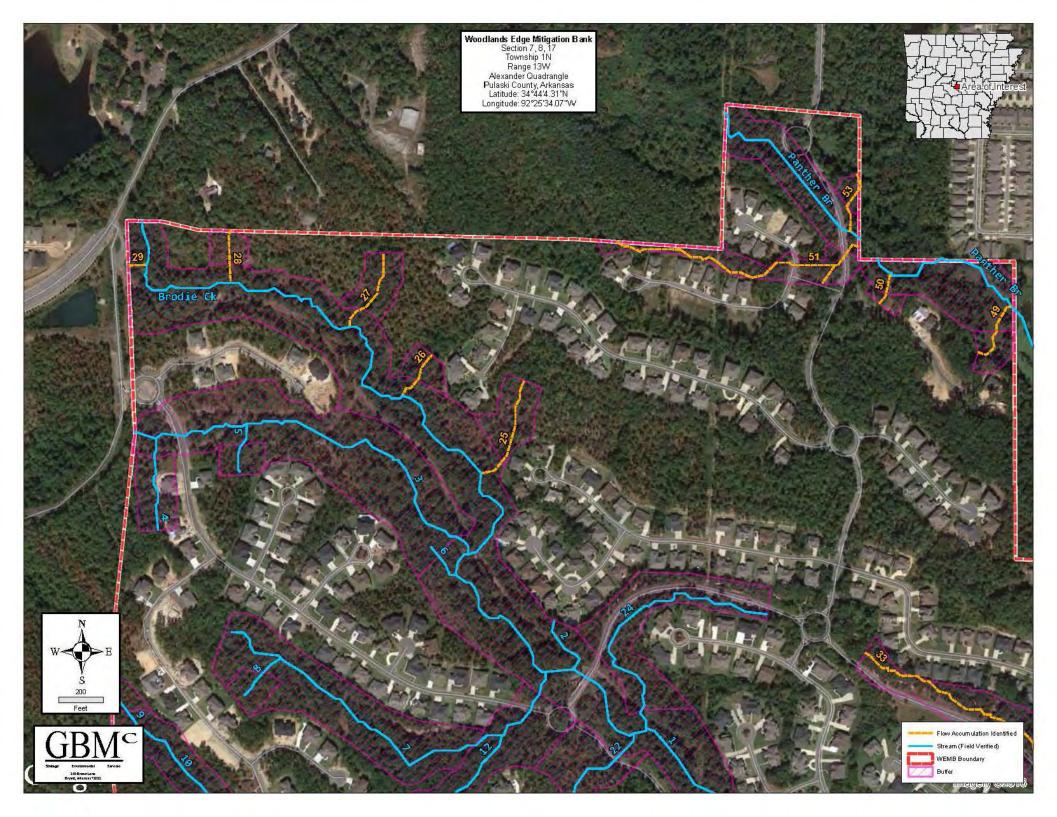
9.0 ASSURANCE OF SUFFICIENT WATER RIGHTS

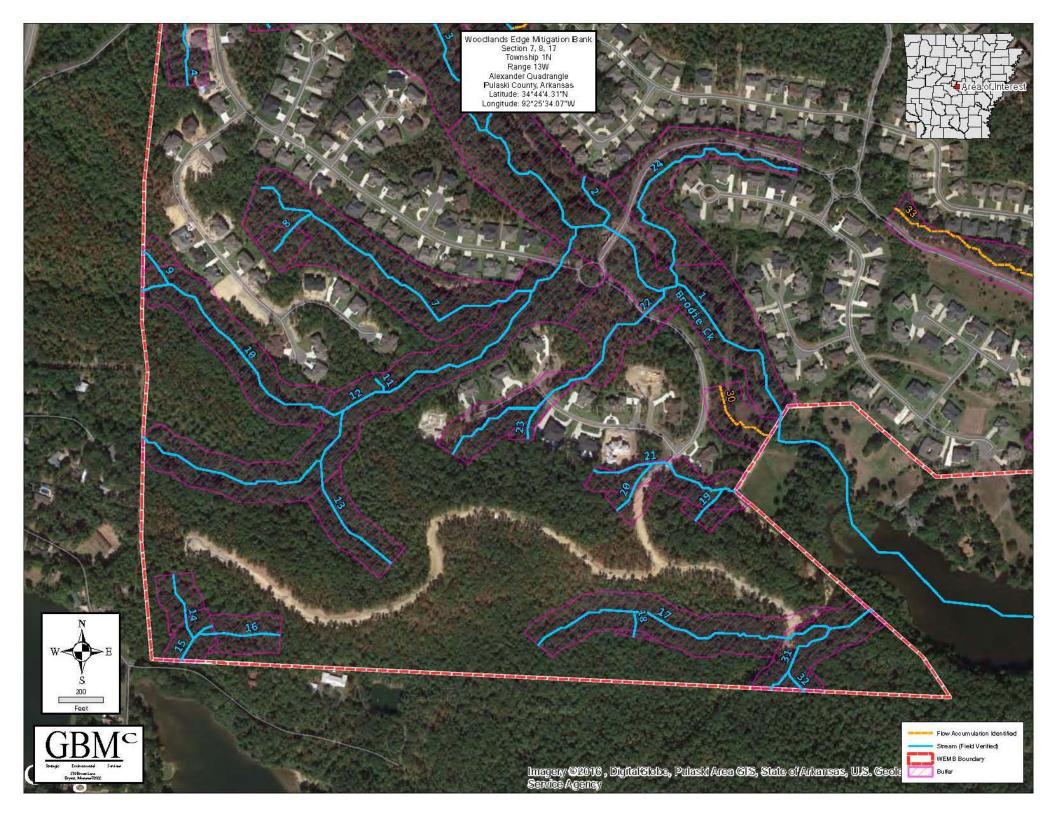
Arkansas' water rights are based on a regulated riparian system in which the Arkansas Natural Resources Commission (ANRC) was established to serve as the state's water resources planning and management agency. The ANRC has legislative authority to allocate surface water from streams during times of shortage based on the reasonable use concept, develop a comprehensive groundwater protection program, designate critical groundwater areas, cost-share on the installation of water conservation practices, establish groundwater rights within critical areas, develop an education program and to delegate management powers to regional water districts and conservation districts.

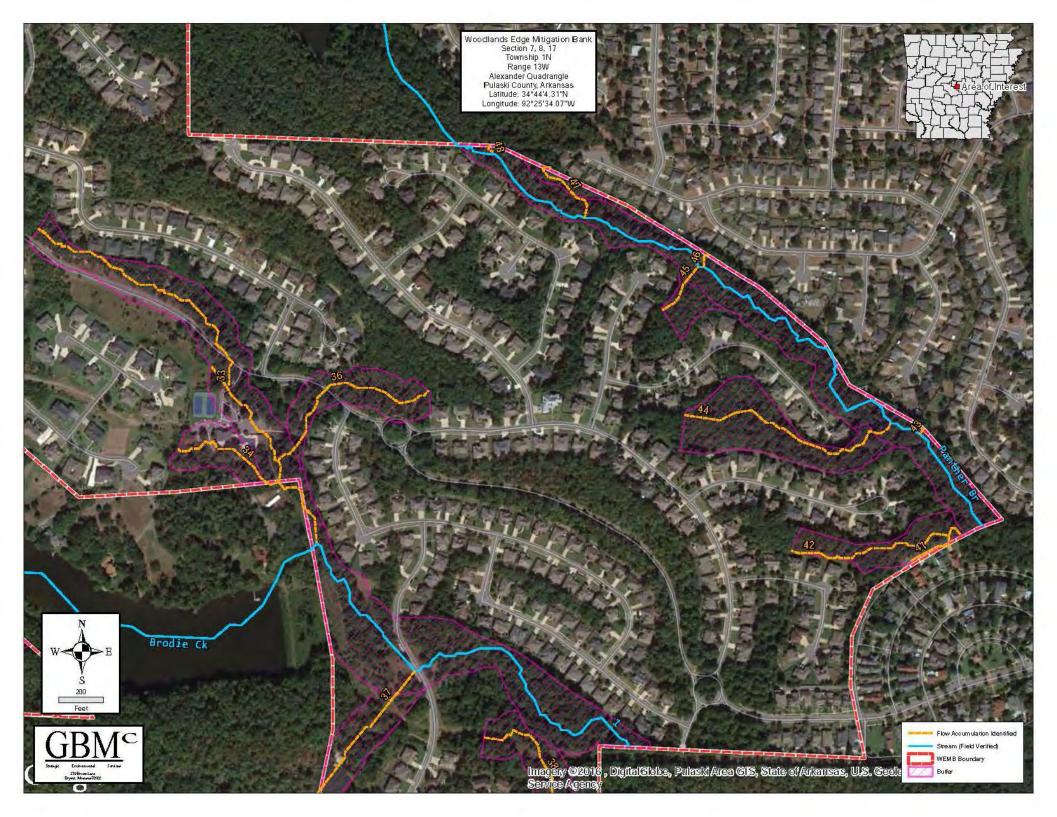
The riparian system attaches water rights to the land adjacent to a water course. All landowners have the right to make reasonable use of the water on or bordering their property. However, the water use cannot unreasonably diminish the quality or quantity of water to neighboring landowners. Therefore, no significant change in flow into the bank areas or out of the bank areas is planned or anticipated.

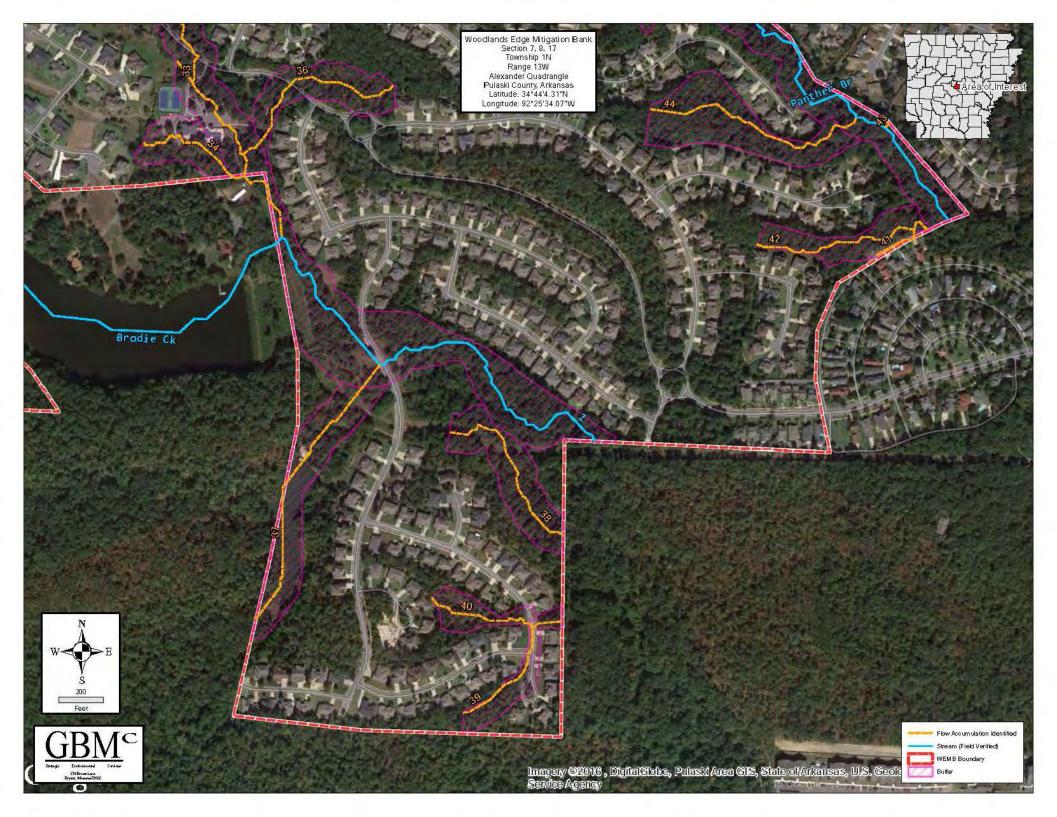
Appendix A

Maps and Stream Tables









Woodlands Edge Mitigation Bank General Stream Information

	Strea				Riparian Buffer	
Map ID	Length (ft)	Туре	Length Restored	Acres	Acres Enhanced	Acres Resto
1, Brodie Ck	7,302	perennial	1,000	34.9	33.9	1.0
2	279	ephemeral		0.1	0.1	
3	1,898	intermittent	1,600	10.9	10.3	0.6
4	425	ephemeral		1.3	1.3	
5	231	ephemeral		0.6	0.6	
6	181	ephemeral		0.1	0.1	
7	1,515	intermittent		6.8	6.8	
8	238	ephemeral		0.7	0.7	
9	192	ephemeral		0.4	0.4	
10	1,183	intermittent		4.2	4.2	
11	73	ephemeral		0.1	0.1	
12	2,620	intermittent		10.0	10.0	
13	588	ephemeral		1.9	1.9	
14	311	ephemeral		0.9	0.9	
15	219	intermittent		0.9	0.9	
16	364	ephemeral		1.2	1.2	
17	1,448	intermittent		4.8	4.8	
18	114	ephemeral		0.1	0.1	
19	191	ephemeral	+	0.3	0.3	
20	270	ephemeral	 	0.5	0.5	
21	705	ephemeral		2.0	2.0	
22	1,326	ephemeral		4.8	4.8	
23	148	ephemeral		0.1	0.1	
24	1,329	ephemeral		4.6	3.5	1.1
25	489	ephemeral		1.4	1.4	
26	237	ephemeral		0.6	0.6	
27	394	ephemeral		1.2	1.2	
28	239	ephemeral		0.6	0.6	
29	78	ephemeral		0.1	0.1	
		•				
30	371	ephemeral		1.3	1.3	
31	630	ephemeral		2.3	2.3	
32	119	ephemeral		0.1	0.1	
33	2,238	ephemeral		6.6	5.6	1.0
34	572	ephemeral		1.6	0.8	0.8
35	112	ephemeral		0.1	0.1	
36	928	ephemeral		2.6	1.3	1.3
37 (Payne Br.)	1,338	Intermittent	500	3.9	2.5	1.4
38	846	ephemeral		3.0	3.0	
39	684	ephemeral		1.4	1.4	
40	528	ephemeral		1.1	1.1	
		•		0.2	0.2	
41	331	ephemeral				
42	794	ephemeral		2.0	2.0	
43	30	ephemeral		0.1	0.1	
44	1,076	ephemeral	<u> </u>	4.1	4.1	
45	259	ephemeral		0.8	0.8	
46	67	ephemeral		0.1	0.1	
47	369	ephemeral		0.4	0.4	
48	52	ephemeral		0.1	0.1	
49	311	ephemeral		0.7	0.7	
50	147	ephemeral	 	0.3	0.3	
51	1,220	ephemeral	+	2.1	2.1	
		•	+ +			
52	98	ephemeral	+	0.1	0.1	
53	291	ephemeral		0.3	0.3	
Panther Br	5,097	intermittent	500	15.4	13.6	1.8
Total	43093.4			146.6		
perennial	7302.0			34.9		
Intermittent	13980.8			53.0		
Ephemeral	21810.5			58.8		
et Stream Restored	21010.5		3,600	55.0		
. Buffer Enhanced			3,000		137.6	
					157.0	2.2
c. Buffer Restored						9.0

Appendix B

Photo Log



Brodie Creek upstream



Brodie Creek mid reach



Stream #3



Panther Branch



Stream #7



Stream #12



Stream #17



Stream #24



Stream #31



Section of unstable bank and proposed restoration location on Stream #3



Section of unstable bank and proposed restoration location on Brodie Creek



Section of unstable bank and proposed restoration location on Brodie Creek