

Bank Parcel Development Plan

Bass Mountain Bank Parcel

Pursuant to:
Restoration Systems' Umbrella Mitigation Banking Instrument for
Riparian Buffer and Nutrient Offset Mitigation Credits
Cape Fear River Basin - Jordan Lake Nutrient Strategy



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June 2014

Bass Mountain Parcel Development Plan

Restoration Systems' Jordan Lake Riparian Buffer & Nutrient Umbrella Mitigation Bank

Restoration Systems (Sponsor) is pleased to provide this Bank Parcel Development Plan (BPDP) for the Bass Mountain Bank Parcel (Parcel), proposed as part of the Restoration Systems' Jordan Lake Riparian Buffer & Nutrient Umbrella Mitigation Banking Instrument (Banking Instrument) signed April 9th, 2013 between Restoration Systems, and the North Carolina Division of Water Resources (NC DWR). Per the Jordan Lake Water supply Nutrient Strategy (15A NCAC 02B .0267 & 15A NCAC 02B .0268), this Parcel is designed to provide riparian buffer and nutrient offset mitigation credits for unavoidable impacts due to development within the Haw River Sub-watershed of Jordan Lake, Cape Fear River Basin, United States Geological Survey ('USGS') 8-digit Hydrologic Unit Codes ('HUC') 03030002.

An onsite determination for applicability to the Jordan Lake Water supply Nutrient Strategy (15A NCAC 02B .0267 & 15A NCAC 02B .0268), was conducted on August 9th, 2013 (Appendix B). A perpetual Conservation Easement is in place and dated September 28th, 2010 (Appendix C). Parcel construction and restoration activities were concluded in early April of 2013. These activities were designed and implemented in concurrence with the Bass Mountain Steam Mitigation Bank (USACE Action ID # SAW-2008-02029) and approved by the Interagency Review Team (IRT) including the North Carolina Division of Water Resources (NC DWR) on March 6th, 2013 (Appendix E).

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1.0 Introduction

Restoration Systems (Sponsor) is pleased to provide this Bank Parcel Development Plan (BPDP) for the Bass Mountain Bank Parcel (Parcel), proposed as part of the Restoration Systems' Jordan Lake Riparian Buffer & Nutrient Umbrella Mitigation Banking Instrument (Banking Instrument) signed April 9th, 2013 between Restoration Systems, and the North Carolina Division of Water Resources. This Parcel is designed to provide riparian buffer and nutrient offset mitigation credits for unavoidable impacts due to development within the Haw River Sub-watershed of Jordan Lake, Cape Fear River Basin, United States Geological Survey ('USGS') 8-digit Hydrologic Unit Codes ('HUC') 03030002, per the Jordan Lake Water supply Nutrient Strategy (15A NCAC 02B .0267 & 15A NCAC 02B .0268). Supporting figures can be found within Appendix A.

Stormwater runoff from the Parcel drains directly to Cane Creek via unnamed tributaries. According to the Final Cape Fear River Basin Restoration Priorities (NC EEP 2009), this watershed should be targeted for restoration to protect the nutrient sensitive watershed that ultimately drains into the nutrient sensitive water supply at Jordan Lake.

An onsite determination for applicability to the Jordan Lake Water supply Nutrient Strategy (15A NCAC 02B .0267 & 15A NCAC 02B .0268), was conducted on August 9th, 2013 (Appendix B). A perpetual Conservation Easement is in place and dated September 28th, 2010 (Appendix C). Parcel construction and restoration activities were concluded in early April of 2013. These activities were designed and implemented in concurrence with the Bass Mountain Stream Mitigation Bank (USACE Action ID # SAW-2008-02029) and approved by the Interagency Review Team (IRT) including the North Carolina Division of Water Resources (NC DWR) on March 6th, 2013 (Appendix E).

1.1 Parcel Location

Located in the South Atlantic/Gulf Region approximately six miles northeast of Liberty, NC in southern Alamance County (Figure 1, Appendix A), the Parcel is hydrologically situated within the USGS 14-digit HUC 03030002050050 of the Cape Fear River Basin and Jordan Lake's Haw Sub-Watershed (North Carolina Division of Water Quality Subbasin Number 03-06-04).

Directions to Parcel:

- From I-40, take exit 147 (Highway 87 South).
- Travel 5.0 miles on Highway 87 South.
- Take a right on Mt. Hernon Rock Creek Road.
- Take first left onto Bass Mountain Road.
- Travel approximately 6.7 miles; the Parcel is on the left.
- Coordinates of Parcel at entrance are 35.9046 °N, 79.4475°W.

1.2 Parcel Overview

The Parcel encompasses 20.53 acres of land with unnamed tributaries which flow directly to Cane Creek. According to the Final Cape Fear River Basin Restoration Priorities (NCEEP 2009), this watershed should be targeted for restoration to protect the nutrient sensitive waters that ultimately drain into the nutrient sensitive water supply of Jordan Lake. The riparian restoration will result in improved water quality within the Parcel and the downstream watershed. The Parcel is located in a region of the state dominated by agriculture and livestock; restoration of the riparian buffer is expected to result in immediate water quality benefits within the vicinity of the Parcel through the removal of livestock access to Parcel streams.

A significant portion of the Parcel is utilized for livestock grazing and hay production. Unnamed tributaries 1-3 were determined subject to the Jordan Lake Water supply Nutrient Strategy (15A NCAC 02B .0267 & 15A NCAC 02B .0268) and thus suitable to generate riparian buffer and nutrient offset credit (Appendix C - NC Division of Water Quality Parcel Determination Letter dated June 7th, 2013). Unnamed tributary 4 was deemed intermittent, however, is not identified on the 1960 Alamance County Soil Survey (Figure 2, Appendix A), and thus subject only to provide nutrient offset credit. The drainage area of these streams ranges from 0.02 mi² to 0.2 mi². Additional land use practices including the maintenance and removal of riparian vegetation and the relocation, dredging and straightening of onsite streams resulted in degraded water quality and unstable channel characteristics (stream entrenchment, erosion, and bank collapse and stream aggradation).

Staff from NC DWR visited the parcel in June of 2013 and determined that Parcel tributaries were viable for riparian buffer and nutrient offset mitigation (Appendix B). A perpetual conservation easement was placed over the Parcel in September of 2012 (Appendix C). Of the Parcel, approximately 12.13 acres will be fully restored and generate riparian buffer or nutrient offset mitigation credit.

2.0 Project Area – Existing Conditions

2.1 Physiography

Situated within North Carolina’s Piedmont Ecoregion, the Parcel’s regional physiography is characterized by dissected, irregular plains with moderate to steep slopes and low to moderate gradient streams over boulder and cobble-dominated substrate (Griffith et. al. 2002). Onsite elevations range from a high of 640 feet National Geodetic Vertical Datum (NGVD) on slopes adjacent to UT1 at the northern/upstream end of the Parcel to a low of approximately 590 feet NGVD at the Parcel’s outfall (USGS Snow Camp, North Carolina 7.5-minute topographic quadrangles). Surrounding land use is rural in nature with limited residential development (Figure 3, Appendix A)

Historically, livestock had indiscriminate access to most of the Parcel streams, resulting in degradation of stream banks. Riparian vegetation adjacent to tributaries was sparse and disturbed due to livestock grazing, bush hogging, and regular maintenance activities. Pasture and hay fields over the entire Parcel were subject to broadcast application of fertilizer and other agricultural products. Mature forests occupy portions of UTs 1, 2 & 4 and throughout UT 3 (Figure 4, Appendix A). The existing vegetation survey will be compared to the as-built stream location upon completion of stream restoration activities to derive an exact acreage of riparian area restoration.

2.2 Soils

Based on Alamance County web soil survey the Parcel contains five soil series; Parcel soils are described below in Table 1.

Table 1. Parcel Soils

Map Unit	Hydric Status	Family	Description
Colfax	Non-hydric	Aquic Fragiudult	This series consists of somewhat poorly-drained, slowly permeable soils of depressions around heads of drainage ways. Slopes are generally between 0 and 15 percent. Depth to seasonal high water table occurs between 0.5 and 1.5 feet. Bedrock occurs at a depth of more than 60 inches.

Goldston	Non-hydric	Typic Dystrudept	This series consists of well to excessively-drained, moderately to rapid permeable soils within uplands. Slopes are generally between 2 and 60 percent. Depth to seasonal high water table occurs below 6.0 feet. Soft bedrock occurs at a depth of 20 to 40 inches or more.
Georgeville	Non-hydric	Typic Kanhapludult	This series consists of well-drained, moderately permeable soils of uplands. Slopes are generally between 2 and 50 percent. Depth to seasonal high water table occurs below 6.0 feet. Soft bedrock occurs at a depth of more than 60 inches.
Herndon	Non-hydric	Typic Kanhapludult	This series consists of well-drained, moderately permeable soils of uplands. Slopes are generally between 2 and 25 percent. Depth to seasonal high water table occurs below 6.0 feet. Soft bedrock occurs at a depth of more than 60 inches.
Starr	Non-hydric	Fluventic Dystrudept	This series consists of well-drained, moderately permeable soils of foot slopes and heads of drainage ways. Slopes are generally between 0 and 8 percent. Depth to seasonal high water table occurs below 6.0 feet. Soft bedrock occurs at a depth of more than 40 inches.

Source: 1960 Alamance County Soil Survey, USDA-NRCS

2.3 Vegetation

The Parcel was characterized by over used agricultural and pastured land, a few mixed-hardwood forest stands, and a poorly developed riparian buffer. The Parcel was heavily grazed, received regular vegetation maintenance, harvested for hay and subject to broadcast application of fertilizer and other agricultural products.

Stream reaches were characterized by native grasses as well as invasive species including multiflora rose (*Rosa multiflora*), blackberry (*Rubus spp.*), milkweed (*Asclepias sp.*) and tree of heaven (*Ailanthus altissima*). Mature forests occupy portions of UTs 1, 2 & 4 and throughout UT 3 (Figure 4, Appendix A) Tree and sapling layers include tulip tree (*Liriodendron tulipifera*), sweetgum (*Liquidambar styraciflua*), American sycamore (*Platanus occidentalis*), eastern red cedar (*Juniperus virginiana*), red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), and various oak species (*Quercus spp.*). The shrub and vine layers are dominated by multiflora rose and also contain greenbrier (*Smilax rotundifolia*). Livestock have access to most onsite forest patches.

Staff from NC DWR confirmed the Parcel is suitable for riparian restoration throughout.

2.4 Threatened and Endangered Species

Species with the classification of Endangered (E), Threatened (T), or officially Proposed (P) for such listing are protected under the Endangered Species Act of 1973 (ESA), as amended (16 U.S. C. 1531 *et seq.*). No species is federally listed for Alamance County by the United States Fish and Wildlife Service (USFWS) (USFWS 2013).

2.5 Environmental & Cultural Constraints

The presence of conditions or characteristics that had the potential to hinder restoration activities on the Parcel was evaluated. The evaluation focused primarily on the presence of hazardous materials, utilities and restrictive easements, rare/threatened/endangered species or critical habitats, cultural resources, and the potential for hydrologic trespass. Existing information regarding constraints was acquired and reviewed. In addition, any parcel conditions that had the potential to restrict design and implementation were documented during the field investigation.

No evidence of natural and/or man-made conditions were identified which had the potential to impede proposed restoration activities. Correspondence with the State Historic Preservation Office (SHPO) concluded that there were no dwellings that fell under the ‘National Register of Historic Place,’ nor were there any documented archaeological sites found within the contact of the Parcel. Correspondence between RS and SHPO is provided in Appendix D. The mitigation will have no impacts to any cultural resources.

2.6 FEMA Floodplain/Floodway mapping

The Parcel is not located within the Federal Emergency Management Association’s (FEMA) designated floodway and approximate 100-year flood boundary (FEMA Map ID 3710876800J). No floodplain impacts are anticipated with the project.

3.0 Restoration Plan

Restoration of riparian areas will be accomplished through the goals and methods outlined by the Bass Mountain Stream Mitigation Bank - Mitigation Plan. Primary goals focus on 1) improving water quality, 2) enhancing flood attenuation and hydrology, 3) improving aquatic resources, and 4) restoring riparian habitat. Proposed mitigation activities will create wildlife and fish habitat, shade/cool surface waters (thereby increasing dissolved oxygen levels), filter nutrients, reduce sedimentation, reduce downstream flooding, and increase bed morphology (habitat) through maintenance of perpendicular flow vectors. The riparian area will be restored through the re-vegetation of native plant communities. Detailed analysis of plant communities and the Interagency Review Team (IRT) approved planting plan follow.

3.1 Riparian Restoration Activities

Restoration of floodplain forest and stream-side habitat allows for development and expansion of characteristic species across the landscape. Ecotonal changes between community types contribute to diversity and provide secondary benefits, such as enhanced feeding and nesting opportunities for mammals, birds, amphibians and other wildlife. Plant species and a planting plan were developed and approved by the IRT including the NC DWR during the development of the Bass Mountain Stream Mitigation Bank.

Stream-side trees include species with high value for sediment stabilization, rapid growth rate, and the ability to withstand hydraulic forces associated with bankfull flow and overbank flood events. Stream-side trees and shrubs were planted along reconstructed stream banks and concentrated along outer bends. Planted vegetation along cleared stream banks will reestablish native/historic community patterns within the stream corridor, associated side slopes, and transition areas. Re-vegetating Parcel floodplains and stream banks will provide stream bank stability, give shade, reduce surface water temperatures, filter pollutants from adjacent runoff, and provide habitat for area wildlife.

Variations in vegetative planting occurred based on topographic locations and hydraulic conditions of the soil. Vegetative species composition mimics reference forest data, onsite observations, and community descriptions from Classifications of the Natural Communities of North Carolina (Schafale and Weakley 1990). Community associations to be utilized include 1) Dry-Mesic Oak-Hickory Forest on slopes, 2) Piedmont Alluvial Forest within floodplains, and 3) stream-side assemblage within 15 feet of stream banks. Deep-rooted, riparian vegetation will be planted over 15.44 acres of the Parcel.

3.2 Planting Plan

Species selected for planting were dependent upon availability of local seedling sources. Seedlings from a local source (within 200 miles) were obtained from a licensed nursery and planted at the Parcel. Advance notification to nurseries (1 year) helped to facilitate availability of various noncommercial elements.

Bare-root seedlings of tree species were planted within the Dry-Mesic Oak-Hickory Forest and Piedmont Alluvial Forest at a density of approximately 680 stems per acre on 8-foot centers. Species in the streamside assemblage community were planted at a density of 2,720 stems per acre on 3-foot centers. Figure 6 Appendix A depicts the total number of stems and species distributed within each vegetation association, with the exception of the emergent seed mix. Planting was performed in Mid-March of 2014. A detailed planting list is depicted below in Table 2, and graphically on Figure 5 of Appendix A.

Table 2: Tree Species

Vegetation Association: Dry-Mesic Oak-Hickory Forest and Piedmont Alluvial Forest						
Area (Acres) Total = 15.44 acres			4.49		10.95	
Vegetation Association:	Streamside Assemblage		Piedmont Alluvial Forest		Dry-Mesic Oak Hickory Forest	
Species	Live Stake or Bare Root	Stems per Acre/ Spacing	Live Stake or Bare Root	Stems per Acre / Spacing	Live Stake or Bare Root	Stems per Acre/ Spacing
Black Willow (<i>Salix nigra</i>)	LS	3x3				
River Birch (<i>Betula nigra</i>)			BR	85		
Ironwood (<i>Carpinus caroliniana</i>)			BR	85		
Shagbark hickory (<i>Carya ovate</i>)			BR	85		
Green Ash (<i>Fraxinus pennsylvanica</i>)			BR	85		
Sycamore (<i>Platanus occidentalis</i>)			BR	85		
Water Oak (<i>Quercus nigra</i>)			BR	85		
Willow oak (<i>Quercus phellos</i>)			BR	85		
American Elm (<i>Ulmus americana</i>)			BR	85		
Mockernut Hickory (<i>Carya alba</i>)					BR	97
Pignut Hickory (<i>Carya glabra</i>)					BR	97
Persimmon (<i>Diospyros virginiana</i>)					BR	97
Sourwood (<i>Oxydendron arboreum</i>)					BR	97
White Oak (<i>Quercus alba</i>)					BR	97
Southern red oak (<i>Quercus falcata</i> var. <i>pagodifolia</i>)					BR	97
Northern red oak (<i>Quercus rubra</i>)					BR	97
Total		N/A		3,053		8,100

3.3 BMP

A total for four (4) constructed BMP's were installed to intercept surface waters draining through agricultural areas prior to discharging into Parcel streams. Figure 5 of Appendix A identifies where these structures were placed and Figure 7 shows the final footprint of each BMP. Each structure was excluded from credit calculations. Design, permitting, and construction of these structures were completed under the development of the Bass Mountain Steam Mitigation Bank (USACE Action ID # SAW-2008-02029).

3.4 Easement Boundaries and Fencing

Parcel boundaries were identified in the field to ensure clear distinction between the Parcel and adjacent properties. Boundaries were delineated by fencing where necessary to insure protection from livestock and were clearly marked. Fencing and boundary markers disturbed, damaged, or destroyed will be repaired and/or replaced on an as-needed basis and documented as part of annual monitoring reports submitted to the NC DWR.

4.0 Monitoring and Maintenance Plan

4.1 Monitoring Protocol

Restoration monitoring procedures for vegetation will include periodic visual inspection and annual plant survival and species diversity survey reports. Quantitative sampling of vegetation will be performed as outlined in the CVS Level 1-2 Protocol for Recording Vegetation, Version 4.0 (Lee et al. 2006). Detailed qualitative and quantitative monitoring is proposed for vegetated riparian areas; marsh treatment areas will be visually inspected periodically and reported qualitatively within the annual monitor report, which will include photographic record of the Parcel's assets.

Monitoring of the restoration efforts will be performed for five years or until success criteria are fulfilled. Restoration Systems shall submit to NC DWR an annual monitoring report, no later than December 31st of each year. Quantitative monitoring will occur at twelve (12) 10x10 meter vegetation plots. Sampling of vegetation will be performed as outlined in the CVS Level 1-2 Protocol for Recording Vegetation, Version 4.0 (Lee et al. 2006) in late August or October of each year, with the 1st monitoring data to be collected in the Fall of 2014 but not within 5 months from initial planting.

During the first year, vegetation will receive a cursory, visual evaluation on a periodic basis to ascertain the degree of overtopping of planted elements by nuisance species. Success criteria within the riparian buffer and nutrient offset restoration areas will be based on the survival of planted species at a density of 320 stems per acre after five years of monitoring. Natural recruits will not count towards annual success criteria, but maybe taken into account during review by the NC DWR.

4.2 Parcel Maintenance

A remedial action plan will be developed and implemented with the approval of NCDWQ in the event that the Site or a specific component of the Site fails to achieve success criteria as outlined above. Other vegetation maintenance and repair activities may include pruning, mulching, and fertilizing. In the event that exotic invasive plant species require treatment, such species will be controlled by mechanical (physical removal with the use of a chainsaw) and/or chemical methods (aquatic approved herbicide) in accordance with North Carolina Department of Agriculture (NCDA) rules and regulations.

4.3 Long Term Management Plan

The Sponsor currently holds a Conservation Easement over the Parcel which was approved by the IRT in conjunction with the establishment of the Bass Mountain Stream Mitigation Bank. The Conservation Easement and appropriate title insurance documents are attached as Appendix C. The Conservation

Easement is perpetual, preserves all natural areas, and prohibits all use of the property inconsistent with its use as mitigation property, including any activity that would materially alter the biological integrity. The North Carolina Wildlife Habitat Foundation is expected to be the long-term holder of the Conservation Easement and responsible for long-term stewardship of the Parcel site. The Sponsor will provide a financial sum appropriate for the long-term holder of the Conservation Easement to carry out its responsibilities.

5.0 Financial Assurance

Following approval of the BPD, the Sponsor shall provide a Performance Bond from a surety company that is rated no less than an “A-” as rated by A.M. Best. The Performance Bond amount shall be 100% of the estimated cost for implementation of the buffer restoration and/or stormwater BMP project as described in the approved BPD, but not less than \$150,000.00. Alternatively, in lieu of posting the Performance Bond, the Sponsor may elect to construct the project prior to the first credit release.

After completion of the restoration/construction, a separate Performance/Maintenance Bond will be secured for 100% of the estimated cost to implement the monitoring and maintenance plan but not less than \$100,000.00. The Performance/Maintenance Bond shall be in effect for a minimum of five years, and until NC DRW has released all mitigation credits to the Bank Sponsor. Upon NC DRW approval, this may be lowered each year based on the adjusted cost to complete the monitoring.

6.0 Mitigation Potential

The Bass Mountain Bank will provide Jordan buffer mitigation credits for development impacts within the Haw-River Sub-watershed of Jordan Lake. Additionally, it will provide nutrient offset mitigation credits for development impacts within the Haw River Sub-watershed. The width of the credit generation area will begin at the most landward limit of the top of bank or the rooted herbaceous vegetation and extend landward a maximum distance of 200 feet (Appendix D, DWR Memo to NC EEP). A 5 foot maintenance buffer was subtracted from the credit generation area to allow for fencing repairs and vegetation maintenance around fencing posts and rails. No credit will be generated within 5 feet of fencing (Figure 7, Appendix A).

According to the nutrient reduction goals for the Haw River arm of the Jordan Lake, the generated nitrogen credits per acre in the Haw Sub-watershed is 2,249.36 pounds and the generated phosphorus credit per acre is 143.81 pounds.

The Bass Mountain Bank will generate approximately 10.84 acres of restored riparian area. Of the 10.84 acres, approximately 10.49 acres (456,944.4 square feet) will generate Jordan lake riparian buffer credits and approximately 0.35 acres will generate nutrient offset credits. The 0.35 acres of restored riparian area will yield approximately 787.27 pounds of generated nitrogen offset credit and 50.33 pounds of generated phosphorous offset credits.

The delivery factors applied to this parcel are 71 percent for nitrogen and 67 percent from phosphorus. Therefore, the total delivered nutrient offset credits are 558.9 pounds of nitrogen and 33.7 pounds of phosphorus. The exact acreage of Jordan riparian buffer and nutrient offset (Nitrogen and Phosphorus) credits generated at the Parcel will be shown in the as-built Report.

The Sponsor will maintain three separate credit ledgers for the Bass Mountain Bank according to the requirements listed in the UMBI. The Sponsor will maintain the nutrient offset ledgers in both “Generated Credits” and “Delivered Credits.” The Bass Mountain Bank can only sell delivered credits from this bank.

Riparian buffer mitigation provided by this parcel can be used to offset unavoidable impacts within the Haw River Sub-watershed of Jordan Lake. Both riparian buffer and nutrient offset credit can be generated from the restored parcel per the credit calculations outlined in the DWR Memo to the NC EEP dated August 9th, 2013 (Appendix E). Though, credits cannot be generated from the same sq. foot of restored buffer. The Sponsor must request and receive approval of the transfer of any mitigation credits from NC DWR. All mitigation credits assets shall be shown on the credit ledger.

Table 3 - Jordan Lake: Haw River Sub-Watershed Credit Determination Table

14 Digit Watershed ID: 03030002050050						
Buffer Zone	Credit Type	Total Acreage	Credit Ratio (if applicable)	Credit per Acre	Delivery Factor (if applicable)	Delivered Credit Per Acre
Zone 1 (top of bank to 50')	Riparian Buffer	6.13	1:1	43,560 sq. ft.	n/a	456,944.4 sq. ft.
Zone 2 (50' – 100')	Riparian Buffer	4.36	1:1	43,560 sq. ft.	n/a	558.9 lbs.
Zone 3 (100' – 150')	Nitrogen	0.35	n/a	2,249.36 lbs. / ac.	71%	558.9 lbs.
Zone 3 (100' – 150')	Phosphorus	0.35	n/a	143.81 lbs. / ac.	67%	33.7 lbs.

267,022.8
189,921.6 sq.ft

7.0 References

Griffith, G.E., J.M. Omernik, J.A. Comstock, M.P. Schafale, W.H. McNab, D.R. Lenat, T.F. MacPherson, J.B. Glover, and V.B. Shelbourne. 2002. *Ecoregions of North Carolina and South Carolina*. U.S. Geological Survey, Reston, Virginia.

Jordan Lake Water Supply Watershed Buffer Rules 15A NCAC 02B .0267 and 15A NCAC 02B .0268

NC Department of Environment and Natural Resources, Ecosystem Enhancement Program. *Guidelines for Riparian Buffer Restoration*. October 2004

Schafale, M.P. and A.S. Weakley. 1990. *Classification of the Natural Communities of North Carolina: Third Approximation*. North Carolina Natural Heritage Program, Division of Parks and Recreation, N.C. Department of Environment, Health, and Natural Resources. Raleigh, North Carolina.

United States Fish and Wildlife Service (USFWS). 2013. Endangered Species, Threatened Species, Federal Species of Concern, and Candidate Species, Alamance County, North Carolina Available: <http://www.fws.gov/raleigh/species/cntylist/alamance.html> [March, 2013]. United States Fish and Wildlife Service.

USDA, Soil Conservation Service, 1960. Soil Survey of Alamance County

Appendix A: Supporting Materials

Figure 1 – Site Location & Service Area

Figure 2 – NRCS Alamance County Soil Survey

Figure 3 – USGS 1:24000 Topographic Map

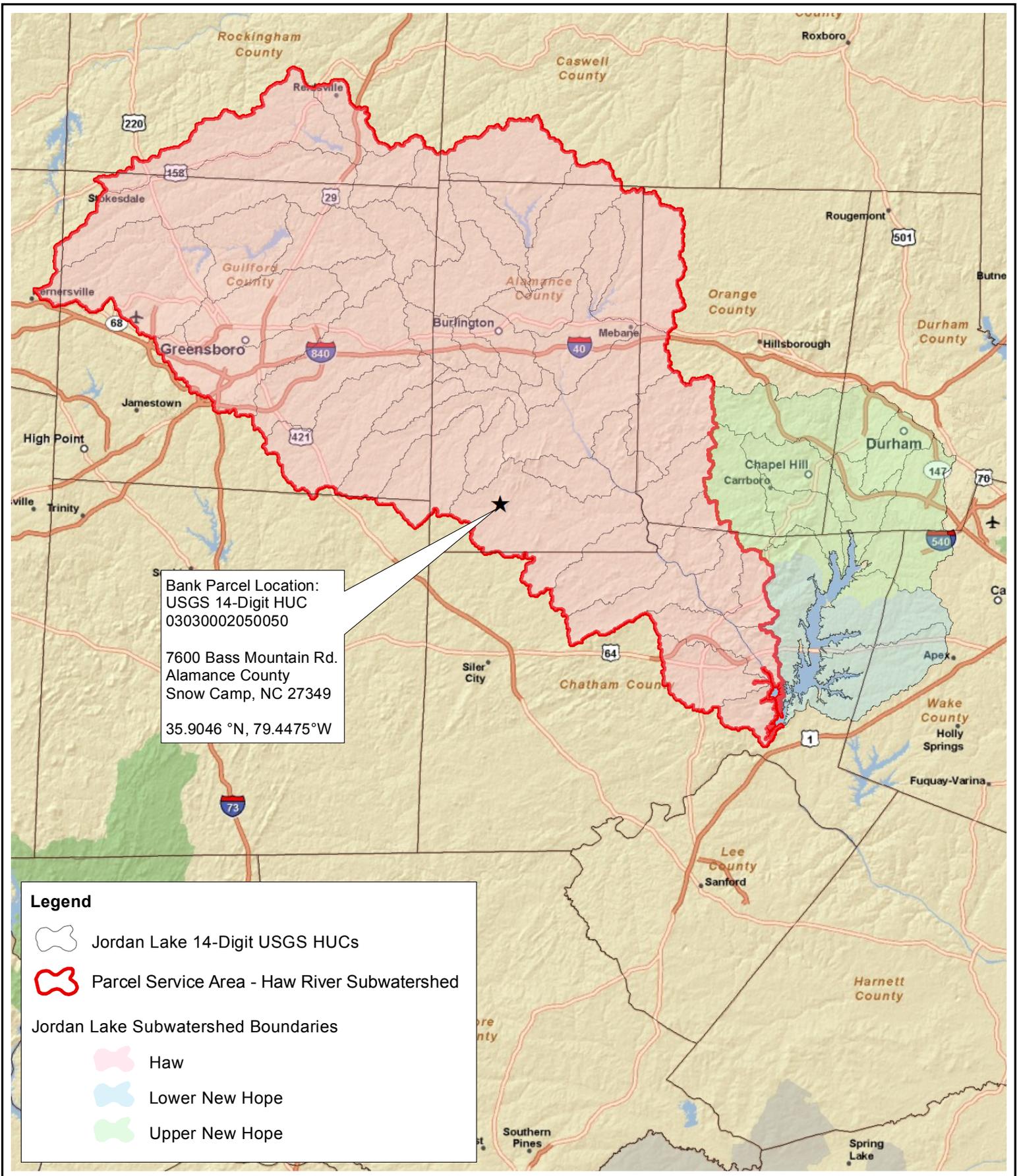
Figure 4 – Historic Conditions Plan View

Figure 5 – Restoration Plan

Figure 6 – Bass Mountain Stream Mitigation Bank – Planting Detail

Figure 7 – Credit Determination

Site Photographs



Bank Parcel Location:
 USGS 14-Digit HUC
 03030002050050

7600 Bass Mountain Rd.
 Alamance County
 Snow Camp, NC 27349

35.9046 °N, 79.4475°W

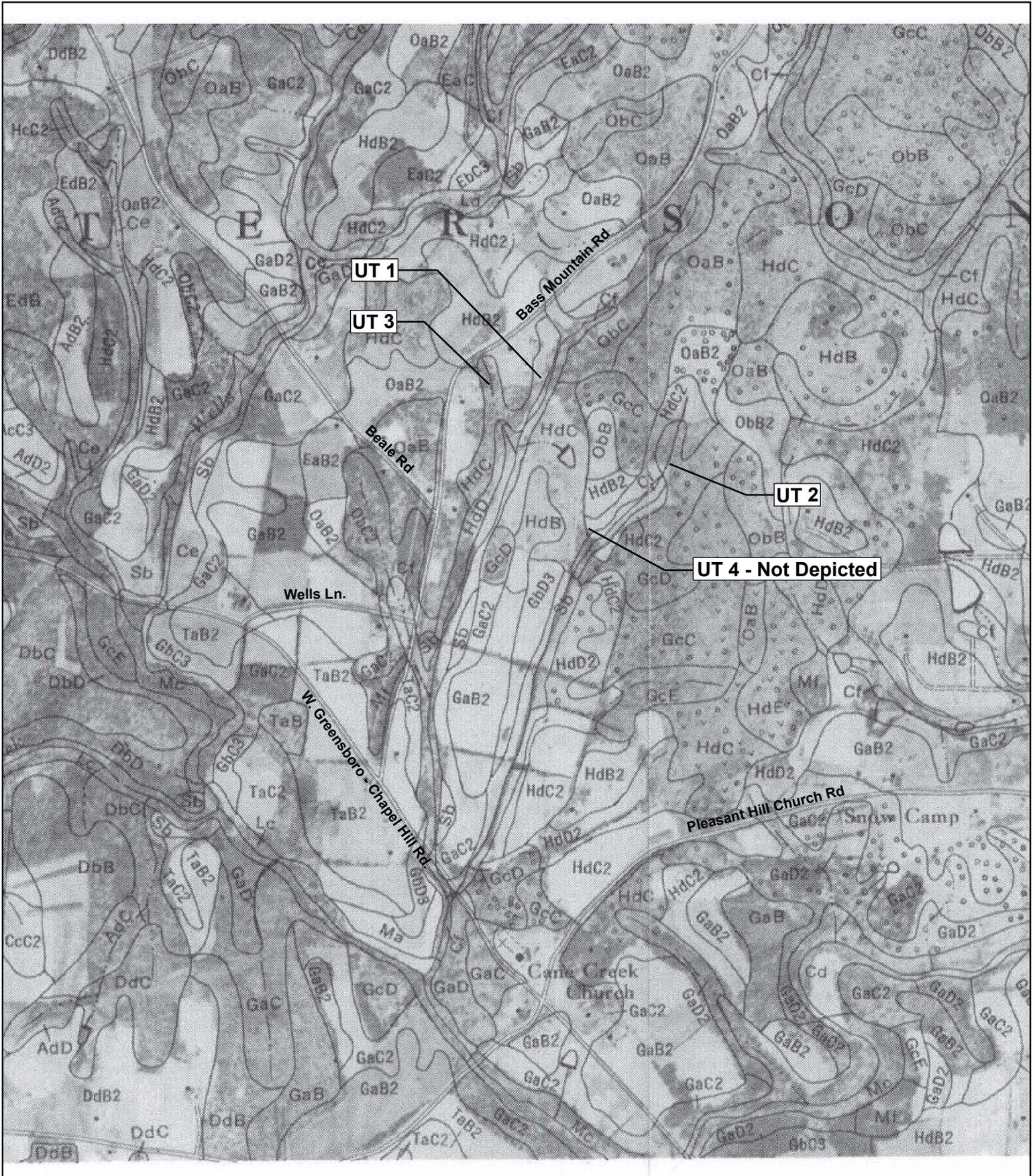
Legend

- Jordan Lake 14-Digit USGS HUCs
- Parcel Service Area - Haw River Subwatershed

Jordan Lake Subwatershed Boundaries

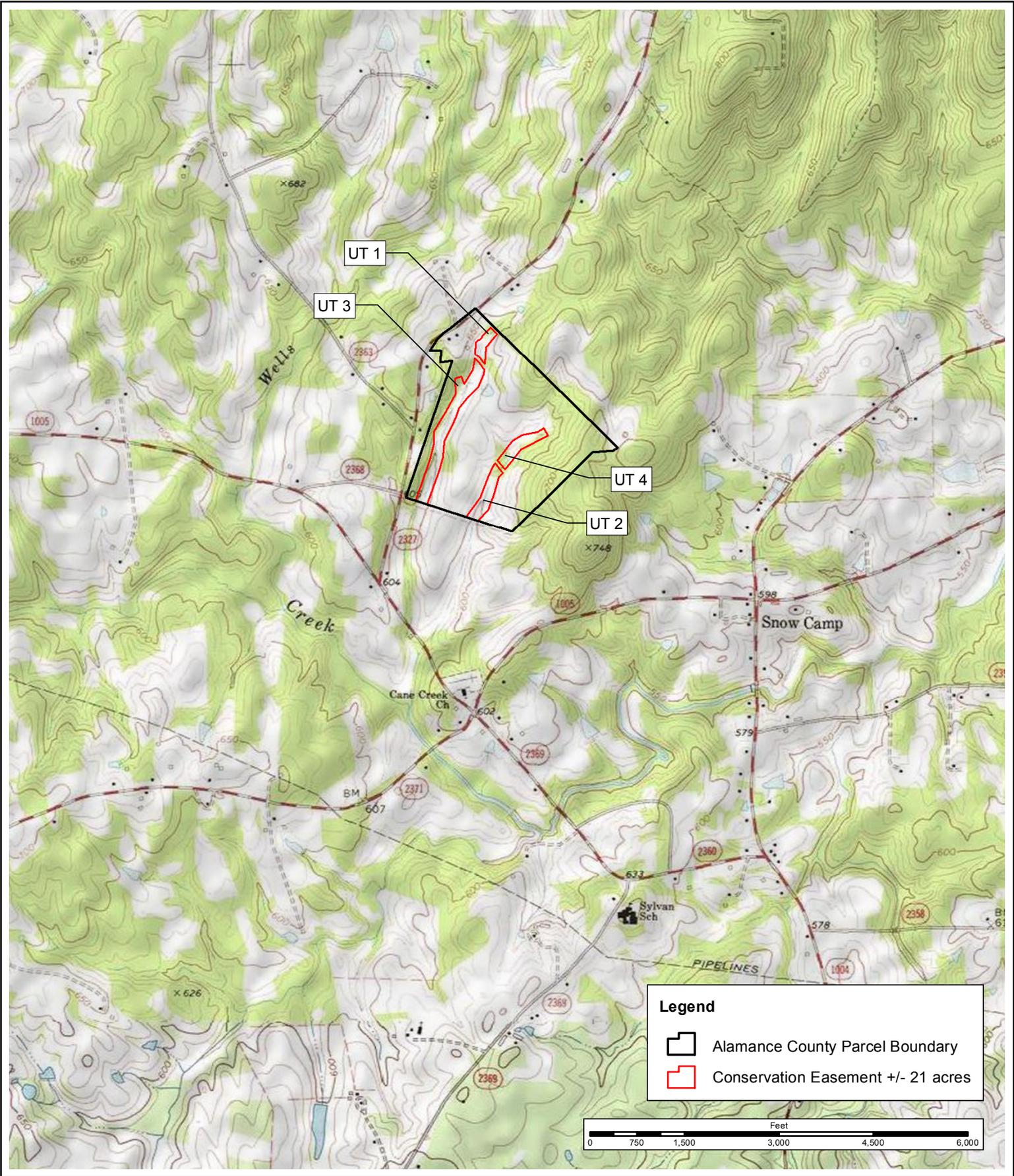
- Haw
- Lower New Hope
- Upper New Hope

 <p>RESTORATION SYSTEMS, LLC 1101 HAYNES ST, SUITE 211 RALEIGH, NC 27604 PHONE : 919.755.9490 FAX : 919.755.9492</p> <p><small>This map and all data contained within are supplied as is with no warranty. Restoration Systems, LLC expressly disclaims responsibility for damages or liability from any claims that may arise out of the use or misuse of this map. It is the sole responsibility of the user to determine if the data on this map is compatible with the user's needs. This map was not created as survey data, nor should it be used as such. It is the user's responsibility to obtain proper survey data, prepared by a licensed surveyor, where required by law.</small></p>	<p>SCALE: 1 in = 50,000 ft</p>	<p align="center">Bass Mountain Bank Parcel Haw River Branch - Jordan Lake Watershed Cape Fear River Basin: USGS HUC 03030002</p>	
	<p>DATE: June - 2013</p>		
	<p>PROJECT: Bass BP</p>	<p align="center">Figure 1: Site Location & Service Area</p>	



(C) 1960 Alamance County NRCS Soil Survey Manuscript; Sheet 30

 <p>RESTORATION SYSTEMS, LLC 1101 HAYNES ST, SUITE 211 RALEIGH, NC 27604 PHONE : 919.755.9490 FAX : 919.755.9492</p>	SCALE:	<p align="center">Bass Mountain Bank Parcel Haw River Branch - Jordan Lake Watershed Cape Fear River Basin: USGS HUC 03030002</p>
	DATE: April - 2013	
	PROJECT: Bass BP	
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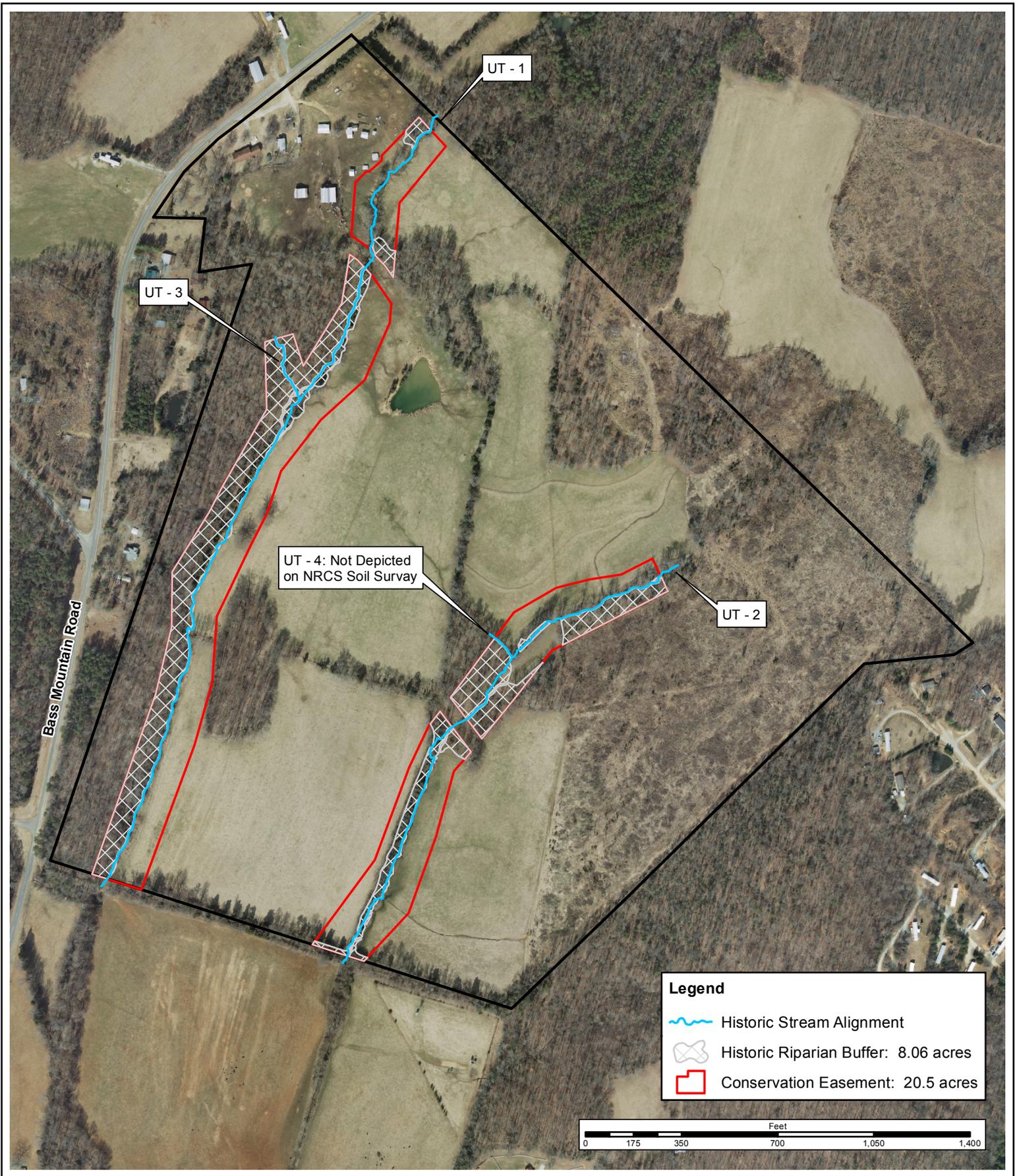
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SCALE: 1:24,000
 DATE: June - 2014
 PROJECT: Bass BP

Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 0303002

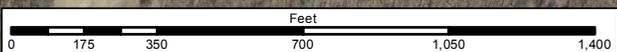
USGS 24:000

Copyright© 2013 National Geographic Society, i-cubed
 COORDINATE SYSTEM: NAD 1983 SP NC FEET



Legend

-  Historic Stream Alignment
-  Historic Riparian Buffer: 8.06 acres
-  Conservation Easement: 20.5 acres



RESTORATION SYSTEMS, LLC
 1101 HAYNES ST, SUITE 211
 RALEIGH, NC 27604
 PHONE : 919.755.9490
 FAX : 919.755.9492

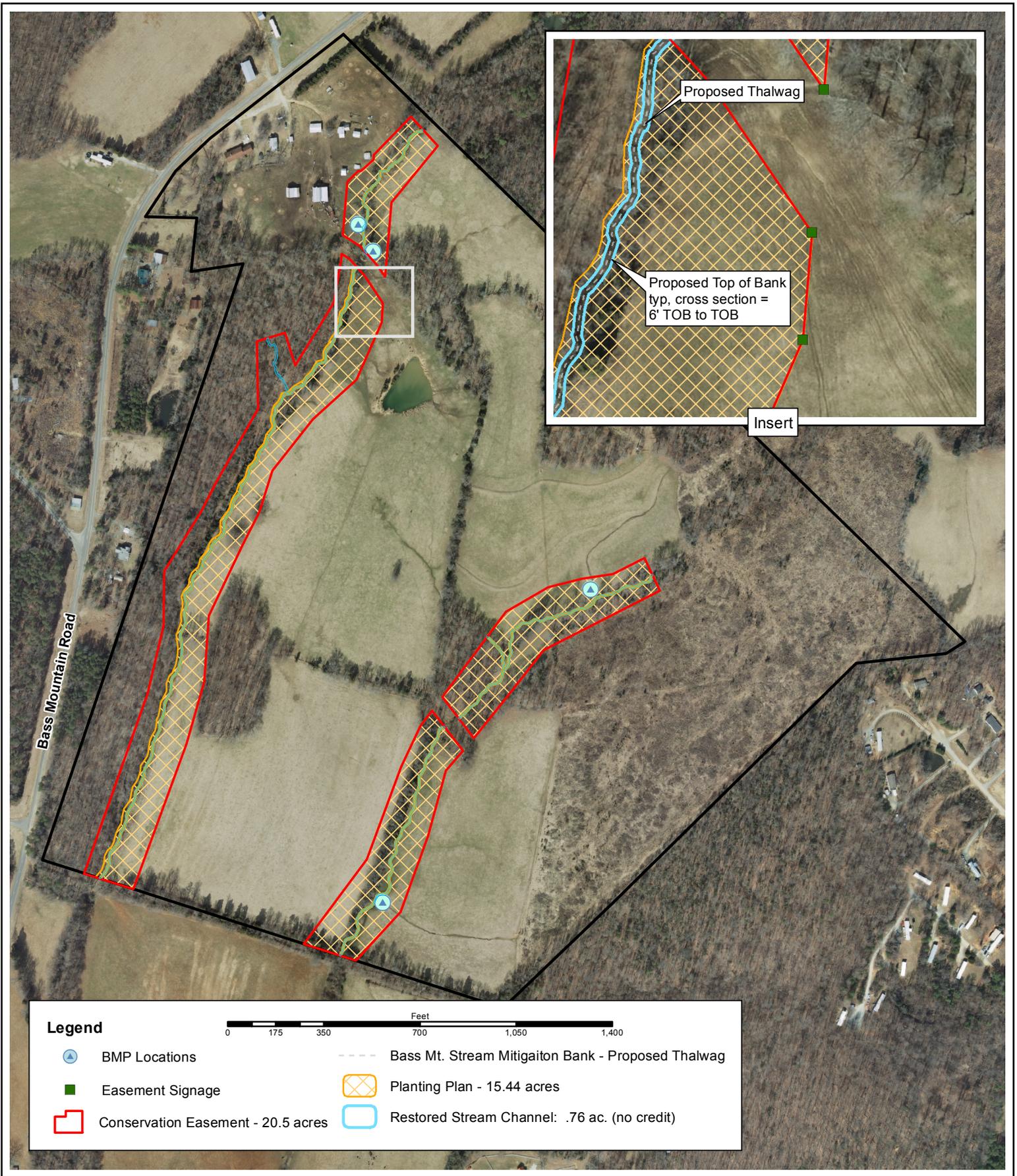
SCALE: 1:5,500
 DATE: June - 2014
 PROJECT: Bass BP

Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 03030002

Figure 4
Historic Conditions Plan View

AERIAL PHOTOGRAPHY
 (c) Color Ortho - Alamance
 COORDINATE SYSTEM: NAD 1983 SPLAS FEET

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Legend

	BMP Locations		Bass Mt. Stream Mitigation Bank - Proposed Thalweg
	Easement Signage		Planting Plan - 15.44 acres
	Conservation Easement - 20.5 acres		Restored Stream Channel: .76 ac. (no credit)

0 175 350 700 1,050 1,400 Feet



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SCALE: 1:5,500
 DATE: June - 2014
 PROJECT: Bass BP

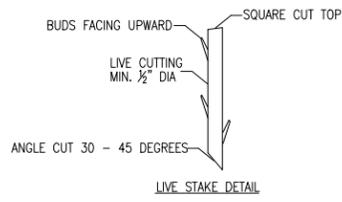
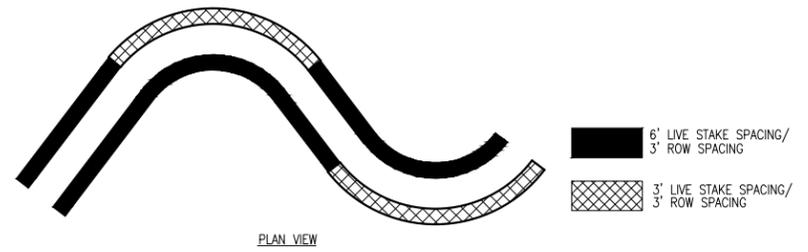
Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 03030002

Figure 5
Restoration Plan

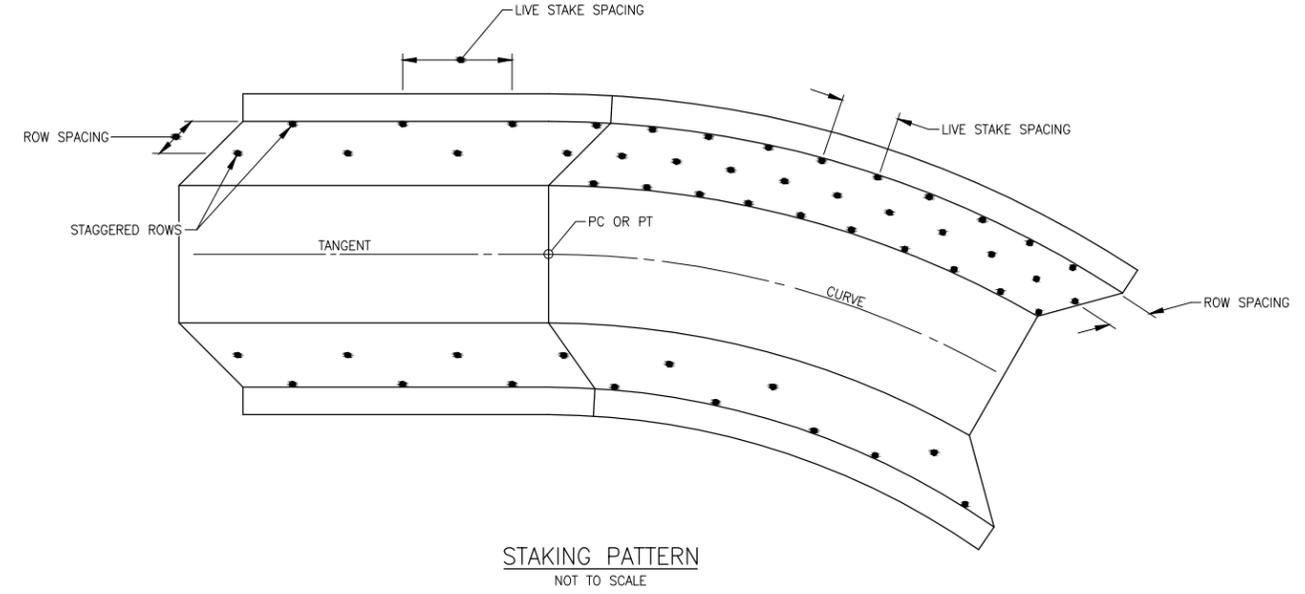
AERIAL PHOTOGRAPHY
 (c) Color Ortho - Alamance
 COORDINATE SYSTEM: NAD 1983 SPLAS FEET

PRELIMINARY PLANS
 NOT FOR CONSTRUCTION

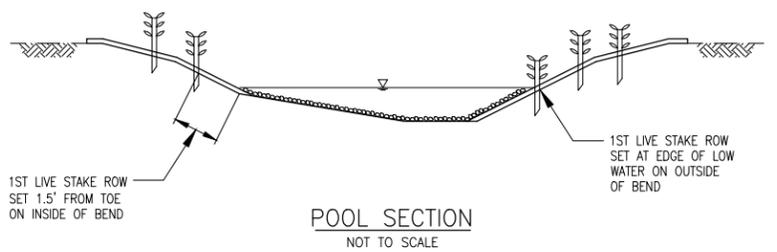
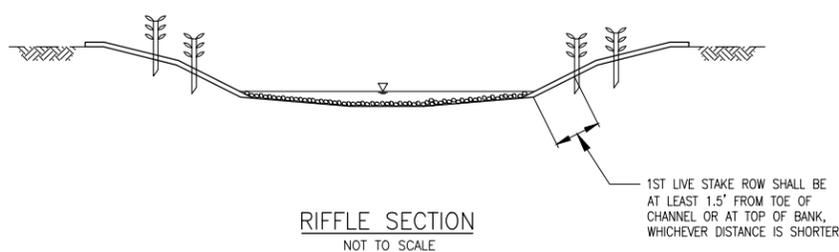
PROJECT BASS MTN RESTORATION PROJECT			
OWNER RESTORATION SYSTEMS LLC			
TITLE PLANTING DETAILS			
SCALE AS NOTED	DESK. BY m.d.m.	PROJECT NO. 1056	DRAWING NUMBER P-1
DATE 09/12/2012	CHKD. BY SGG		
DATE	BY	REV.	DESCRIPTION



NUMBER OF LIVE STAKE ROWS			
CHANNEL DEPTH (FT)	INSIDE OF BEND	TANGENT	OUTSIDE OF BEND
0 - 1.5	1	1	2
1.5 - 2.5	2	2	3
2.5 - 3.5	3	3	4



- PLANTING NOTES:
- TEMPORARY AND PERMANENT SEED
- ALL DISTURBED AREAS WILL BE STABILIZED USING MULCH AND TEMPORARY SEED TO PROVIDE ADEQUATE GROUND COVER AND CONDITION THE SOIL.
 - MULCH MUST BE ADDED TO ACHIEVE 80% COVERAGE (ROUGHLY 2 TONS/ ACRE FOR WHEAT STRAW)
 - A FERTILITY SOIL TEST SHALL BE USED TO DETERMINE FERTILIZER AMOUNTS OR IF NO SOIL TEST IS AVAILABLE, A STANDARD MIXTURE SHALL BE APPLIED OF 2 TONS OF LIME PER ACRE AND 700-1000 LBS OF 10-10-10 FERTILIZER PER ACRE.
- BARE ROOT PLANTINGS
- PLANT BARE ROOT SHRUBS AND TREES IN AREAS IN INDICATED ON THE PLANS.
 - PROVIDE 8' OF SPACING BETWEEN PLANTS.
 - LOOSEN COMPACTED SOIL AND PLANT IN HOLES FORMED WITH A MATTOCK, DIBBLE BAR OR EQUAL.
 - PROVIDE PLANTING HOLE SUFFICIENT IN SIZE AND DEPTH TO PREVENT CROWDING OF ROOTS.
 - ROOTS SHALL BE KEPT MOIST DURING TRANSPORTATION, DISTRIBUTION, AND INSTALLATION.
 - PLANTS SHALL BE HEELED-IN INTO MOIST SOIL IF NOT PROMPTLY PLANTED AFTER DELIVERY TO THE PROJECT SITE.
- LIVE STAKES:
- STAKES SHOULD BE CUT AND INSTALLED ON THE SAME DAY.
 - STAKES THAT ARE SPLIT SHALL NOT BE INSTALLED.
 - STAKES SHALL BE INSTALLED ORTHOGONALLY TO THE BANK AND WITH BUDS POINTING UPWARDS.
 - STAKES SHALL BE 1/2 TO 2 INCHES IN DIAMETER AND 2 TO 3 FEET IN LENGTH.
 - AFTER INSTALLATION, THE TOP PORTION OF STAKES SHALL BE PRUNED WITH A SQUARE CUT LEAVING NO LESS THAN 3 INCHES AND NO MORE THAN 6 INCHES ABOVE THE GROUND.

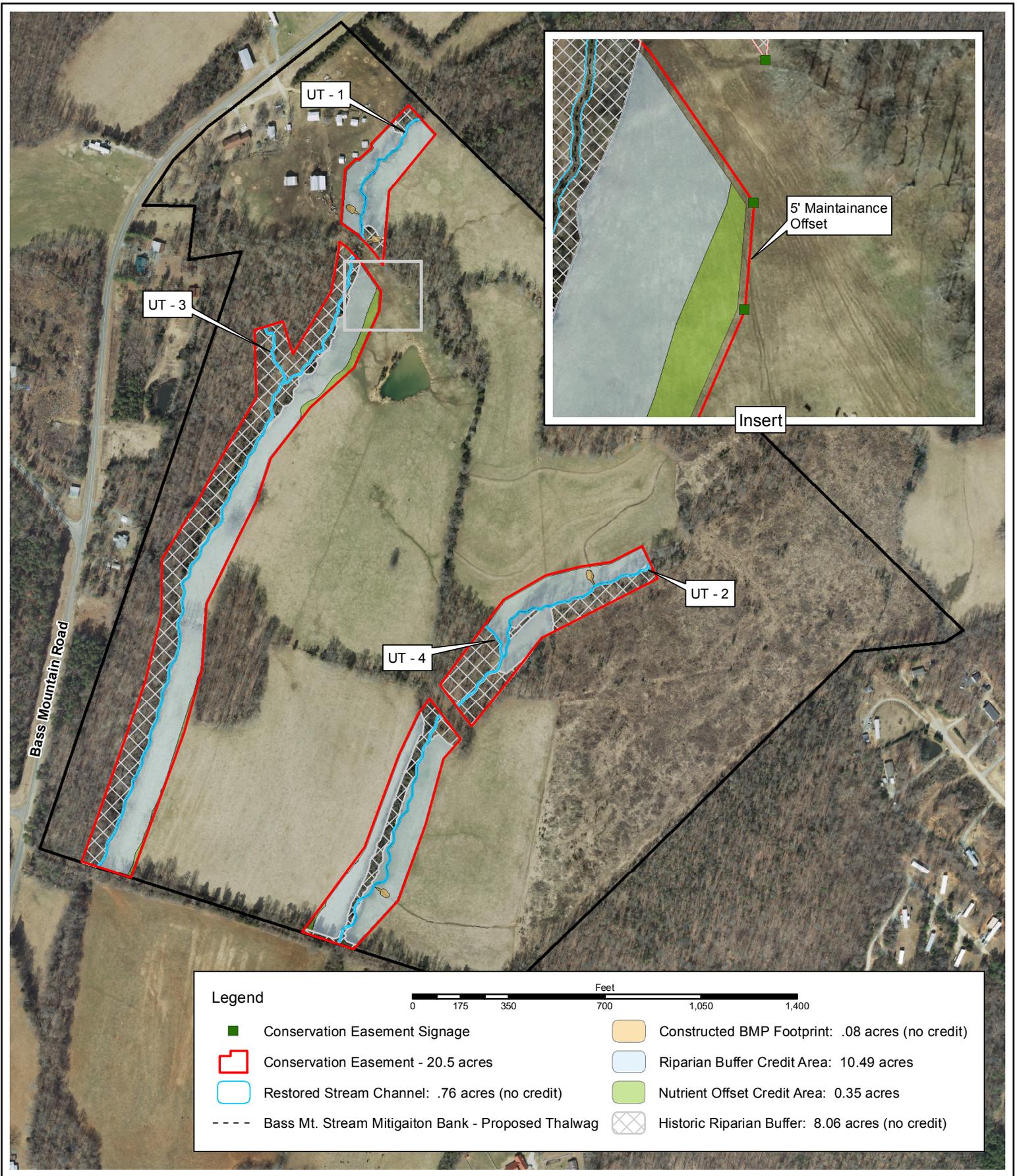


STREAM SIDE						
COMMON NAME	STRATUM	SCIENTIFIC NAME	INDICATOR STATUS	SPACING (ft)	PLANT MATERIAL SIZE	TOTAL STEMS
Black Willow	midstory	<i>Salix nigra</i>	FACU	3x3	Live Stake	
Buttonbush	undersory	<i>Cephalanthus occidentalis</i>	OBL	3x3	Live Stake	
Silky Dogwood	undersory	<i>Cornus amomum</i>	FACW+	3x3	Live Stake	
Elderberry	undersory	<i>Sambucus canadensis</i>	FAC-	3x3	Live Stake	
TOTAL						

Permanent Seed Mix			
COMMON NAME	SCIENTIFIC NAME	ACRES	% MIX
Deer tongue	<i>Panicum clandestinum</i>		14%
Fox Sedge	<i>Carex vulpinoidea</i>		14%
Lanceleaved Coreopsis	<i>Coreopsis lanceolata</i>		14%
Red Top	<i>Agrostis palustris</i>		14%
Showy Tickseed	<i>Bidens aristosa</i>		14%
Switchgrass	<i>Panicum virgatum</i>		16%
Virginia Wild Rye	<i>Elymus virginicus</i>		14%
Temporary Seed Mix			
COMMON NAME	SCIENTIFIC NAME	ACRES	% MIX
Annual Rye	<i>Lolium multiflorum</i>		50%
Winter Wheat	<i>Triticum sp.</i>		50%

PIEDMONT ALLUVIAL FOREST					
COMMON NAME	SCIENTIFIC NAME	PLANT MATERIAL SIZE	STEMS/ACRE	AREA (Acres)	TOTAL STEMS
River Birch	<i>Betula nigra</i>	Bare Root	85	4.49	382
Ironwood	<i>Carpinus caroliniana</i>	Bare Root	85	4.49	382
Shagbark Hickory	<i>Carya ovata</i>	Bare Root	85	4.49	382
Green Ash	<i>Fraxinus pennsylvanica</i>	Bare Root	85	4.49	382
Sycamore	<i>Platanus occidentalis</i>	Bare Root	85	4.49	382
Water Oak	<i>Quercus nigra</i>	Bare Root	85	4.49	382
Willow Oak	<i>Quercus phellos</i>	Bare Root	85	4.49	382
American Elm	<i>Ulmus americana</i>	Bare Root	85	4.49	382
TOTAL					3053

DRY-MESIC OAK HICKORY FOREST					
COMMON NAME	SCIENTIFIC NAME	PLANT MATERIAL SIZE	STEMS/ACRE	AREA (Acres)	TOTAL STEMS
Mookeanut Hickory	<i>Carya alba</i>	Bare Root	97	11.93	1157
Pignut Hickory	<i>Carya glabra</i>	Bare Root	97	11.93	1157
Persimmon	<i>Diospyros virginiana</i>	Bare Root	97	11.93	1157
Sourwood	<i>Oxydendron arboreum</i>	Bare Root	97	11.93	1157
White Oak	<i>Quercus alba</i>	Bare Root	97	11.93	1157
Southern Red Oak	<i>Quercus falcata</i>	Bare Root	97	11.93	1157
Northern Red Oak	<i>Quercus rubra</i>	Bare Root	97	11.93	1157
TOTAL					8100



Legend		Feet 0 175 350 700 1,050 1,400	
	Conservation Easement Signage		Constructed BMP Footprint: .08 acres (no credit)
	Conservation Easement - 20.5 acres		Riparian Buffer Credit Area: 10.49 acres
	Restored Stream Channel: .76 acres (no credit)		Nutrient Offset Credit Area: 0.35 acres
	Bass Mt. Stream Mitigation Bank - Proposed Thalweg		Historic Riparian Buffer: 8.06 acres (no credit)



RESTORATION SYSTEMS, LLC
 1101 HAYNES ST, SUITE 211
 RALEIGH, NC 27604
 PHONE : 919.755.9490
 FAX : 919.755.9492

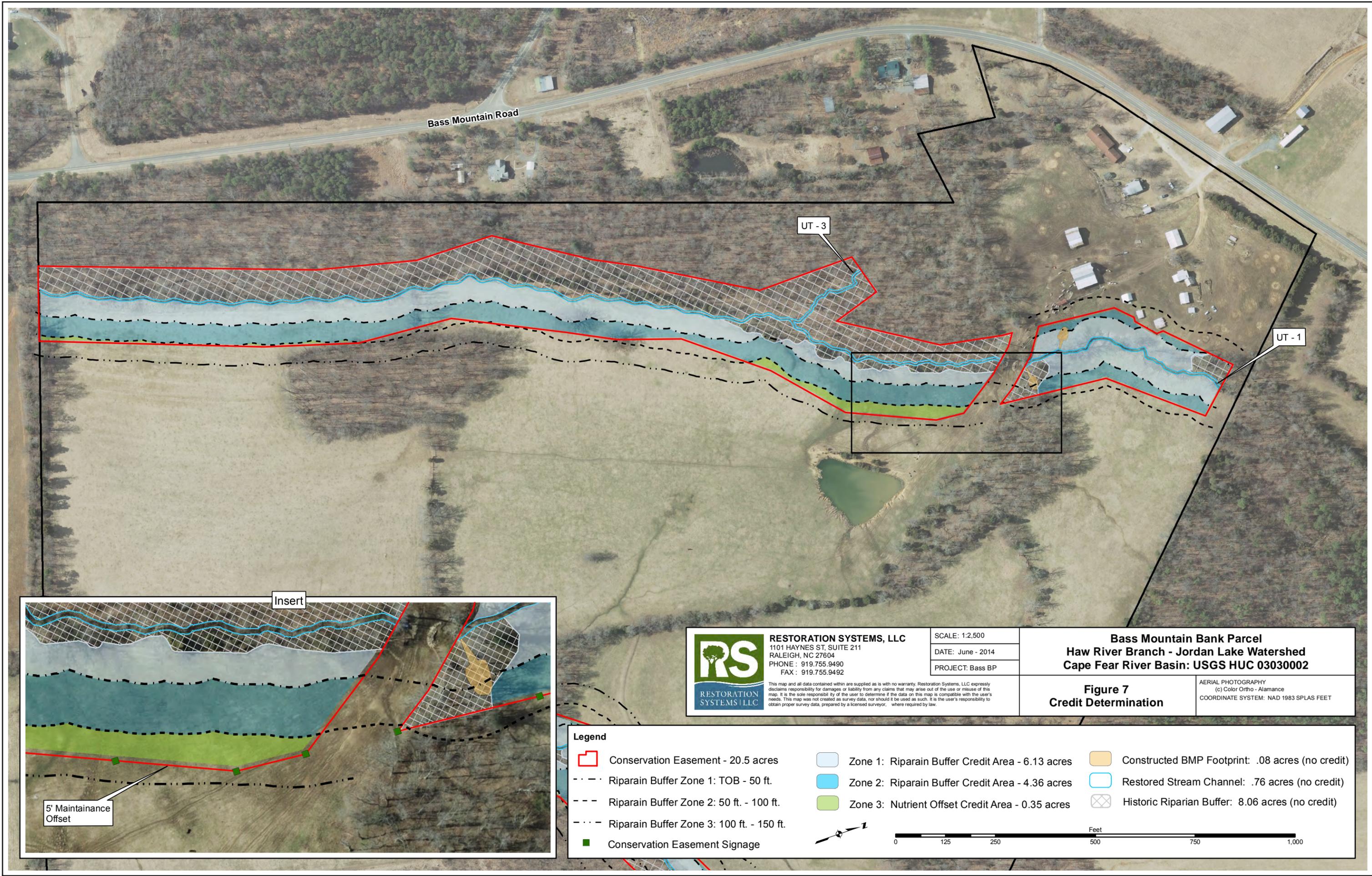
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SCALE: 1:5,500
 DATE: June - 2014
 PROJECT: Bass BP

Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 03030002

Figure 7
Credit Determination

AERIAL PHOTOGRAPHY
 (c) Color Ortho - Alamance
 COORDINATE SYSTEM: NAD 1983 SPLAS FEET



Bass Mountain Road

UT - 3

UT - 1

Insert

5' Maintenance Offset



RESTORATION SYSTEMS, LLC
1101 HAYNES ST, SUITE 211
RALEIGH, NC 27604
PHONE : 919.755.9490
FAX : 919.755.9492

SCALE: 1:2,500
DATE: June - 2014
PROJECT: Bass BP

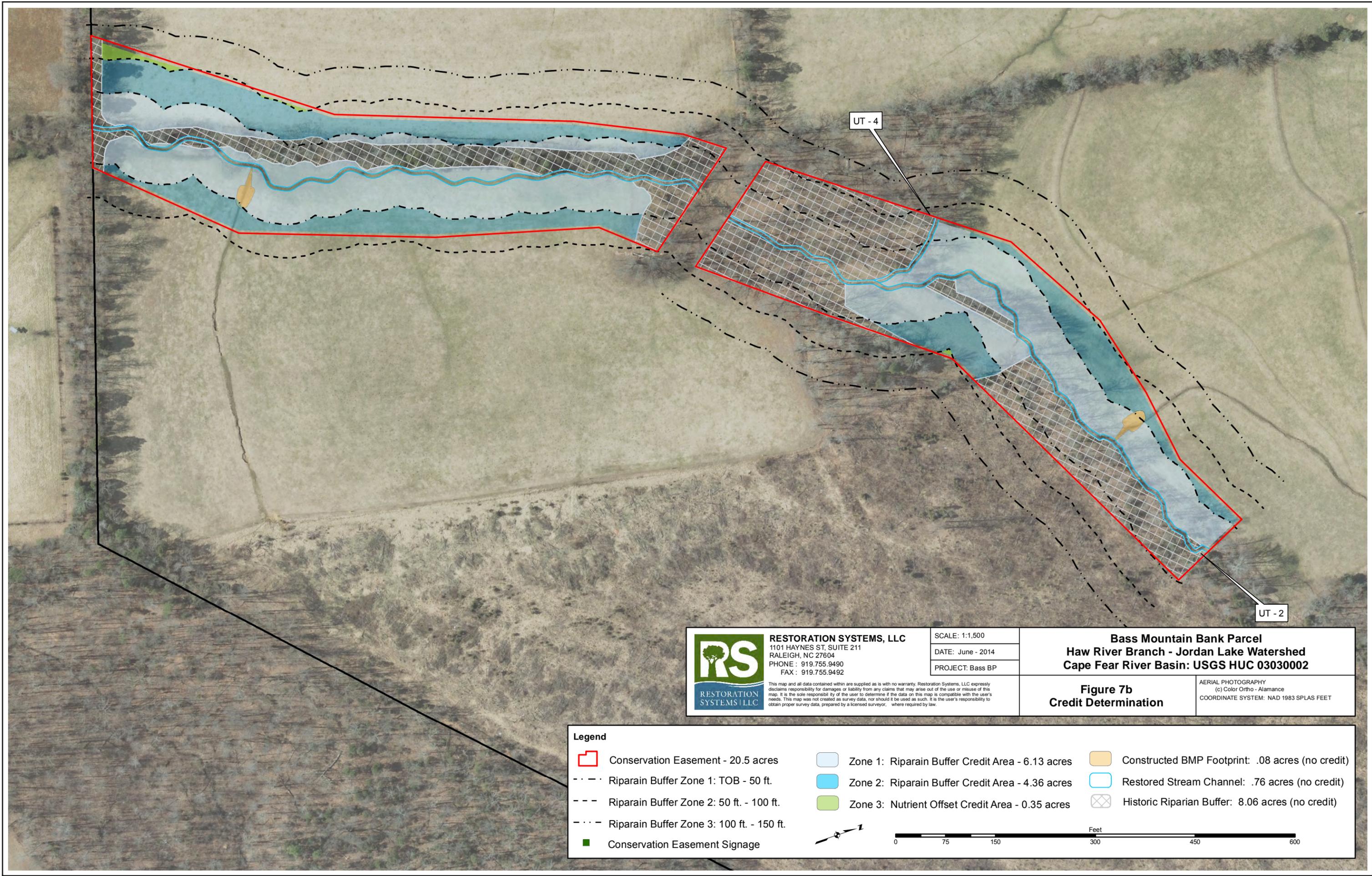
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Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 03030002

Figure 7
Credit Determination

AERIAL PHOTOGRAPHY
(c) Color Ortho - Alamance
COORDINATE SYSTEM: NAD 1983 SPLAS FEET

<p>Legend</p> <ul style="list-style-type: none"> Conservation Easement - 20.5 acres Riparain Buffer Zone 1: TOB - 50 ft. Riparain Buffer Zone 2: 50 ft. - 100 ft. Riparain Buffer Zone 3: 100 ft. - 150 ft. Conservation Easement Signage 	<ul style="list-style-type: none"> Zone 1: Riparain Buffer Credit Area - 6.13 acres Zone 2: Riparain Buffer Credit Area - 4.36 acres Zone 3: Nutrient Offset Credit Area - 0.35 acres 	<ul style="list-style-type: none"> Constructed BMP Footprint: .08 acres (no credit) Restored Stream Channel: .76 acres (no credit) Historic Riparian Buffer: 8.06 acres (no credit)
---	---	---



 RESTORATION SYSTEMS, LLC 1101 HAYNES ST, SUITE 211 RALEIGH, NC 27604 PHONE : 919.755.9490 FAX : 919.755.9492	SCALE: 1:1,500
	DATE: June - 2014
	PROJECT: Bass BP

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Bass Mountain Bank Parcel
Haw River Branch - Jordan Lake Watershed
Cape Fear River Basin: USGS HUC 03030002

Figure 7b
Credit Determination

AERIAL PHOTOGRAPHY
 (c) Color Ortho - Alamance
 COORDINATE SYSTEM: NAD 1983 SPLAS FEET

Legend  Conservation Easement - 20.5 acres  Riparain Buffer Zone 1: TOB - 50 ft.  Riparain Buffer Zone 2: 50 ft. - 100 ft.  Riparain Buffer Zone 3: 100 ft. - 150 ft.  Conservation Easement Signage	 Zone 1: Riparain Buffer Credit Area - 6.13 acres  Zone 2: Riparain Buffer Credit Area - 4.36 acres  Zone 3: Nutrient Offset Credit Area - 0.35 acres	 Constructed BMP Footprint: .08 acres (no credit)  Restored Stream Channel: .76 acres (no credit)  Historic Riparian Buffer: 8.06 acres (no credit)
---	--	--






Bass Mountain BPDP – Image 1: Looking North at the upper reach of UT 1



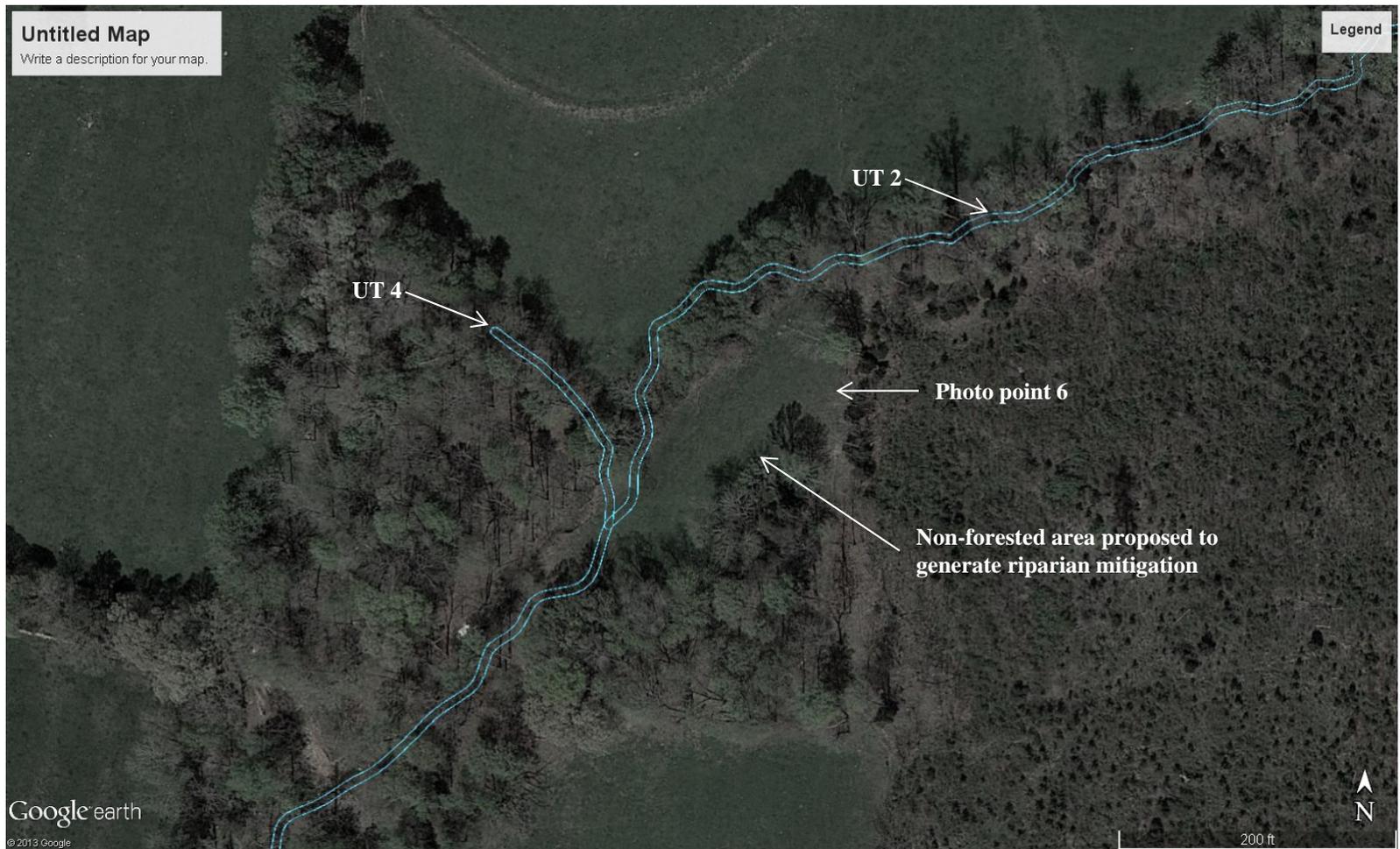
Bass Mountain BPDP – Image 2: Looking North along the center portion UT 1



Bass Mountain BPDP – Image 3: Looking North at the Southern extent of UT 1



Bass Mountain BPDP – Image 4: Looking North at the southern extent of UT 2



Bass Mountain BPD – Image 5: DWR comments during the Draft BPD review requested additional clarification on a small non-forested section along UT 2. As this 2013 winter aerial shows there is clearly a non forested portion, no stem count survey was performed as no woody vegetation exists. The following photo shows this area



Bass Mountain BPDP – Image 6: Non-forested area along UT 2 (see photo 5)

Appendix B: DWR Buffer Determination Letter



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Charles Wakild, P. E.
Director

Pat McCrory
Governor

John E. Skvarla, III
Secretary

June 7, 2013

Mr. Raymond Holz
Restoration Systems LLC
1101 Haynes Street, Suite 211
Raleigh, NC 27604

Subject Property: Bass Mountain Mitigation Site, Graham NC, Alamance County

On-Site Determination for Applicability to the Mitigation Rules (15A NCAC 2H .0506(h))

Dear Mr. Holz:

On March 12, 2012, Sue Homewood conducted an on-site determination to review features located on the subject property for intermittent/perennial determinations with regards to the above noted state regulations.

The streams shown as UT3 and UT4, and the upper end of UT2 above location B on the attached map were determined to be intermittent streams throughout the boundaries of the project. UT1 and UT2 below location B on the attached map were determined to be perennial streams.

Please note that at the time of this letter, all intermittent and perennial stream channels and jurisdictional wetlands found on the property are subject to the mitigation rules cited above. These regulations are subject to change in the future.

The owner (or future owners) should notify the DWQ (and other relevant agencies) of this decision in any future correspondences concerning this property. This on-site determination shall expire five (5) years from the date of this letter.

Landowners or affected parties that dispute a determination made by the DWQ or Delegated Local Authority that a surface water exists and that it is subject to the buffer rule may request a determination by the Director. A request for a determination by the Director shall be referred to the Director in writing c/o Cyndi Karoly, DWQ, 401 Oversight/Express Review Permitting Unit, 2321 Crabtree Blvd., Suite 250, Raleigh, NC 27604-2260. Individuals that dispute a determination by the DWQ or Delegated Local Authority that "exempts" surface water from the buffer rule may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. Applicants are hereby notified that the 60-day statutory appeal time does not start until the affected party (including downstream and adjacent landowners) is notified of this decision. DWQ recommends that the applicant conduct this notification in order to be certain that third party appeals are made in a timely manner. To ask for a hearing, send a written petition, which conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This determination is final and binding unless you ask for a hearing within 60 days.

This letter only addresses the applicability to the mitigation rules and the buffer rules and does not approve any activity within Waters of the United States or Waters of the State or their associated buffers. If you have any additional questions or require additional information please contact me at 336-771-4964 or sue.homewood@ncdenr.gov

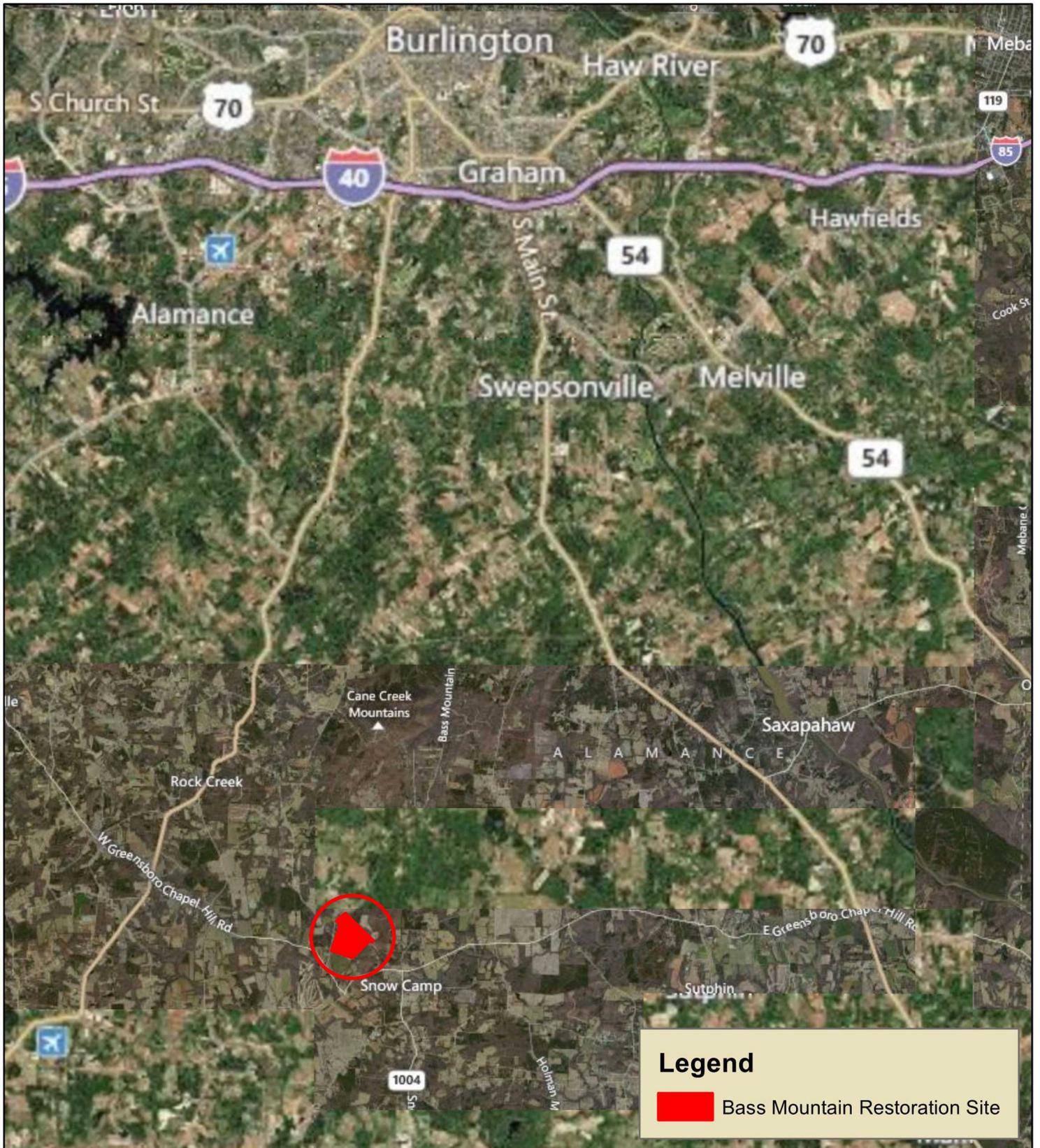
Sincerely,

A handwritten signature in black ink, appearing to read "Sue Homewood", with a large, stylized flourish at the end.

Sue Homewood
DWQ Winston-Salem Regional Office

Enclosures: Wolf Creek provided location map
Axiom provided Aerial View Map

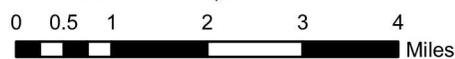
cc: DWQ, Winston-Salem Regional Office



VICINITY MAP

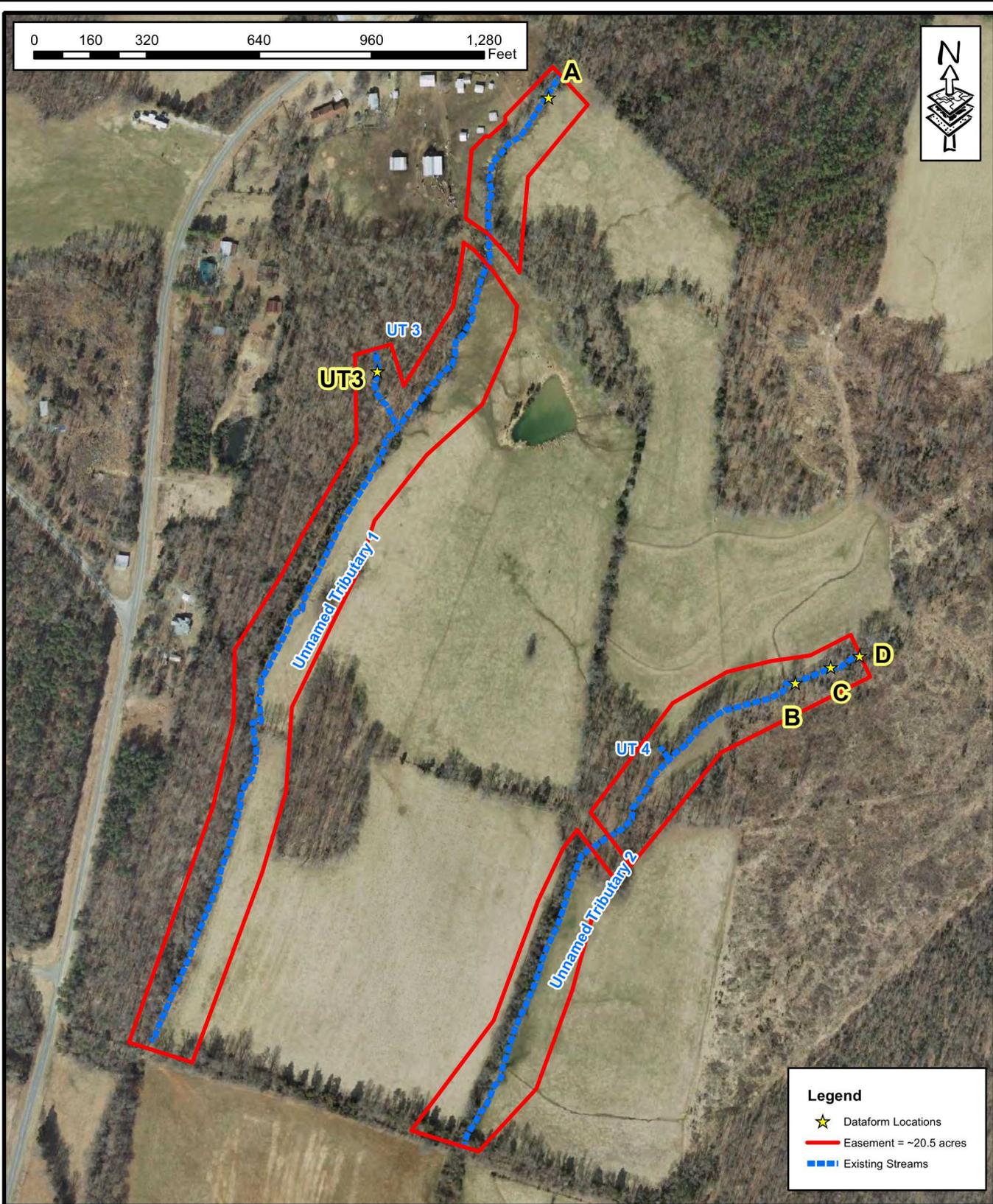
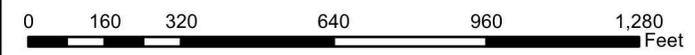
BASS MOUNTAIN RESTORATION SITE

Alamance County, North Carolina



FIGURE

1



Legend

- ★ Dataform Locations
- Easement = ~20.5 acres
- - - Existing Streams



Axiom Environmental
 218 Snow Avenue
 Raleigh, NC 27603
 (919) 215-1693

**NCDWQ STREAM DATAFORM LOCATIONS
 BASS MOUNTAIN MITIGATION BANK
 Alamance County, North Carolina**

Dwn. by: CLF
 Date: July 2011
 Project: 08-020

FIGURE
B1

Appendix C: Conservation Easement



Doc ID: 010537290012 Type: CRP
 Recorded: 12/22/2010 at 12:09:46 PM
 Fee Amt: \$47.00 Page 1 of 12
 Revenue Tax: \$0.00
 Alamance, NC
 HUGH WEBSTER REGISTER OF DEEDS
 BK **2973** PG **120-131**

Prepared by and mail to: William P. Aycock II, Attorney ↙
 Schell Bray Aycock Abel & Livingston PLLC
 P. O. Box 21847, Greensboro, NC 27420

NORTH CAROLINA
ALAMANCE COUNTY

**AMENDED AND RESTATED
 PERMANENT CONSERVATION EASEMENT**

THIS AMENDED AND RESTATED PERMANENT CONSERVATION EASEMENT, made this 28 day of September, 2010, by and between **RANDEL MACK GREESON and spouse, IVA JEWEL GREESON; and HOYT LEE GREESON and spouse, KELLEY DAWSON-GARTLAND GREESON**, (the "Grantor") whose mailing address is c/o Hoyt Lee Greeson, 1013 Sunny Brae Court, Apex, North Carolina, 27502, and **RESTORATION SYSTEMS, LLC**, a North Carolina limited liability company, (the "Grantee") whose mailing address is 1101 Haynes Street, Suite 211, Raleigh, North Carolina, 27604. The designations Grantor and Grantee as used herein shall include said parties, their heirs, successors and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH:

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

RECITALS

WHEREAS, Grantor owns in fee simple certain real property situated, lying and being in Patterson Township, Alamance County, North Carolina, and more particularly described on **Exhibit A** attached hereto and incorporated herein (the "Land"); and

WHEREAS, Grantor and Grantee entered into a Deed of Easement dated November 18, 2008, and recorded in Book 2768, Page 630, Alamance County Registry (the "Prior Easement"), in which Grantor conveyed a conservation easement to Grantee over a portion of the Land, which portion is more particularly described on **Exhibit A-1** attached thereto (the "Property"); and

WHEREAS, Randel Mack Greeson and Hoyt Lee Greeson acquired the interest of Wayne Anthony Greeson, Jr. in the Land subsequent to the execution and recording of the Prior Easement; and

WHEREAS, Grantor and Grantee desire to amend and restate the Prior Easement in order to facilitate the establishment of an environmental mitigation bank on the Property as more particularly described herein; and

WHEREAS, Grantee agrees that it shall cause the appropriate environmental restoration to be accomplished on the Property as more particularly set forth herein and, upon completion of such restoration, Grantee will assign this Conservation Easement to a non-profit corporation or trust whose purpose is the conservation of property and which is qualified to be the Grantee of a conservation easement pursuant to N.C. Gen. Stat. § 121-34 et seq and Internal Revenue Code § 170(h); and

WHEREAS, Grantor and Grantee recognize the conservation, scenic, natural, or aesthetic value of the Property in its restored state, which includes the following natural communities: degraded stream channels, riparian areas, and wetlands that will be restored to stable stream morphology, a forested streamside assemblage, and piedmont alluvial forest as appropriate for landscape conditions. The purpose of this Conservation Easement is to maintain wetland and/or riparian resources and other natural values of the Property, and prevent the use or development of the Property for any purpose or in any manner that would conflict with the maintenance of the Property in its natural condition; and

WHEREAS, the restoration and preservation of the Property is required by a Mitigation Banking Instrument for the Bass Mountain Stream and Wetland Mitigation Bank, Department of the Army Action ID # SAW-200802029. The Mitigation Bank is intended to be used to compensate for unavoidable stream and/or wetland impacts authorized by permits issued by the Department of the Army. Grantor and Grantee agree that third-party rights of enforcement shall be held by the U.S. Army Corps of Engineers, Wilmington District (Corps, to include any successor agencies), and that these rights are in addition to, and do not limit, the rights of the parties to the Mitigation Banking Instrument.

NOW, THEREFORE, for and in consideration of the covenants and representations contained herein and for other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, Grantor hereby unconditionally and irrevocably grants and conveys unto Grantee, its heirs, successors and assigns, forever and in perpetuity a Conservation Easement of the nature and character and to the extent hereinafter set forth, over the Property described on **Exhibit A-1**, together with the right to preserve and protect the conservation values thereof, as follows:

ARTICLE I. DURATION OF EASEMENT

This Conservation Easement shall be perpetual. This Conservation Easement is an easement in gross, runs with the land and is enforceable by Grantee against Grantor, Grantor's personal representatives, heirs, successors and assigns, lessees, agents and licensees.

ARTICLE II PROHIBITED AND RESTRICTED ACTIVITIES

Any activity on, or use of, the Property inconsistent with the purpose of this Conservation Easement is prohibited. The Property shall be preserved in its restored condition and restricted from any development that would impair or interfere with the conservation values of the Property.

Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited, restricted or reserved as indicated hereunder:

A. Disturbance of Natural Features. Any change disturbance, alteration or impairment of the natural features of the Property or any introduction of non-native plants and/or animal species is prohibited.

B. Construction. There shall be no constructing or placing of any building, mobile home, asphalt or concrete pavement, billboard or other advertising display, antenna, utility pole, tower, conduit, line, pier, landing, dock or any other temporary or permanent structure or facility on or above the Property.

C. Industrial, Commercial and Residential Use. Industrial, residential and/or commercial activities, including any right of passage for such purposes are prohibited.

D. Agricultural, Grazing and Horticultural Use. Agricultural, grazing, animal husbandry, and horticultural use of the Property are prohibited.

E. Vegetation. There shall be no removal, burning, destruction, harming, cutting or mowing of trees, shrubs, or other vegetation on the Property.

F. Roads and Trails. There shall be no construction of roads, trails or walkways on the Property; nor enlargement or modification to existing roads, trails or walkways.

G. Signage. No signs shall be permitted on or over the Property, except the posting of no trespassing signs, signs identifying the conservation values of the Property, signs giving directions or proscribing rules and regulations for the use of the Property and/or signs identifying the Grantor as owner of the Property.

H. Dumping or Storage. Dumping or storage of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery or hazardous substances, or toxic or hazardous waste, or any placement of underground or aboveground storage tanks or other materials on the Property is prohibited.

I. Excavation, Dredging or Mineral Use. There shall be no grading, filling, excavation, dredging, mining or drilling; no removal of topsoil, sand, gravel, rock, peat, minerals or other materials, and no change in the topography of the land in any manner on the Property, except to restore natural topography or drainage patterns.

J. Water Quality and Drainage Pattern. There shall be no diking, draining, dredging, channeling, filling, leveling, pumping, impounding or related activities, or altering or tampering with water control structures or devices, or disruption or alteration of the restored, enhanced, or created drainage patterns. In addition, diverting or causing or permitting the diversion of surface or underground water into, within or out of the easement area by any means, removal of wetlands, polluting or discharging into waters, springs, seeps, or wetlands, or use of pesticide or biocides is prohibited.

K. Development Rights. No development rights that have been encumbered or extinguished by this Conservation Easement shall be transferred pursuant to a transferable development rights scheme or cluster development arrangement or otherwise.

L. Vehicles. The operation of mechanized vehicles, including, but not limited to, motorcycles, dirt bikes, all-terrain vehicles, cars and trucks is prohibited.

M. Other Prohibitions. Any other use of, or activity on, the Property which is or may become inconsistent with the purposes of this grant, the preservation of the Property substantially in its restored condition, or the protection of its environmental systems, is prohibited.

ARTICLE III GRANTOR'S RESEVERED RIGHTS

The Grantor expressly reserves for himself, his personal representatives, heirs, successors or assigns, the right to continue the use of the Property for all purposes not inconsistent with this Conservation Easement, including, but not limited to, the right to quiet enjoyment of the Property, the rights of ingress and egress, the right to hunt, fish, and hike on the Property, the right to sell, transfer, gift or otherwise convey the Property, in whole or in part, provided such sale, transfer or gift conveyance is subject to the terms of, and shall specifically reference, this Conservation Easement.

Notwithstanding the foregoing Restrictions, Grantor specifically grants to Grantee, its successors and assigns, the right to construct wetland and stream mitigation on the Property, in accordance with the detailed mitigation plan approved in accordance with the Mitigation Banking Instrument for the Bass Mountain Stream and Wetland Mitigation Bank.

ARTICLE IV. GRANTEE'S RIGHTS

The Grantee or its authorized representatives, successors and assigns, and the Corps, shall have the right to enter the Property at all reasonable times for the purpose of inspecting the Property to determine if the Grantor, or his personal representatives, heirs, successors, or assigns, is complying with the terms, conditions, restrictions, and purposes of this Conservation Easement. The Grantee shall also have the right to enter and go upon the Property for purposes of making scientific or educational observations and studies, and taking samples. The easement rights granted herein do not include public access rights.

ARTICLE V ENFORCEMENT AND REMEDIES

A. To accomplish the purposes of this Easement, Grantee is allowed to prevent any activity on or use of the Property that is inconsistent with the purposes of this Conservation Easement and to require the restoration of such areas or features of the Property that may be damaged by such activity or use. Upon any breach of the terms of this Conservation Easement by Grantor that comes to the attention of the Grantee, the Grantee shall notify the Grantor in writing of such breach. The Grantor shall have 30 days after receipt of such notice to correct the conditions constituting such breach. If the breach remains uncured after 30 days, the Grantee may enforce this Conservation Easement by appropriate legal proceedings including damages, injunctive and other relief. Notwithstanding the foregoing, the Grantee reserves the immediate right, without notice, to obtain a temporary restraining order, injunctive or other appropriate relief if the breach of the term of this Conservation Easement is or would irreversibly or otherwise materially impair the benefits to be derived from this Conservation Easement. The Grantor and Grantee acknowledge that under such circumstances damage to the Grantee would be irreparable and remedies at law will be inadequate. The rights and remedies of the Grantee provided hereunder shall be in addition to, and not in lieu of, all other rights and remedies available to Grantee in connection with this Conservation Easement. The costs of a breach, correction or restoration, including the Grantee's expenses, court costs, and attorneys' fees, shall be paid by Grantor, provided Grantor is determined to be responsible for the breach. The Corps shall have the same right to enforce the terms and conditions of this Conservation Easement as the Grantee.

B. No failure on the part of the Grantee or the Corps to enforce any covenant or provision hereof shall discharge or invalidate such covenant or any other covenant, condition, or provision hereof or affect the right to Grantee or the Corps to enforce the same in the event of a subsequent breach or default.

C. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury or change in the Property resulting from causes beyond the Grantor's control, including, without limitation, fire, flood, storm, war, acts of God or third parties, except Grantor's lessees or invitees; or from any prudent action taken in good faith by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to life, damage to property or harm to the Property resulting from such causes.

ARTICLE VI MISCELLANEOUS

A. Warranty. Grantor warrants, covenants and represents that they own the Property in fee simple, and that Grantor either owns all interests in the Property which may be impaired by the granting of this Conservation Easement or that there are no outstanding mortgages, tax liens, encumbrances, or other interests in the Property which have not been expressly subordinated to this Conservation Easement. Grantor further warrants that Grantee shall have the use of and enjoy all the benefits derived from and arising out of this Conservation Easement, and that Grantor will warrant and defend title to the Property against the claims of all persons.

B. Subsequent Transfers. The Grantor agrees to incorporate the terms of this Conservation Easement in any deed or other legal instrument that transfers any interest in all or a portion of the Property. The Grantor agrees to provide written notice of such transfer at least thirty (30) days prior to the date of the transfer. The Grantor and Grantee agree that the terms of this Conservation Easement shall survive any merger of the fee and easement interests in the Property or any portion thereof and shall not be amended, modified or terminated without the prior written consent and approval of the Corps.

C. Assignment. The parties recognize and agree that the benefits of this Conservation Easement are in gross and assignable provided, however that the Grantee hereby covenants and agrees, that in the event it transfers or assigns this Conservation Easement, the organization receiving the interest will be a qualified holder under N.C. Gen. Stat. § 121-34 et seq. and § 170(h) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue to monitor in perpetuity the terms of this Conservation Easement.

D. Entire Agreement and Severability. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement. If any provision is found to be void or unenforceable by a court of competent jurisdiction, the remainder shall continue in full force and effect.

E. Obligations of Ownership. Grantor is responsible for any real estate taxes, assessments, fees, or charges levied upon the Property. Grantor shall keep the Property free of any liens or other encumbrances for obligations incurred by Grantor. Grantee and its successors or assigns shall not be responsible for any costs or liability of any kind related to the ownership, operation, insurance, upkeep, or maintenance of the Property, except as expressly provided herein. Nothing

herein shall relieve the Grantor of the obligation to comply with federal, state or local laws, regulations and permits that may apply to the exercise of the Reserved Rights.

F. Extinguishment. In the event that changed conditions render impossible the continued use of the Property for the conservation purposes, this Conservation Easement may only be extinguished, in whole or in part, by judicial proceeding.

G. Eminent Domain. Whenever all or part of the Property is taken in the exercise of eminent domain so as to substantially abrogate the Restrictions imposed by this Conservation Easement, Grantor and Grantee shall join in appropriate actions at the time of such taking to recover the full value of the taking, and all incidental and direct damages due to the taking.

H. Proceeds. This Conservation Easement constitutes a real property interest immediately vested in Grantee. In the event that all or a portion of this Property is sold, exchanged, or involuntarily converted following an extinguishment or the exercise of eminent domain, Grantee shall be entitled to the fair market value of this Conservation Easement. The parties stipulate that the fair market value of this Conservation Easement shall be determined by multiplying the fair market value of the Property unencumbered by this Conservation Easement (minus any increase in value after the date of this grant attributable to improvements) by the ratio of the value of this easement at the time of this grant to the value of the Property (without deduction for the value of this Conservation Easement) at the time of this grant. The values at the time of this grant shall be the values used, or which would have been used, to calculate a deduction for federal income tax purposes, pursuant to Section 170(h) of the Internal Revenue Code (whether eligible or ineligible for such a deduction). Grantee shall use its share of the proceeds in a manner consistent with the purposes of this Conservation Easement.

I. Notification. Any notice, request for approval, or other communication required under this Conservation Easement shall be sent by registered or certified mail, postage prepaid, to the following addresses (or such address as may be hereafter specified by notice pursuant to this paragraph):

To Grantor: c/o Hoyt Lee Greeson
1013 Sunny Brae Court
Apex, North Carolina 27502

To Grantee: Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, North Carolina 27604

To the Corps: U. S. Army Corps of Engineers
Raleigh Regulatory Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587

Attention: Regulatory Project Manager

J. Failure of Grantee. If at any time Grantee is unable or fails to enforce this Conservation Easement, or if Grantee ceases to be a qualified grantee, and if within a reasonable period of time after the occurrence of one of these events Grantee fails to make an assignment

pursuant to this Conservation Easement, then the Grantee's interest shall become vested in another qualified grantee in accordance with an appropriate proceeding in a court of competent jurisdiction.

K. Amendment. This Conservation Easement may be amended, but only in a writing signed by all parties hereto, and provided such amendment does not affect the qualification of this Conservation Easement or the status of the Grantee under any applicable laws, and is consistent with the conservation purposes of this grant.

L. Present Condition of the Property. The wetlands, scenic, resource, environmental, and other natural characteristics of the Property, and its current use and state of improvement, are described in Section ___ of the Mitigation Plan, dated _____, prepared by Grantor and acknowledged by the Grantor and Grantee to be complete and accurate as of the date hereof. Both Grantor and Grantee have copies of this report. It will be used by the parties to assure that any future changes in the use of the Property will be consistent with the terms of this Conservation Easement. However, this report is not intended to preclude the use of other evidence to establish the present condition of the Property if there is a controversy over its use.

TO HAVE AND TO HOLD the said rights and easements perpetually unto Grantee for the aforesaid purposes.

[Signature Pages Follow]

IN TESTIMONY WHEREOF, Grantor has set his hand and seal to this Amended and Restated Permanent Conservation Easement, the day and year first above written.

Randel Mack Greeson (SEAL)
Randel Mack Greeson

Iva Jewell Greeson (SEAL)
Iva Jewell Greeson

STATE OF NORTH CAROLINA

COUNTY OF Chatham

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document:

Randel Mack Greeson and Iva Jewell Greeson

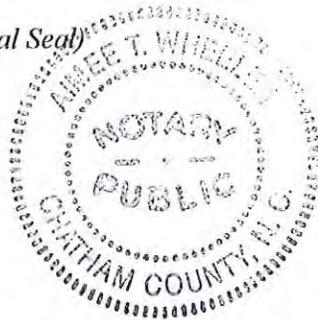
WITNESS my hand and official seal, this 17 day of March, 2010.

Aimee T. Wheeler
Notary's Official Signature

Aimee T. Wheeler
Notary's Printed or Typed Name

My commission expires: 3/9/2012

(Official Seal)



IN TESTIMONY WHEREOF, Grantor has set his hand and seal to this Amended and Restated Permanent Conservation Easement, the day and year first above written.

Hoyt Lee Greeson (SEAL)
Hoyt Lee Greeson

Kelley Dawson-Gartland Greeson (SEAL)
Kelley Dawson-Gartland Greeson

STATE OF NORTH CAROLINA

COUNTY OF Wake

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document:

Hoyt Lee Greeson and Kelley Dawson-Gartland Greeson

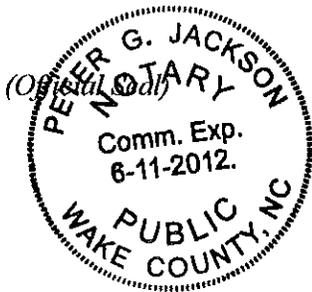
WITNESS my hand and official seal, this 2 day of February, 2010.

Peter G. Jackson
Notary's Official Signature

Peter G. Jackson
Notary's Printed or Typed Name

My commission expires: 6-11-2012

NCOL used as FD Acknowledged voluntarily



IN TESTIMONY WHEREOF, Grantee has caused this Amended and Restated Permanent Conservation Easement to be signed, the day and year first above written.

RESTORATION SYSTEMS, LLC

By: John Preyer
Name: John Preyer
Title: Chief of Operations

STATE OF NORTH CAROLINA
COUNTY OF Wake

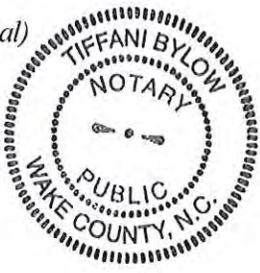
I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document:

John Preyer

WITNESS my hand and official seal, this 28th day of September, 2010.

Tiffani Bylow
Notary's Official Signature

(Official Seal)



Tiffani Bylow
Notary's Printed or Typed Name

My commission expires: 5.04.2013 (DB)

EXHIBIT "A"

All of THE PROPERTY SHOWN ON Deed Book 736, Page 631, Office of the Register of Deeds of Alamance County, North Carolina.

EXHIBIT "A-1"

CONSERVATION EASEMENT

All of Conservation Easement A as shown on Conservation Easement Survey for Restoration Systems, LLC, entitled "Bass Mountain Restoration Site (Across the Lands of Greeson and McPherson)," prepared by K2 Design Group, P.A., and recorded in Plat Book 73, Pages 58-59, Office of the Register of Deeds of Alamance County, North Carolina.



Doc ID: 010537280010 Type: GRP
 Recorded: 12/22/2010 at 12:07:36 PM
 Fee Amt: \$41.00 Page 1 of 10
 Revenue Tax: \$0.00
 Alamance, NC
 HUGH WEBSTER REGISTER OF DEEDS

BK 2973 PG 110-119

→ Prepared by and mail to: William P. Aycock II, Attorney
 Schell Bray Aycock Abel & Livingston PLLC
 P. O. Box 21847, Greensboro, NC 27420

NORTH CAROLINA

**AMENDED AND RESTATED
 PERMANENT CONSERVATION EASEMENT**

ALAMANCE COUNTY

THIS AMENDED AND RESTATED PERMANENT CONSERVATION EASEMENT, made this 27 day of Jan, 2010, by and between **LOIS M. McPHERSON, TRUSTEE OF THE SARAH J. McPHERSON IRREVOCABLE TRUST** (the "Grantor") whose mailing address is 1611 Purse Drive, Manassas, Virginia, 20112, and **RESTORATION SYSTEMS, LLC**, a North Carolina limited liability company, (the "Grantee") whose mailing address is 1101 Haynes Street, Suite 211, Raleigh, North Carolina, 27604. The designations Grantor and Grantee as used herein shall include said parties, their heirs, successors and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH:

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

RECITALS

WHEREAS, Grantor owns in fee simple certain real property situated, lying and being in Patterson Township, Alamance County, North Carolina, and more particularly described on **Exhibit A** attached hereto and incorporated herein (the "Land"); and

WHEREAS, Grantor and Grantee entered into a Deed of Easement dated November 18, 2008, and recorded in Book 2768, Page 624, Alamance County Registry (the "Prior Easement"), in which Grantor conveyed a conservation easement to Grantee over a portion of the Land, which portion is more particularly described on **Exhibit A-1** attached thereto (the "Property"); and

WHEREAS, Grantor and Grantee desire to amend and restate the Prior Easement in order to facilitate the establishment of an environmental mitigation bank on the Property as more particularly

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described herein; and

WHEREAS, Grantee agrees that it shall cause the appropriate environmental restoration to be accomplished on the Property as more particularly set forth herein and, upon completion of such restoration, Grantee will assign this Conservation Easement to a non-profit corporation or trust whose purpose is the conservation of property and which is qualified to be the Grantee of a conservation easement pursuant to N.C. Gen. Stat. § 121-34 et seq and Internal Revenue Code § 170(h); and

WHEREAS, Grantor and Grantee recognize the conservation, scenic, natural, or aesthetic value of the Property in its restored state, which includes the following natural communities: degraded stream channels, riparian areas, and wetlands that will be restored to stable stream morphology, a forested streamside assemblage, and piedmont alluvial forest as appropriate for landscape conditions. The purpose of this Conservation Easement is to maintain wetland and/or riparian resources and other natural values of the Property, and prevent the use or development of the Property for any purpose or in any manner that would conflict with the maintenance of the Property in its natural condition; and

WHEREAS, the restoration and preservation of the Property is required by a Mitigation Banking Instrument for the Bass Mountain Stream and Wetland Mitigation Bank, Department of the Army Action ID # SAW-200802029. The Mitigation Bank is intended to be used to compensate for unavoidable stream and/or wetland impacts authorized by permits issued by the Department of the Army. Grantor and Grantee agree that third-party rights of enforcement shall be held by the U.S. Army Corps of Engineers, Wilmington District (Corps, to include any successor agencies), and that these rights are in addition to, and do not limit, the rights of the parties to the Mitigation Banking Instrument.

NOW, THEREFORE, for and in consideration of the covenants and representations contained herein and for other good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, Grantor hereby unconditionally and irrevocably grants and conveys unto Grantee, its heirs, successors and assigns, forever and in perpetuity a Conservation Easement of the nature and character and to the extent hereinafter set forth, over the Property described on Exhibit A-1, together with the right to preserve and protect the conservation values thereof, as follows:

ARTICLE I. DURATION OF EASEMENT

This Conservation Easement shall be perpetual. This Conservation Easement is an easement in gross, runs with the land and is enforceable by Grantee against Grantor, Grantor's personal representatives, heirs, successors and assigns, lessees, agents and licensees.

ARTICLE II PROHIBITED AND RESTRICTED ACTIVITIES

Any activity on, or use of, the Property inconsistent with the purpose of this Conservation Easement is prohibited. The Property shall be preserved in its restored condition and restricted from any development that would impair or interfere with the conservation values of the Property.

Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited, restricted or reserved as indicated hereunder:

A. Disturbance of Natural Features. Any change disturbance, alteration or impairment of the natural features of the Property or any introduction of non-native plants and/or animal species is prohibited.

B. Construction. There shall be no constructing or placing of any building, mobile home, asphalt or concrete pavement, billboard or other advertising display, antenna, utility pole, tower, conduit, line, pier, landing, dock or any other temporary or permanent structure or facility on or above the Property.

C. Industrial, Commercial and Residential Use. Industrial, residential and/or commercial activities, including any right of passage for such purposes are prohibited.

D. Agricultural, Grazing and Horticultural Use. Agricultural, grazing, animal husbandry, and horticultural use of the Property are prohibited.

E. Vegetation. There shall be no removal, burning, destruction, harming, cutting or mowing of trees, shrubs, or other vegetation on the Property.

F. Roads and Trails. There shall be no construction of roads, trails or walkways on the Property; nor enlargement or modification to existing roads, trails or walkways.

G. Signage. No signs shall be permitted on or over the Property, except the posting of no trespassing signs, signs identifying the conservation values of the Property, signs giving directions or proscribing rules and regulations for the use of the Property and/or signs identifying the Grantor as owner of the Property.

H. Dumping or Storage. Dumping or storage of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery or hazardous substances, or toxic or hazardous waste, or any placement of underground or aboveground storage tanks or other materials on the Property is prohibited.

I. Excavation, Dredging or Mineral Use. There shall be no grading, filling, excavation, dredging, mining or drilling; no removal of topsoil, sand, gravel, rock, peat, minerals or other materials, and no change in the topography of the land in any manner on the Property, except to restore natural topography or drainage patterns.

J. Water Quality and Drainage Pattern. There shall be no diking, draining, dredging, channeling, filling, leveling, pumping, impounding or related activities, or altering or tampering with water control structures or devices, or disruption or alteration of the restored, enhanced, or created drainage patterns. In addition, diverting or causing or permitting the diversion of surface or underground water into, within or out of the easement area by any means, removal of wetlands, polluting or discharging into waters, springs, seeps, or wetlands, or use of pesticide or biocides is prohibited.

K. Development Rights. No development rights that have been encumbered or extinguished by this Conservation Easement shall be transferred pursuant to a transferable development rights scheme or cluster development arrangement or otherwise.

L. Vehicles. The operation of mechanized vehicles, including, but not limited to, motorcycles, dirt bikes, all-terrain vehicles, cars and trucks is prohibited.

M. Other Prohibitions. Any other use of, or activity on, the Property which is or may become inconsistent with the purposes of this grant, the preservation of the Property substantially in its restored condition, or the protection of its environmental systems, is prohibited.

ARTICLE III
GRANTOR'S RESEVERED RIGHTS

The Grantor expressly reserves for himself, his personal representatives, heirs, successors or assigns, the right to continue the use of the Property for all purposes not inconsistent with this Conservation Easement, including, but not limited to, the right to quiet enjoyment of the Property, the rights of ingress and egress, the right to hunt, fish, and hike on the Property, the right to sell, transfer, gift or otherwise convey the Property, in whole or in part, provided such sale, transfer or gift conveyance is subject to the terms of, and shall specifically reference, this Conservation Easement.

Notwithstanding the foregoing Restrictions, Grantor specifically grants to Grantee, its successors and assigns, the right to construct wetland and stream mitigation on the Property, in accordance with the detailed mitigation plan approved in accordance with the Mitigation Banking Instrument for the Bass Mountain Stream and Wetland Mitigation Bank.

ARTICLE IV.
GRANTEE'S RIGHTS

The Grantee or its authorized representatives, successors and assigns, and the Corps, shall have the right to enter the Property at all reasonable times for the purpose of inspecting the Property to determine if the Grantor, or his personal representatives, heirs, successors, or assigns, is complying with the terms, conditions, restrictions, and purposes of this Conservation Easement. The Grantee shall also have the right to enter and go upon the Property for purposes of making scientific or educational observations and studies, and taking samples. The easement rights granted herein do not include public access rights.

ARTICLE V
ENFORCEMENT AND REMEDIES

A. To accomplish the purposes of this Easement, Grantee is allowed to prevent any activity on or use of the Property that is inconsistent with the purposes of this Conservation Easement and to require the restoration of such areas or features of the Property that may be damaged by such activity or use. Upon any breach of the terms of this Conservation Easement by Grantor that comes to the attention of the Grantee, the Grantee shall notify the Grantor in writing of such breach. The Grantor shall have 30 days after receipt of such notice to correct the conditions constituting such breach. If the breach remains uncured after 30 days, the Grantee may enforce this Conservation Easement by appropriate legal proceedings including damages, injunctive and other relief. Notwithstanding the foregoing, the Grantee reserves the immediate right, without notice, to obtain a temporary restraining order, injunctive or other appropriate relief if the breach of the term of this Conservation Easement is or would irreversibly or otherwise materially impair the benefits to be derived from this Conservation Easement. The Grantor and Grantee acknowledge that under such circumstances damage to the Grantee would be irreparable and remedies at law will be inadequate. The rights and remedies of the Grantee provided hereunder shall be in addition to, and not in lieu of, all other rights and remedies available to Grantee in connection with this Conservation Easement. The costs of a breach, correction or restoration, including the Grantee's expenses, court costs, and attorneys' fees, shall be paid by Grantor, provided Grantor is determined to be responsible for the breach. The Corps shall have the same right to enforce the terms and conditions of this Conservation Easement as the Grantee.

B. No failure on the part of the Grantee or the Corps to enforce any covenant or provision hereof shall discharge or invalidate such covenant or any other covenant, condition, or provision hereof or affect the right to Grantee or the Corps to enforce the same in the event of a subsequent breach or default.

C. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury or change in the Property resulting from causes beyond the Grantor's control, including, without limitation, fire, flood, storm, war, acts of God or third parties, except Grantor's lessees or invitees; or from any prudent action taken in good faith by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to life, damage to property or harm to the Property resulting from such causes.

ARTICLE VI MISCELLANEOUS

A. Warranty. Grantor warrants, covenants and represents that they own the Property in fee simple, and that Grantor either owns all interests in the Property which may be impaired by the granting of this Conservation Easement or that there are no outstanding mortgages, tax liens, encumbrances, or other interests in the Property which have not been expressly subordinated to this Conservation Easement. Grantor further warrants that Grantee shall have the use of and enjoy all the benefits derived from and arising out of this Conservation Easement, and that Grantor will warrant and defend title to the Property against the claims of all persons.

B. Subsequent Transfers. The Grantor agrees to incorporate the terms of this Conservation Easement in any deed or other legal instrument that transfers any interest in all or a portion of the Property. The Grantor agrees to provide written notice of such transfer at least thirty (30) days prior to the date of the transfer. The Grantor and Grantee agree that the terms of this Conservation Easement shall survive any merger of the fee and easement interests in the Property or any portion thereof and shall not be amended, modified or terminated without the prior written consent and approval of the Corps.

C. Assignment. The parties recognize and agree that the benefits of this Conservation Easement are in gross and assignable provided, however that the Grantee hereby covenants and agrees, that in the event it transfers or assigns this Conservation Easement, the organization receiving the interest will be a qualified holder under N.C. Gen. Stat. § 121-34 et seq. and § 170(h) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue to monitor in perpetuity the terms of this Conservation Easement.

D. Entire Agreement and Severability. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement. If any provision is found to be void or unenforceable by a court of competent jurisdiction, the remainder shall continue in full force and effect.

E. Obligations of Ownership. Grantor is responsible for any real estate taxes, assessments, fees, or charges levied upon the Property. Grantor shall keep the Property free of any liens or other encumbrances for obligations incurred by Grantor. Grantee and its successors or assigns shall not be responsible for any costs or liability of any kind related to the ownership, operation, insurance, upkeep, or maintenance of the Property, except as expressly provided herein. Nothing herein shall relieve the Grantor of the obligation to comply with federal, state or local laws, regulations and permits that may apply to the exercise of the Reserved Rights.

F. Extinguishment. In the event that changed conditions render impossible the continued use of the Property for the conservation purposes, this Conservation Easement may only be extinguished, in whole or in part, by judicial proceeding.

G. Eminent Domain. Whenever all or part of the Property is taken in the exercise of eminent domain so as to substantially abrogate the Restrictions imposed by this Conservation Easement, Grantor and Grantee shall join in appropriate actions at the time of such taking to recover the full value of the taking, and all incidental and direct damages due to the taking.

H. Proceeds. This Conservation Easement constitutes a real property interest immediately vested in Grantee. In the event that all or a portion of this Property is sold, exchanged, or involuntarily converted following an extinguishment or the exercise of eminent domain, Grantee shall be entitled to the fair market value of this Conservation Easement. The parties stipulate that the fair market value of this Conservation Easement shall be determined by multiplying the fair market value of the Property unencumbered by this Conservation Easement (minus any increase in value after the date of this grant attributable to improvements) by the ratio of the value of this easement at the time of this grant to the value of the Property (without deduction for the value of this Conservation Easement) at the time of this grant. The values at the time of this grant shall be the values used, or which would have been used, to calculate a deduction for federal income tax purposes, pursuant to Section 170(h) of the Internal Revenue Code (whether eligible or ineligible for such a deduction). Grantee shall use its share of the proceeds in a manner consistent with the purposes of this Conservation Easement.

I. Notification. Any notice, request for approval, or other communication required under this Conservation Easement shall be sent by registered or certified mail, postage prepaid, to the following addresses (or such address as may be hereafter specified by notice pursuant to this paragraph):

To Grantor: Lois M. McPherson, Trustee
1611 Purse Drive
Manassas, Virginia 20112

To Grantee: Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, North Carolina 27604

To the Corps: U. S. Army Corps of Engineers
Raleigh Regulatory Field Office
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587

Attention: Regulatory Project Manager

J. Failure of Grantee. If at any time Grantee is unable or fails to enforce this Conservation Easement, or if Grantee ceases to be a qualified grantee, and if within a reasonable period of time after the occurrence of one of these events Grantee fails to make an assignment pursuant to this Conservation Easement, then the Grantee's interest shall become vested in another qualified grantee in accordance with an appropriate proceeding in a court of competent jurisdiction.

K. Amendment. This Conservation Easement may be amended, but only in a writing signed by all parties hereto, and provided such amendment does not affect the qualification of this Conservation Easement or the status of the Grantee under any applicable laws, and is consistent with the conservation purposes of this grant.

L. Present Condition of the Property. The wetlands, scenic, resource, environmental, and other natural characteristics of the Property, and its current use and state of improvement, are described in Section ___ of the Mitigation Plan, dated _____, prepared by Grantor and acknowledged by the Grantor and Grantee to be complete and accurate as of the date hereof. Both Grantor and Grantee have copies of this report. It will be used by the parties to assure that any future changes in the use of the Property will be consistent with the terms of this Conservation Easement. However, this report is not intended to preclude the use of other evidence to establish the present condition of the Property if there is a controversy over its use.

TO HAVE AND TO HOLD the said rights and easements perpetually unto Grantee for the aforesaid purposes.

IN TESTIMONY WHEREOF, Grantor has set her hand and seal to this Amended and Restated Permanent Conservation Easement, the day and year first above written.

Lois M. McPherson (SEAL)
Lois M. McPherson, Trustee of the
Sarah J. McPherson Irrevocable Trust

STATE OF Virginia
COUNTY OF Prince William

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document:

Lois M. McPherson, Trustee of the Sarah J. McPherson Irrevocable Trust

WITNESS my hand and official seal, this 27 day of January, 2010.

[Signature]
Notary's Official Signature

(Official Seal)

Notary's Printed or Typed Name

My commission expires: _____



Carmen Jacinta James
NOTARY PUBLIC
Commonwealth of Virginia
Reg. # 7158949
My Commission Expires
April 30, 2012

IN TESTIMONY WHEREOF, Grantee has caused this Amended and Restated Permanent Conservation Easement to be signed, the day and year first above written.

RESTORATION SYSTEMS, LLC

By: [Signature]
Name: John Preyer
Title: Chief of Operations

STATE OF NORTH CAROLINA
COUNTY OF Wake

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document:

John Preyer

WITNESS my hand and official seal, this 29th day of September, 2010.



[Signature]
Notary's Official Signature

Tiffani Bylow
Notary's Printed or Typed Name

My commission expires: 5.04.2013

EXHIBIT "A"

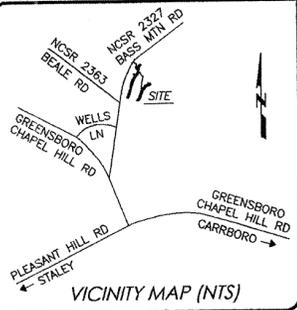
All of THE PROPERTY SHOWN ON Deed Book 2061, Page 871, Office of the Register of Deeds of Alamance County, North Carolina.

EXHIBIT "A-1"

CONSERVATION EASEMENT

All of Conservation Easements B, C, D and E as shown on Conservation Easement Survey for Restoration Systems, LLC, entitled "Bass Mountain Restoration Site (Across the Lands of Greeson and McPherson)," prepared by K2 Design Group, P.A., and recorded in Plat Book 73, Pages 58-59, Office of the Register of Deeds of Alamance County, North Carolina.

TOGETHER WITH Access Easements 1, 2, 3 and 4 as shown on Conservation Easement Survey for Restoration Systems, LLC, entitled "Bass Mountain Restoration Site (Across the Lands of Greeson and McPherson)," prepared by K2 Design Group, P.A., and recorded in Plat Book 73, Pages 58-59, Office of the Register of Deeds of Alamance County, North Carolina.



DEED REFERENCE(S):
 BEING A PORTION OF THE PROPERTY RECORDED IN D.B. 2061, PG. 871 OF THE ALAMANCE COUNTY REGISTRY.
 BEING A PORTION OF THE PROPERTY RECORDED IN D.B. 736, PG. 631 OF THE ALAMANCE COUNTY REGISTRY.

MAP REFERENCE(S):
 P.B. 72, PG. 101
 P.B. 72, PG. 252
 P.B. 72, PG. 373
 P.B. 72, PG. 251

STATE OF NORTH CAROLINA
 COUNTY OF ALAMANCE

Filed for registration at _____ M. _____, 2008 in the Register of Deeds
 Office. Recorded in P.B. _____, PG. _____.

Register of Deeds _____ By _____

STATE OF NORTH CAROLINA
 COUNTY OF ALAMANCE

I, Christopher S. Ows, Register of Deeds, certify that the map or plan to which this certification is affixed meets all statutory requirements for recording.

Date 11/13/08 Review Officer _____

CERTIFICATE OF OWNERSHIP, DEDICATION AND MAINTENANCE

I (We) hereby certify that I am (we are) the Owner(s) of the property shown and described hereon, which was conveyed to me (us) by deed recorded in Deed Books and Pages referenced hereon, and that the Conservation Easements and Associated Ingress, Egress & Regress Easements to be placed upon the property shown in this plat are exceptions to the Subdivision Ordinance of Alamance County, North Carolina.

10/21/08 Lois M. McPherson Owner (McPherson)
10-16-08 Wayne Anthony Gresson Sr. Owner (Gresson)
11/5/08 Robert Lee Gresson Owner (Gresson)
11-9-08 Randal Mack Gresson Owner (Gresson)

CERTIFICATE OF EXEMPTION

I hereby certify that the Conservation Easement to be placed upon the property shown and described hereon is exempt from the Alamance County Subdivision Regulations by definition.

Date 11/13/08 Subdivision Administrator _____

SURVEYOR'S CERTIFICATION(S):

Surveyor's disclaimer: No attempt was made to locate any cemeteries, wetlands, hazardous material sites, underground utilities or any other features above, or below ground other than those shown.

I certify that the survey is of another category (conservation easement), such as the recombination of existing parcels, a court-ordered survey, or other exception to the definition of a subdivision.

I, JOHN A. RUDOLPH, certify that this plot was drawn under my supervision from (an actual survey made under my supervision) (deed description recorded in Book SEE..., Page REF..., etc.) (other); that the ratio of precision as calculated by latitudes and departures is 1/100,000±; that the boundaries not surveyed are shown as broken lines plotted from information found in D.B. XX, Page XX; that this plat was prepared in accordance with G.S. 47-30 as amended. Witness my original signature, registration number, and seal this 18th day of August, A.D. 2008.

SEAL OR STAMP

Surveyor John A. Rudolph L-4194



LINE DATA ALONG CONSERVATION EASEMENTS A, B & C

LINE	LENGTH	BEARING
L134	194.42'	N03°50'59"E
L135	54.98'	N43°14'34"E
L136	10.98'	S88°15'35"E
L137	62.17'	N47°14'43"E
L138	16.89'	N04°47'47"W
L139	194.45'	N43°14'34"E
L140	145.53'	S44°04'33"E
L141	266.56'	S38°28'05"W
L142	272.12'	S03°50'59"W
L143	71.31'	S03°50'59"W
L144	227.69'	S22°31'59"W
L145	213.39'	S46°46'11"W
L146	238.29'	S37°18'18"W
L147	160.23'	S16°58'04"W
L148	128.43'	S25°28'32"W
L149	291.02'	S24°43'57"W
L150	239.84'	S02°49'42"W
L151	237.71'	S15°11'53"W
L152	575.81'	S19°05'03"W
L153	137.15'	N73°37'58"W
L154	9.76'	N73°37'58"W
L155	26.61'	N73°37'58"W
L156	15.00'	N73°37'58"W
L157	710.39'	N18°26'44"E
L158	252.86'	N12°23'10"E
L159	198.06'	N02°20'27"W
L160	258.01'	N31°02'42"E
L161	109.79'	N25°53'20"E
L162	316.43'	N28°49'46"E
L163	245.85'	N02°06'49"W
L164	106.23'	N72°23'27"E
L165	123.74'	S18°27'21"E
L166	266.65'	N30°42'18"E
L167	156.31'	N08°45'40"E
L168	25.88'	N03°50'59"E

LINE DATA ALONG CONSERVATION EASEMENTS D & E

LINE	LENGTH	BEARING
L169	387.63'	N35°49'48"E
L170	178.31'	N59°03'13"E
L171	128.27'	N74°59'19"E
L172	112.59'	N80°38'37"E
L173	129.02'	N61°42'14"E
L174	131.43'	S26°04'23"E
L175	475.29'	S61°54'29"W
L176	207.38'	S36°50'06"W
L177	201.83'	S38°00'52"W
L178	95.51'	S39°59'05"W
L179	245.67'	S14°15'46"W
L180	295.43'	S18°49'33"W
L181	242.29'	S41°45'27"W
L182	199.75'	N73°56'14"W
L183	389.72'	N35°41'08"E
L184	359.61'	N19°19'02"E
L185	165.06'	N24°21'23"E
L186	68.50'	N35°49'48"E

GENERAL NOTES:

1) NOTE: NO ABSTRACT TITLE, NOR TITLE COMMITMENT, NOR RESULTS OF TITLE SEARCH WERE FURNISHED TO THE SURVEYOR. ALL DOCUMENTS OF RECORD REVIEWED ARE NOTED HEREON (SEE REFERENCES). THERE MAY EXIST OTHER DOCUMENTS OF RECORD THAT MAY AFFECT THIS SURVEYED PARCEL.

2) NO HORIZONTAL CONTROL EXISTS WITHIN 2000 FT.

LINE DATA ALONG TIE DOWNS

LINE	LENGTH	BEARING
L127	74.75'	S55°36'32"E
L128	34.34'	N81°54'27"E
L129	315.71'	N81°55'34"E
L130	60.37'	N81°56'10"E
L131	82.17'	S62°40'24"E

LINE DATA ALONG PROPERTY LINE BETWEEN GREESON & MCPHERSON SEPARATING CONSERVATION EASEMENTS A & B

LINE	LENGTH	BEARING
L132	53.51'	S62°40'24"E
L133	7.88'	S62°40'24"E

LINE DATA FROM "A" TO "B" ALONG PROPERTY LINE BETWEEN MCPHERSON AND GREESON SEPARATING CONSERVATION EASEMENTS A & B (ALSO THE CENTERLINE OF EXISTING STREAM)

LINE	LENGTH	BEARING
L44A	3.78'	S39°00'11"W
L44B	21.53'	S16°43'53"W
L45	22.49'	S00°11'55"W
L46	19.12'	S25°34'18"W
L47	17.26'	S01°38'02"E
L48	15.61'	S00°31'44"E
L49	10.79'	S19°38'15"W
L50	16.73'	S33°12'14"W
L51	37.48'	S18°47'25"W
L52	21.23'	S26°23'17"W
L53	15.85'	S07°26'56"W
L54	11.14'	S08°18'26"E
L55	13.04'	S39°05'01"W
L56	15.25'	S09°39'41"W
L57	23.98'	S22°38'07"W
L58	19.35'	S17°38'08"W
L59	21.92'	S30°31'14"W
L60	19.09'	S39°31'26"W
L61	15.70'	S14°33'15"W
L62	25.05'	S04°09'16"W
L63	11.22'	S68°52'34"W
L64	16.02'	S71°28'11"W
L65	27.87'	S32°09'30"W
L66	24.07'	S45°52'12"W
L67	17.85'	S40°56'04"W
L68	27.06'	S30°31'33"W
L69	11.88'	S48°29'26"W
L70	16.39'	S36°49'51"W
L71	38.44'	S35°02'23"W
L72	3.55'	S48°14'25"W
L73	10.35'	S44°34'43"W
L74	21.50'	S53°25'49"W
L75	19.20'	S02°04'01"W
L76	26.72'	S24°30'21"W
L77	24.66'	S23°25'17"W
L78	20.39'	S37°43'32"W
L79	23.65'	S30°50'17"W
L80	6.18'	S07°50'14"W
L81	60.60'	S29°13'56"W
L82	108.54'	S27°18'55"W
L83	15.45'	S39°53'58"W
L84	31.26'	S26°42'59"W
L85	45.45'	S26°16'26"W
L86	40.61'	S20°51'59"W
L87	133.46'	S23°04'23"W
L88	27.97'	S56°31'23"W
L89	14.82'	S06°41'17"E
L90	24.30'	S24°36'29"W
L91	66.18'	S25°06'27"W
L92	38.07'	S28°39'20"W
L93	42.70'	S28°23'15"W
L94	17.88'	S32°48'57"W
L95	19.01'	S11°56'27"E
L96	34.57'	S14°31'17"W
L97	54.88'	S11°00'44"E
L98	15.53'	S18°26'53"W
L99	13.59'	N62°20'49"W
L100	13.08'	S39°22'48"W
L101	20.39'	S12°46'13"E
L102	69.70'	S05°28'04"E
L103	60.05'	S11°34'42"W
L104	16.85'	S57°19'09"W
L105	27.78'	S18°24'40"W
L106	20.29'	S01°46'10"W
L107	56.66'	S13°48'04"W
L108	21.63'	S32°59'28"W
L109	17.13'	S09°16'17"E
L110	48.88'	S20°35'18"W
L111	25.17'	S03°13'40"W
L112	41.52'	S25°00'36"W
L113	48.25'	S10°08'42"W
L114	35.78'	S19°19'06"W
L115	42.33'	S18°08'57"W
L116	46.01'	S18°21'20"W
L117	26.99'	S31°51'35"W
L118	39.24'	S26°48'37"W
L119	98.92'	S13°36'32"W
L120	47.40'	S21°45'26"W
L121	51.01'	S31°26'42"W
L122	47.04'	S23°51'39"W
L123	16.34'	S16°04'54"W
L124	21.06'	S21°38'09"W
L125	27.92'	S29°56'36"W
L126	14.49'	S44°42'08"W

- LEGEND:**
- EIS - Existing Iron Stake
 - EIP - Existing Iron Pipe
 - NMC - Non-Monumented Corner
 - ECM - Existing Concrete Monument
 - R/W - Right-Of-Way
 - EOP - Edge of Pavement
 - N/F - Now or Formerly
 - EPK - Existing PK Nail
 - PKS - PK Nail Set
 - IPS - Iron Pipe Set (1" O.D.)
 - ECM - Existing Concrete Monument
 - ERRS - Existing Railroad Spike
 - CC - Control Corner
 - D.B. - Deed Book
 - PG. - Page
 - NCDOT - North Carolina Department of Transportation
 - NCSR - North Carolina Secondary Road
 - HWY - Highway
 - BRG - Bearing
 - RCG - Reinforced Concrete Pipe
 - *UP - Utility Pole
 - FEMA - Federal Emergency Management Agency
 - ISS - Iron Stake Set (No. 5 Rebar)
 - MNS - Map Nail Set
 - RCP - Reinforced Concrete Pipe
 - CPP - Corrugated Plastic Pipe
 - E/B - Easement Boundary
 - IS - Iron Stake Set with Cap No. 5 Rebar
 - - Non-Monumented Corner (Unless Otherwise Noted)

LINE DATA ALONG CENTERLINE OF N.C.S.R. 2327 (BASS MOUNTAIN ROAD) (TIE DOWN)

LINE	LENGTH	BEARING
L1	155.37'	N07°47'55"E
L2	99.91'	N05°18'52"E
L3	99.91'	N04°25'41"E
L4	100.04'	N03°53'28"E
L5	376.90'	N03°41'38"E
L6	99.97'	N05°12'31"E
L7	99.95'	N10°13'48"E
L8	99.98'	N16°15'21"E
L9	100.01'	N22°38'43"E
L10	99.97'	N28°14'19"E
L11	100.02'	N33°46'17"E
L12	99.96'	N39°52'25"E
L13	100.03'	N46°41'46"E
L14	99.97'	N50°16'45"E
L15	228.39'	N51°26'36"E

LINE DATA ALONG TIE DOWN FROM CL OF BASS MOUNTAIN RD TO R/W OF BASS MOUNTAIN RD

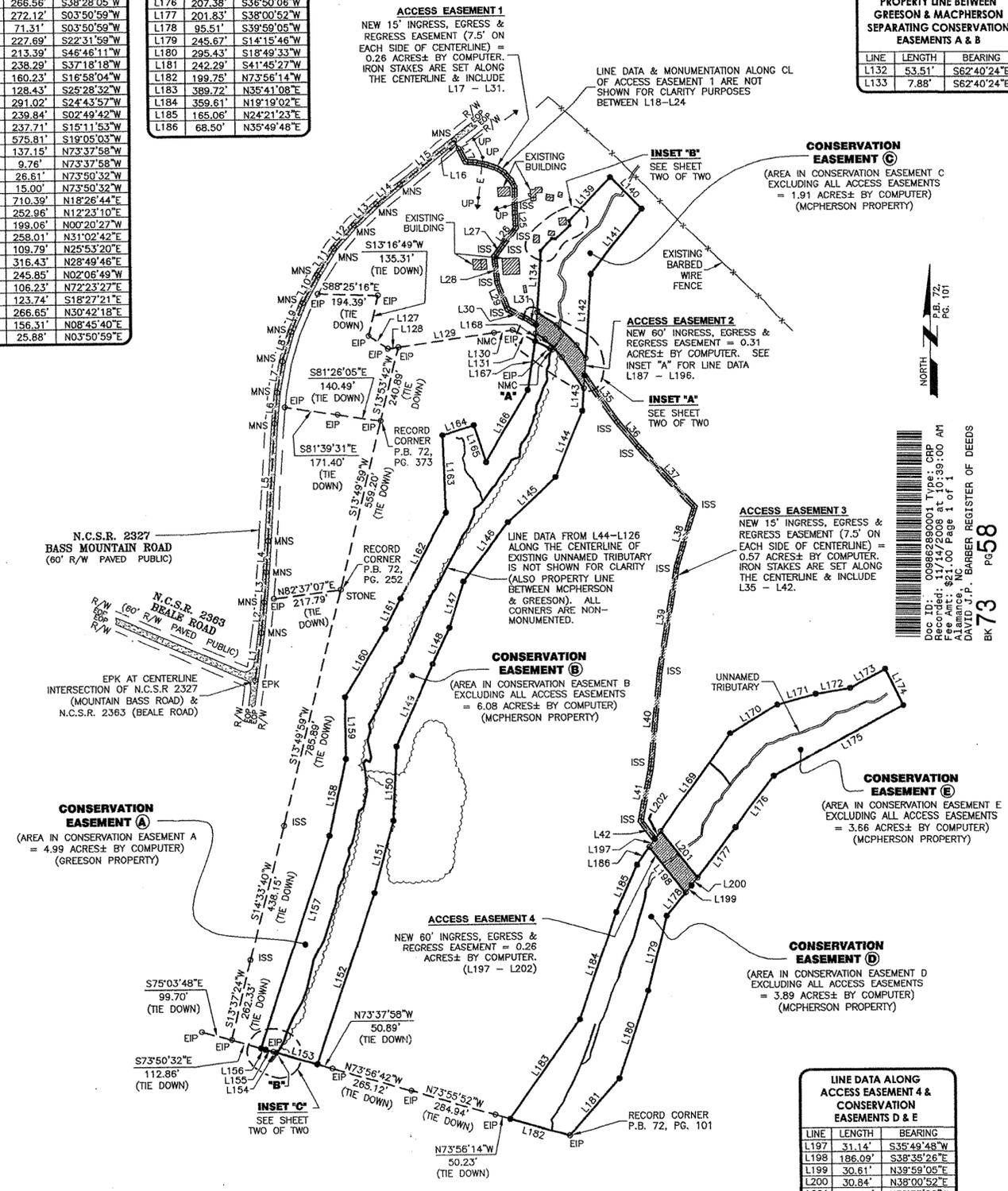
LINE	LENGTH	BEARING
L16	30.54'	S27°43'47"E

LINE DATA ALONG CENTERLINE OF ACCESS EASEMENT 1 (ISS ALONG CL)

LINE	LENGTH	BEARING
L17	47.88'	S27°43'47"E
L18	30.33'	S85°50'50"E
L19	36.80'	S78°50'51"E
L20	35.38'	S70°08'58"E
L21	29.32'	S58°12'54"E
L22	34.67'	S40°27'26"E
L23	21.32'	S27°56'40"E
L24	87.21'	S00°49'17"E
L25	50.68'	S02°45'54"E
L26	76.18'	S36°44'23"W
L27	40.52'	S37°25'11"W
L28	80.67'	S06°14'23"E
L29	91.81'	S21°15'07"E
L30	67.05'	S63°50'53"E
L31	37.89'	S56°37'17"E

LINE DATA ALONG CENTERLINE OF ACCESS EASEMENT 3 (ISS ALONG CL)

LINE	LENGTH	BEARING
L35	181.61'	S35°21'13"E
L36	105.96'	S40°06'00"E
L37	262.20'	S43°01'47"E
L38	200.19'	S18°56'09"W
L39	349.00'	S09°24'35"W
L40	314.20'	S03°45'39"W
L41	174.15'	S11°10'22"W
L42	73.52'	S38°35'26"E



LINE DATA ALONG ACCESS EASEMENT 4 & CONSERVATION EASEMENTS D & E

LINE	LENGTH	BEARING
L197	31.14'	S35°49'48"W
L198	186.09'	S39°35'26"E
L199	30.81'	N39°59'05"E
L200	30.84'	N38°00'52"E
L201	189.61'	N38°35'26"W
L202	31.14'	S35°49'48"W

FEMA FLOOD STATEMENT:
 THE AREA REPRESENTED BY THIS PLAT IS NOT LOCATED IN A FLOOD HAZARD BOUNDARY ACCORDING TO FEMA MAP NUMBER(S) 3710876800. ZONE(S): X. DATED: SEPTEMBER 8, 2008.

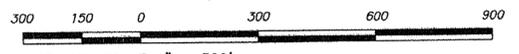
ACREAGE DATA
 THE AREA OF THE CONSERVATION EASEMENTS A, B, C, D & E = 20.53 ACRES± EXCLUDING ALL ACCESS EASEMENTS BY COMPUTER

SHEET ONE OF TWO



CONSERVATION EASEMENT SURVEY
 FOR
RESTORATION SYSTEMS, LLC

BASS MOUNTAIN RESTORATION SITE
 (ACROSS THE LANDS OF GREESON & MCPHERSON)
 Restoration & Conservation
 Natural Resources
 PATTERSON TOWNSHIP ALAMANCE COUNTY NORTH CAROLINA



DRAWN BY: FGR
 DATE: 8/19/08
 DWG. NO.: RSS021MR08
 SURVEYED BY: J.A.R.

5688 U.S. Hwy. 70 East
 Goldsboro, NC 27534
 Tel.: (919) 751-0075
 Fax: (919) 778-9087
 K2design@suddenlink.net



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Office. Recorded in P.B. _____, PG. _____.

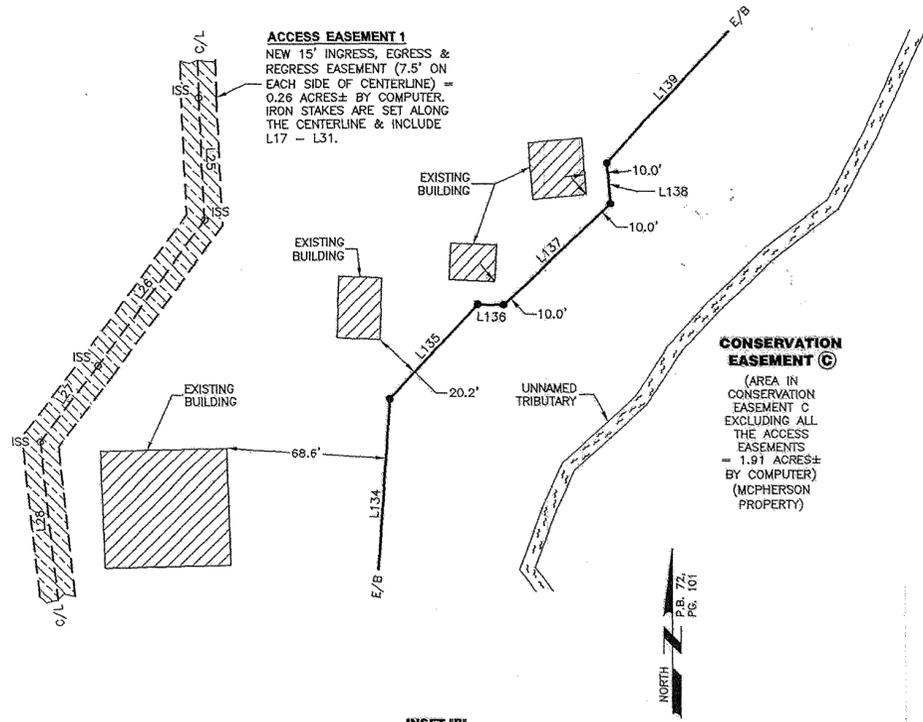
Register of Deeds

By _____

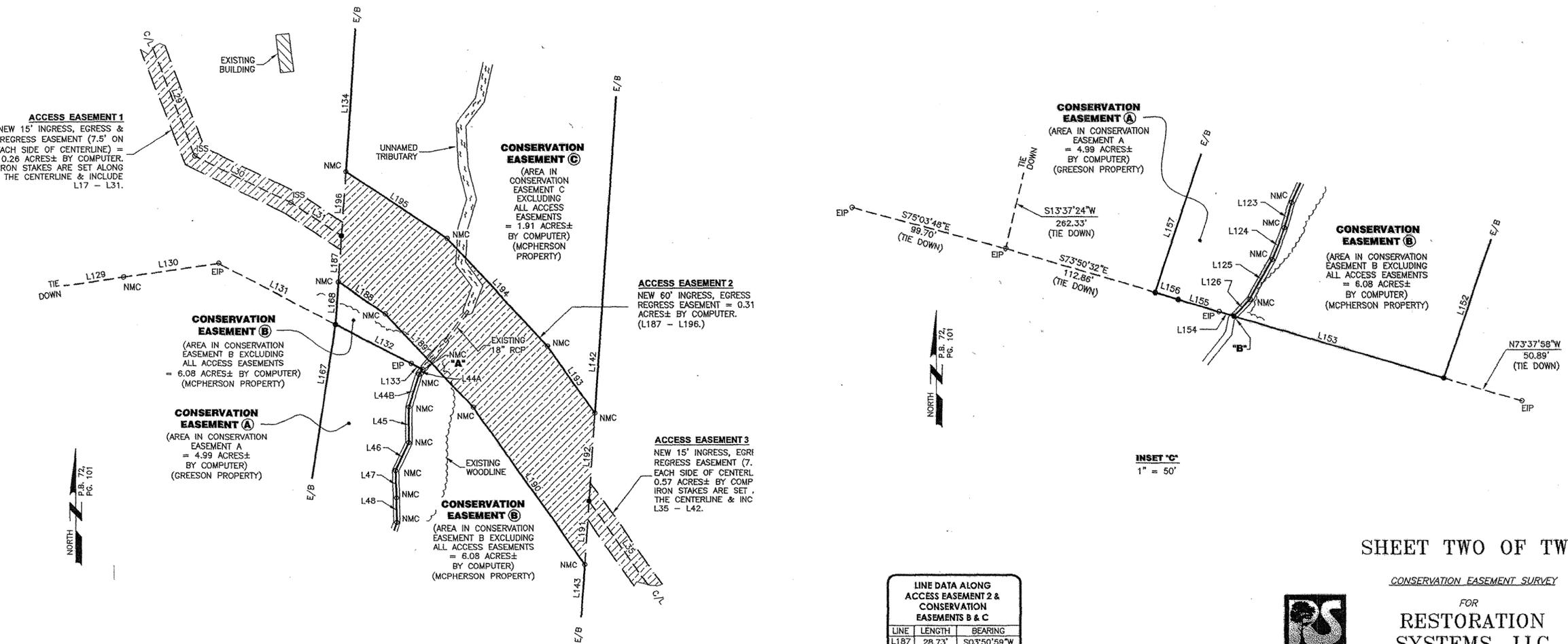


- LEGEND:**
- EIS - Existing Iron Stake
 - EIP - Existing Iron Pipe
 - NMC - Non Monumented Corner
 - ECM - Existing Concrete Monument
 - R/W - Right-Of-Way
 - EOP - Edge Of Pavement
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 - RCP - Reinforced Concrete Pipe
 - *UP - Utility Pole
 - FEMA - Federal Emergency Management Agency
 - ISS - Iron Stake Set (No. 5 Rebar)
 - MNS - Mag Nail Set
 - RCP - Reinforced Concrete Pipe
 - CPP - Corrugated Plastic Pipe
 - E/B - Easement Boundary
 - - Iron Stake Set with Cap No. 5 Rebar

Doc ID: 00986290001 Type: CRP
Recorded: 11/14/2008 at 10:40:26 AM
Fee Amt: \$21.00 Page 1 of 1
Alamance, NC
DAVID J.P. BARBER REGISTER OF DEEDS
BK 73 PG 59



INSET 'B'
1" = 50'



LINE DATA ALONG ACCESS EASEMENT 2 & CONSERVATION EASEMENTS B & C

LINE	LENGTH	BEARING
L187	28.73'	S03°50'59"W
L188	35.18'	S56°37'17"E
L189	80.26'	S43°25'46"E
L190	120.95'	S35°21'13"E
L191	39.55'	N03°50'59"E
L192	55.37'	N03°50'59"E
L193	51.63'	N35°21'13"W
L194	91.44'	N43°25'46"W
L195	76.10'	N56°37'17"W
L196	40.22'	S03°50'59"W

SHEET TWO OF TWO



CONSERVATION EASEMENT SURVEY
FOR
RESTORATION SYSTEMS, LLC

BASS MOUNTAIN RESTORATION SITE
(ACROSS THE LANDS OF GREESON & MCPHERSON)
PATTERSON TOWNSHIP ALAMANCE COUNTY NORTH CAROLINA



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Appendix D: State Historic Preservation Office Correspondence – May 29th, 2013



North Carolina Department of Cultural Resources
State Historic Preservation Office

Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

May 29, 2008

Barrett Jenkins
Restoration Systems, LLC
Pilot Mill
1101 Haynes Street, Suite 107
Raleigh, NC 27604

Re: Bass Mountain Stream Restoration, Alamance County, ER 08-1106

Dear Mr. Jenkins:

Thank you for your letter of April 24, 2008, concerning the above project.

We have conducted a review of the project and are aware of no historic resources which would be affected by the project. Therefore, we have no comment on the project as proposed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above-referenced tracking number.

Sincerely,

Handwritten signature of Peter B. Sandbeck in black ink. The signature is written in a cursive style and includes a small "CR" monogram above the end of the name.

Peter Sandbeck

Appendix E: DWR Memorandum to NC EEP “*Reforms needed immediately in the regulation of riparian buffer mitigation*” – August 9th, 2013



North Carolina Department of Environment and Natural Resources
Division of Water Resources
Water Quality Programs

Pat McCrory
Governor

Thomas A. Reeder
Director

John E. Skvarla, III
Secretary

August 9, 2013

MEMORANDUM

To: N.C. Ecosystem Enhancement Program

From: Tom Reeder

Subject: DWR responses to the EEP document “*Reforms needed immediately in the regulation of riparian buffer mitigation*”

On August 2, 2013, the Division of Water Resources (DWR) received a document from the N.C. Ecosystem Enhancement Program (EEP) titled “*Reforms needed immediately in the regulation of riparian buffer mitigation*”. Below is a short summary of each point raised in the document and DWR’s response to those points.

I. Riparian Buffer Mitigation Widths – the Ironclad 50’ Standard

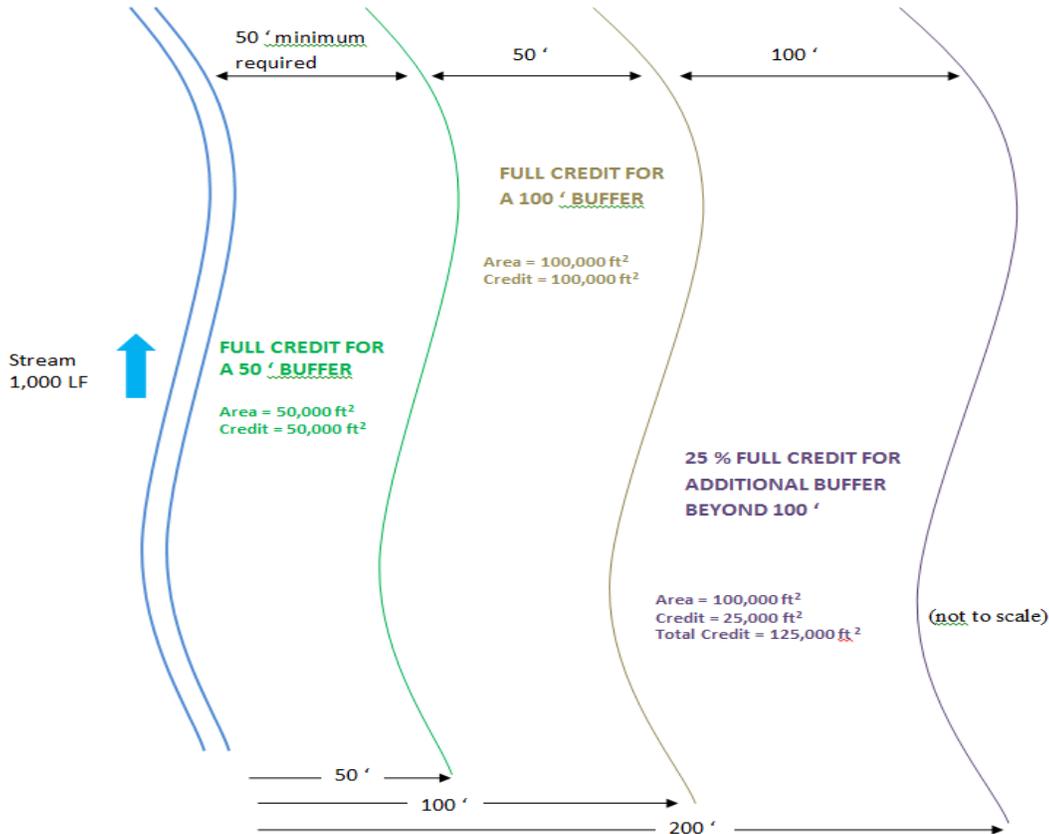
There are two issues raised under this section: (a) provide mitigation credit for buffers wider than 50 feet and (b) provide mitigation credit for buffers narrower than 50 feet.

Response:

- (a) DWR will approve mitigation credit for buffer widths in excess of 50 feet on a prorated basis, up to a maximum of 200 feet, including on pre-existing mitigation sites:

Buffer width (ft)	Percentage of Full Credit
50-100	100%
101-200	25% for area > 100 feet

Example for restoration of a 1,000 linear foot stream segment:



(b) DWR agrees that mitigation credit should be granted for restored buffer widths less than 50 feet, however this would require a rule change. The draft consolidated buffer mitigation rule (15A NCAC 02B .0295) already has provisions for narrower buffers in urban areas and DWR supports expanding this to non-urban areas.

II. Riparian Buffer Jurisdiction – Map Jurisdiction.

There are two issues raised under this section: (a) the ability to conduct restoration or enhancement on unmapped streams and (b) the ability to conduct restoration or enhancement on all watercourses, including ditches.

Response for the Neuse, Tar-Pamlico, Catawba and Jordan:

Under the current buffer mitigation rules, applicants may “restore or enhance a non-forested riparian buffer...” A riparian buffer is defined within each of the buffer rules. Each rule has an applicability paragraph that defines where the rule shall apply (e.g. in the Neuse “*This Rule shall apply to 50-foot wide riparian buffers directly adjacent to surface waters in the Neuse River Basin (intermittent streams, perennial streams, lakes, ponds, and estuaries), excluding wetlands.*”) The rule goes on further to clarify that a subject feature must be depicted on either the USGS topo map or the NRCS soil survey and defines the Zones of the riparian buffer.

To allow buffer mitigation to occur on non-subject features requires a rule change. DWR does support buffer mitigation on unmapped streams, and the draft consolidated buffer mitigation rule (15A NCAC 02B .0295) already has language to allow for this.

Response for Randleman:

Under the current Randleman buffer mitigation rules, applicants may “restore or enhance a non-forested riparian buffer...” A riparian buffer is defined within the Randleman rules to include unmapped features, as well as ditches or manmade conveyances that “deliver untreated stormwater runoff from an adjacent source directly to an intermittent or perennial stream are subject to the Rule.”

DWR will continue to allow buffer mitigation to occur in the Randleman watershed on unmapped features as well as ditches or manmade conveyances that meet the rule.

Response for Goose Creek:

Under the current Goose Creek buffer mitigation rules, unmapped streams may be used to provide buffer mitigation, as well as first order ephemeral streams that discharge/outlet into intermittent or perennial streams.

III. Riparian Buffer Jurisdiction – Stream Calls on Mapped Streams

The issues raised under this section focus on the requirement to have a stream determination made by DWR staff. More specifically, there is a concern that the stream method is not appropriate for modified natural streams that may be severely degraded and that these streams are not eligible for mitigation.

Response:

- DWR will allow all subject streams to be eligible for riparian buffer mitigation.

IV. Restoration Success Criteria – Native Hardwood Trees

The issues raised under this section focus on the requirement to plant a minimum of at least two native hardwood tree species and the current DWR practice of not allowing Sweet Gum or Red Maple to be counted towards meeting this requirement.

Response:

- DWR agrees that as written, the use of Sweet Gum and Red Maple counts towards meeting the minimum requirement of the rule. Mitigation providers will be expected to meet planting criteria established by the IRT in buffer areas that are part of a stream mitigation site.

V. Restoration Success Criteria – Planted Stems

The issues raised under this section focus on the requirement to plant 320 trees per acre and the statement that DWR does not count trees derived from existing seed sources, planted seeds, stump sprouts or other volunteer species towards meeting that 320 requirement.

Response:

- DWR agrees that using 260 stems per acre at the end of the monitoring period would provide more consistency with the federal performance standards for stream and wetland projects; however this would require a rule change. The draft consolidated buffer mitigation rule (15A NCAC 02B .0295) has already incorporated this change.

DWR staff will continue to consider the presence of woody volunteers during closeout of buffer sites.

VI. Restoration and Enhancement Criteria – Measuring Density

The issues raised under this section focus on tree density for determining restoration or enhancement. More specifically, the issues include the inconsistency among rules, the lack of clarity on how to measure density which has resulted in inconsistent calls among DWR staff, and the use of a tree's dripline.

Response:

- DWR agrees that the inconsistency among rules has created confusion and inconsistency in implementation; however this would require a rule change to be consistent among all six rules. The draft consolidated buffer mitigation rule (15A NCAC 02B .0295) has definitions for restoration, enhancement and preservation, which were written to provide clarity and predictability while still allowing DWR staff to use best professional judgment in evaluating potential mitigation sites based on their many years of experience.

In the Jordan and Randleman watersheds, the rules allow for restoration on sites with fewer than 100 trees/acre and enhancement on sites with between 100 and 200 trees. In these two watersheds, DWR will accept established forestry protocols (e.g. fixed radius plot sampling) to be used to determine existing tree densities in any non-forested buffer area. Sufficient numbers of plots should be used to accurately assess stem densities and delineate areas of the site with varying densities. Plot data should not be averaged to determine an overall stem density unless the site is fairly homogeneous in terms of vegetative coverage. Existing forested areas should be delineated out and not included in stem density calculations. DWR has not considered the drip line to represent the outer edge of a wooded area for several years and will not consider it in the future. Existing wooded areas should be delineated at the trunks of the outer edge of the areas.

Appendix F: Bass Mountain Stream Mitigation Banking Instrument and Mitigation Plan
(USACE Action ID # SAW-2008-02029)

(Version June 2009)

**AGREEMENT TO ESTABLISH THE BASS MOUNTAIN
STREAM MITIGATION BANK
IN ALAMANCE COUNTY, NORTH CAROLINA**

This Mitigation Banking Instrument (MBI) is made and entered into on the 6 day of March, 2013, by the Restoration Systems, LLC, hereinafter Sponsor, and the U. S. Army Corps of Engineers (Corps), and each of the following agencies, upon its execution of this MBI, the Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the North Carolina Wildlife Resources Commission (NCWRC), and the North Carolina Division of Water Quality (NCDWQ). The Corps, together with the State and Federal agencies that execute this MBI, are hereinafter collectively referred to as the Interagency Review Team (IRT).

WHEREAS the purpose of this agreement is to establish a mitigation bank (Bank) providing compensatory mitigation for unavoidable stream impacts separately authorized by Section 404 Clean Water Act permits and /or Section 10 of the Rivers and Harbors Act permits in appropriate circumstances;

WHEREAS the Sponsor is the record owner of a Conservation Easement covering that certain parcel of land containing approximately 20.5 acres located in Alamance County, North Carolina, described in the **Bass Mountain Stream Mitigation Bank** Stream Mitigation Plan (Mitigation Plan, attached as Appendix A), and as shown on the attached survey (Property, attached as Appendix B);

WHEREAS the agencies comprising the IRT agree that the Bank site is a suitable mitigation bank site, and that implementation of the Mitigation Plan is likely to result in net gains in functions at the Bank site, and have therefore approved the Mitigation Plan;

THEREFORE, it is mutually agreed among the parties to this agreement that the following provisions are adopted and will be implemented upon signature of this MBI.

Section I: General Provisions

A. The Sponsor is responsible for assuring the success of the restoration, enhancement and preservation activities at the Bank site, and for the overall operation and management of the Bank. The Sponsor assumes the legal responsibility for providing the compensatory mitigation once a permittee secures credits from the Sponsor and the DE receives documentation that confirms the Sponsor has accepted responsibility for providing the required compensatory mitigation.

B. The goal of the Bank is to restore, enhance and preserve stream systems and their functions to compensate in appropriate circumstances for unavoidable stream impacts authorized by Section 404 of the Clean Water Act permits and or Section 10 of the Rivers and Harbors Act permits in

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circumstances deemed appropriate by the Corps after consultation, through the permit review process, with members of the IRT.

C. Use of credits from the Bank to offset stream impacts authorized by Clean Water Act permits must be in compliance with the Clean Water Act and implementing regulations, including but not limited to the 404(b)(1) Guidelines, the National Environmental Policy Act, and all other applicable Federal and State legislation, rules and regulations. This agreement has been drafted in accordance with the regulations for Compensatory Mitigation for Losses of Aquatic Resources effective June 9, 2008 (33 CFR Parts 325 and 332) (“Mitigation Rule”).

D. The IRT shall be chaired by the District Engineer (DE) of the U.S. Army Corps of Engineers, Wilmington District. The IRT shall review documentation for the establishment of mitigation banks. The IRT will also advise the DE in assessing monitoring reports, recommending remedial measures, approving credit releases, and approving modifications to this instrument. The IRT’s role and responsibilities are more fully set forth in Sections 332.8 of the Mitigation Rule. The IRT will work to reach consensus on its actions.

E. The DE, after consultation with the appropriate Federal and State review agencies through the permit review process, shall make final decisions concerning the amount and type of compensatory mitigation to be required for unavoidable, permitted stream impacts, and whether or not the use of credits from the Bank is appropriate to offset those impacts. In the case of permit applications and compensatory mitigation required solely under the Section 401 Water Quality Certification rules of North Carolina, the N.C. Division of Water Quality (NCDWQ) will determine the amount of credits that can be withdrawn from the Bank.

F. The parties to this agreement understand that a watershed approach to establish compensatory mitigation must be used to the extent appropriate and practicable. Where practicable, the use of in-kind compensatory mitigation is preferred.

Section II: Geographic Service Area

The Geographic Service Area (GSA, shown in Appendix C) is the designated area within which the bank is authorized to provide compensatory mitigation required by DA permits. The GSA for this Bank shall include the **Cape Fear River Basin** Hydrologic Unit **03030002** in North Carolina, which is situated entirely in the Piedmont ecoregion.

The Bank is located in the Cape Fear River Basin in 14-digit United States Geological Survey Cataloging Unit and **Targeted Local Watershed 03030002050050** of the South Atlantic/Gulf Region (North Carolina Division of Water Quality Subbasin Number 03-06-04). The Bank site will provide functional improvements to its resident watershed. Primary considerations for Bank selection include in-kind mitigation and the potential for protection/improvement of water quality within a region of North Carolina under heavy livestock agriculture, and development pressure that is characterized by nutrient sensitive waters. More specifically, considerations include desired aquatic resource functions, hydrologic conditions, aquatic habitat diversity, habitat connectivity,

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compatibility with adjacent land uses, reasonably foreseeable effects the mitigation project will have on ecologically important aquatic and terrestrial resources, and potential development trends and land use changes.

Currently, the proposed Bank is characterized by pasture used for livestock grazing and hay production. The Bank is located in an area protected by state water supply classification and Jordan Lake buffer rules; however, clearing of vegetation for row crop production, channel straightening, and livestock grazing adjacent to streams has resulted in stream bank erosion, a decrease in flood attenuation, stream entrenchment in upstream reaches, and stream aggradation in downstream reaches. If the proposed stream mitigation does not occur, erosion and nutrient inputs into the nutrient sensitive watersheds are expected to continue.

The Bank is located along unnamed tributaries to Cane Creek. According to the *Final Cape Fear River Basin Restoration Priorities* (NCEEP 2009), this watershed should be targeted for restoration to protect the nutrient sensitive watershed that ultimately drains into the nutrient sensitive water supply at Jordan Lake. The proposed restoration, enhancement and preservation will result in improved water quality within the Bank and downstream watershed. The Bank is located in a region of the state dominated by agriculture and livestock; therefore, restoration of streams is expected to result in immediate water quality benefits in the vicinity of the Bank.

Use of a Bank site to compensate for impacts beyond the GSA may be considered by the Corps or the permitting agency on a case-by-case basis.

Section III: Mitigation Plan

Any Mitigation Plan submitted pursuant to this agreement must contain the information listed in 332.4(c)(2) through (14) of the Compensatory Mitigation Rule.

A. The Bank site is characterized by pastureland, which is utilized by the McPherson family for cattle grazing and hay production. The property adjacent to Bank includes the primary residence of the McPherson family and a large agricultural complex including barns, garages, and feed storage areas. The Bank is situated south of the Cane Creek Mountains and Bass Mountain within a region characterized by agricultural land and timber tracts. Area agriculture includes beef and dairy cattle production, poultry, corn, tobacco, and wheat.

The main hydrologic features of the Bank include two unnamed tributaries to Cane Creek, two secondary tributaries, and associated floodplains (Mitigation Plan, Figure 4, Appendix A). The unnamed tributaries to Cane Creek (UT1 and UT2) are first- and second-order, perennial, bank-to-bank stream systems that drain approximately 0.2- and 0.1-square mile watersheds, respectively. UT1 and UT2 have been dredged and straightened and are characterized by eroding banks in the upper reaches, aggradation in the downstream reaches, bimodal sediment transport, and a narrow and sparse, disturbed riparian buffer. The secondary tributary (UT3) is a stable, perennial, first-order stream with a forested riparian buffer and is proposed for

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preservation. UT4 initiates at a spring that is eroded, trampled heavily by livestock, and is characterized by disturbed vegetation.

A more detailed description of the baseline conditions on the site is contained in the Mitigation Plan.

B. The Sponsor will perform work described on pages 14 through 18 of the Mitigation Plan, including the restoration, enhancement and preservation of tributaries to Cane Creek in the 03030002050050 Targeted Local Watershed of the Cape Fear River Basin. Implementation of the Mitigation Plan will include: 1) construction of a stable, riffle-pool stream channel, 2) enhancement of water quality functions (reduce nonpoint source sedimentation and nutrient inputs), 3) restoration of a natural woody riparian buffer along the Bank's stream reaches, 4) restoration of wildlife habitat associated with a riparian corridor/stable stream, and 5) establishment of a permanent conservation easement which will encompass all restoration activities.

The purpose of this work, and the objective of the Bank, is to provide compensatory mitigation for permitted impacts in the GSA through the restoration of 4,044 linear feet of stream channel, enhancement of 938 linear feet of stream channel, and the preservation of 544 linear feet of stream channel. These areas have been largely cleared of native forest vegetation and are accessible to livestock, resulting in local disturbance to stream banks and soil surfaces. Additional land use practices including the maintenance of riparian vegetation, and relocating, dredging, and straightening of onsite streams have resulted in degraded water quality and unstable channel characteristics (stream erosion, bank collapse, and stream aggradation). Restoration of these streams will stabilize the stream channels, thereby limiting sedimentation from instream and bank erosion, provide increased habitat for aquatic flora and fauna, and establish a forested riparian corridor comprised of native plant species, which will provide water quality and wildlife habitat benefits. Protection of Bank resources through a conservation easement will promote the sustainability and improvement of aquatic resources in the Bank watershed, as well as downstream of the Bank.

C. The Sponsors shall monitor the Bank Site as described on pages 19 through 21 of the Mitigation Plan, until such time as the IRT determines that the success criteria described on page 19 of the Mitigation Plan have been met.

D. The members of the IRT will be allowed reasonable access to the Property for the purposes of inspection of the Property and compliance monitoring of the Mitigation Plan.

Section IV: Reporting

A. The Sponsor shall submit to the DE, for distribution to each member of the IRT, an annual report describing the current condition of the Bank and the condition of the Bank in relation to the success criteria in the Mitigation Plan. The Sponsor shall provide to the DE any monitoring reports described on pages 19 through 21 of the Mitigation Plan.

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B. The Sponsor shall provide ledger reports documenting credit transactions as described in Section VIII of this MBI.

C. The Sponsor shall provide notification the DE each time a credit transaction occurs.

Section V: Remedial Action

A. The DE shall review the monitoring reports, and may, at any time, after consultation with the Sponsor and the IRT, direct the Sponsor to take remedial action at the Bank site. Remedial action required by the DE shall be designed to achieve the success criteria specified in the Mitigation Plan. All remedial actions required under this section shall include a work schedule and monitoring criteria that will take into account physical and climactic conditions.

B. The Sponsor shall implement any remedial measures required pursuant to the above.

C. In the event the Sponsor determines that remedial action may be necessary to achieve the required success criteria, it shall provide notice of such proposed remedial action to all members of the IRT. No remedial actions shall be taken without the concurrence of the DE, in consultation with the IRT.

Section VI: Use of Mitigation Credits

Description of Stream Compensation:

Proposed Mitigation Activity	Proposed Mitigation	Mitigation Ratio	<i>Proposed Credits</i>
	Streams (linear feet)		Stream Credits
Stream Restoration	4044	1:1	4044
Enhancement I	522	1.5:1	348
Enhancement II	416	2.5:1	166
Stream Preservation	544	5:1	109
Totals	5526		4667
Credit Adjustment for Buffer > 50' wide	–	Per Corps' guidance	4981

After completion of the project the Bank will offer **4,981 Stream Mitigation Units**.

B. It is anticipated by the parties that in most cases in which the DE, after consultation with the IRT, has determined that mitigation credits from the Bank may be used to offset stream impacts authorized by Section 404 permits and/or Section 10 permits, that the Restoration Equivalents, as

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enumerated above, constitute credits that are considered to be equal to restoration credits for the purposes of compensatory mitigation. Therefore, the use of Restoration credits or Restoration Equivalents credits, or any combination thereof, is acceptable to the DE for any permit requirement so long as the required amount of credits are debited for a given mitigation requirements. It is also understood that in order to satisfy mitigation requirements imposed by the NC Division of Water Quality, that restoration impact amounts must be at a minimum of 1:1 such that for every one acre (or linear foot) of impact, at least one acre (or linear foot) of mitigation must be in the form of restoration. Additionally, decisions regarding stream mitigation will be made consistent with current policy and guidance and will be made on a case-by-case basis. Wetland and stream compensation ratios are determined by the DE on a case-by-case basis based on considerations of functions of the wetlands and/or streams impacted, the severity of the wetland and/or stream impacts, the relative age of the mitigation site, whether the compensatory mitigation is in-kind, and the physical proximity of the wetland and/or stream impacts to the Bank site.

C. Notwithstanding the above, all decisions concerning the appropriateness of using credits from the Bank to offset impacts to waters and wetlands, as well as all decisions concerning the amount and type of such credits to be used to offset wetland and water impacts authorized by Department of the Army permits, shall be made by the DE, pursuant to Section 404 of the Clean Water Act and implementing regulations and guidance, after notice of any proposed use of the Bank to the members of the IRT, and consultation with the members of the IRT concerning such use. Notice to and consultation with the members of the IRT shall be through the permit review process.

Section VII: Credit Release Schedule

All credit releases must be approved by the DE, in consultation with the IRT, based on a determination that required success criteria have been achieved.

If deemed appropriate by the IRT, fifteen percent (15%) of the Bank's total restoration and enhancement credits and one hundred percent (100%) of the Bank's preservation credits shall be available for sale immediately upon completion of all of the following:

1. Execution of this MBI by the Sponsor, the DE, and other agencies eligible for membership in the IRT who choose to execute this agreement;
2. Approval of the final Mitigation Plan;
3. Mitigation bank site has been secured;
4. Delivery of the financial assurance described in Section IX of this MBI; and
5. Recordation of the long-term protection mechanism described in Section X of this MBI, as well as a title opinion covering the property acceptable to the DE.

Subject to the Sponsor's continued satisfactory completion of all required success criteria and monitoring, additional stream credits will be available for sale by the Sponsor on the following schedule:

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1. 15 % upon completion of all initial physical and biological improvements made pursuant to the Mitigation Plan (total 30%);
2. 10% after first year, provided channel is stable and all other success measures are met (total 40%);
3. 10% after second year, provided channel is stable and all other success measures are met (total 50%);
4. 10% after third year, provided channel is stable and all other success measures are met (total 60%);
5. 10% after fourth year, provided channel is stable and all other success measures are met (total 70%);
6. 15% after fifth year, provided channel is stable and all other success measures are met (total 85%).

A reserve of 15% of the Bank's total stream credits shall be released any time after two bank-full events have occurred, in separate years, provided the channel is stable and all other Success Criteria are met. In the event that less than two bank-full events occur during the monitoring period, remaining credit release shall be at the discretion of the IRT.

Section VIII: Accounting Procedures

A. The Sponsor shall develop accounting procedures acceptable to the IRT for maintaining accurate records of debits made from the Bank. Such procedures shall include the generation of a ledger by the Sponsor showing credits used at the time they are debited from the Bank. A template for this ledger is included as Appendix D herein. All ledger reports shall identify credits debited and remaining by type of credit and shall include for each reported debit the Corps ORM ID number for the permit for which the credits were utilized and the permitted impacts for each resource type. Each time an approved credit transaction occurs, the Sponsor must notify the DE within 30 days of the transaction in accordance with the current Wilmington District Transfer of Mitigation Responsibility Guidelines.

B. The Sponsor shall prepare an annual ledger report, on each anniversary of the date of execution of this agreement, showing all credits used, any changes in credit availability (e.g., additional credits released, credit sales suspended), and the beginning and ending balance of credits remaining. The Sponsor shall submit the annual report to the DE, for distribution to each member of the IRT, until such time as all of the credits have been utilized, or this agreement is otherwise terminated.

Section IX: Financial Assurances

A. The Sponsor shall provide either a Performance Bond underwritten by a surety company licensed to do business in North Carolina with a Best's current rating of not less than "A-" or a casualty insurance policy in an appropriate form to be approved by the DE and in compliance with current U.S. Army Corps of Engineers policy and guidance documents. A Model Performance Bond and Casualty Insurance Policy are included herein as Appendix E. The

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financial assurances instrument shall be presented to the Corps for timely review prior to execution.

- a. Additionally, the Conservation Easement designates the U.S. Army Corps of Engineers as a party enabled to access the site and this document requires all project-specific reports and records to be provided to the Corps. As such, the Corps is enabled to determine the status of the site and to determine the occurrence of default of the mitigation.
- b. Prior to determination of default, the bank sponsor shall be given a full opportunity to remedy the Site to the satisfaction of the Corps.
- c. The total value of the financial assurances shall be \$725,960.00, which will be split between construction in the amount of \$544,470.00 and, subsequently, monitoring in the amount of \$181,490.00. These values include the amount necessary to complete all tasks associated with the project from its current point through to completion. These include, but are not limited to, permitting, construction, planting, monitoring, and a 30% contingency for regrading and/or replanting.
- d. Upon successful completion of the construction phase, the value of the financial assurances shall decrement in amounts proportional to the cost of carrying the bank through to completion. The project costs and bonding calculations are shown in the Table below. The Bank Sponsor will keep the Corps apprised of any issues that may affect the project's financial assurances.

Item	Future (Bonded) Cost	Contingency Fees (30%)
Project Construction	\$450,000	\$135,000
Vegetation Planting	\$25,000	\$7,500
As-Built Survey & Report	\$33,460	
Project Monitoring	\$75,000	
Total	\$583,460	\$142,500

B. Financial assurances structured to provide funds to the Corps of Engineers in the event of default by the Bank Sponsor are not acceptable.

C. A financial assurance must be in the form that ensures that the DE receives notification at least 120 days in advance of any termination or revocation.

Section X: Long-Term Protection

A. The Sponsor currently holds a Conservation Easement on each of the two parcels of land that comprise the Bank Site. The Conservation Easement documents and appropriate title insurance documents are attached herein (Appendix B). The Conservation Easements are perpetual, preserve all natural areas, and prohibit all use of the property inconsistent with its use as mitigation property, including any activity that would materially alter the biological integrity or functional and educational value of wetlands or streams within the Bank site, consistent with

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the Mitigation Plan. The Conservation Easements assure that future use of the Bank site will result in the restoration, protection, maintenance and enhancement of aquatic functions described in the Mitigation Plan.

B. The Sponsor has included here title opinion documentation covering the mitigation property. The property shall be free and clear of any encumbrances that would conflict with its use as mitigation, including, but not limited to, any liens that have priority over the recorded preservation mechanism.

C. The Sponsor shall hold the Conservation Easement during the operational life of the bank, which is anticipated to be a period of seven to nine years (as shown in the Credit Release Schedule), ending with project close out. At project close out, the Sponsor shall transfer the CE to the North Carolina Wildlife Habitat Foundation (NCWHF). A letter indicating the NCWHF's willingness to accept the CE is attached as Appendix F. As the owner of the property, the Sponsor will remain in the chain of title. The CE contains a provision requiring 60-day advance notification to the DE before any action is taken to void or modify the CE, including transfer of title to, or establishment of any other legal claims over, the project site.

Section XI: Long-term Management

A. The Sponsor shall implement the long-term management plan, if required, described in Section 11 of the Mitigation Plan prior to the final release of credits, which is anticipated to be after completion of the fifth year of monitoring.

B. The long-term management plan will provide financing mechanisms as necessary to provide for any long-term maintenance identified in the long-term management plan.

Section XII: Default and Closure

A. It is agreed to establish and/or maintain the Bank site until (i) credits have been exhausted or banking activity is voluntarily terminated with written notice by the Sponsor provided to the DE and other members of the IRT; and (ii) it has been determined and agreed upon by the DE and IRT that the debited Bank site has satisfied all the conditions herein and in the Mitigation Plan. If the DE determines that the Bank site is not meeting performance standards or complying with the terms of the instrument, appropriate action will be taken. Such actions may include, but are not limited to, suspending credit sales, adaptive management, decreasing available credits, utilizing financial assurances, and terminating the instrument.

B. Any delay or failure of Bank Sponsor shall not constitute a default hereunder if and to the extent that such delay or failure is primarily caused by any act, event or conditions beyond the Sponsor's reasonable control and significantly adversely affects its ability to perform its obligations hereunder including: (i) acts of God, lightning, earthquake, fire, landslide, or interference by third parties; (ii) condemnation or other taking by any governmental body; (iii) change in applicable law, regulation, rule, ordinance or permit condition, or the interpretation or

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enforcement thereof; (iv) any order, judgment, action or determination of any federal, state or local court, administrative agency or government body; or (v) the suspension or interruption of any permit, license, consent, authorization or approval. If the performance of the Bank Sponsor is affected by any such event, Bank Sponsor shall give written notice thereof to the IRT as soon as is reasonably practicable. If such event occurs before the final availability of all credits for sale, the Sponsor shall take remedial action to restore the property to its condition prior to such event, in a manner sufficient to provide adequate mitigation to cover credits that were sold prior to such delay or failure to compensate for impacts to waters, including wetlands, authorized by Department of the Army permits. Such remedial action shall be taken by the Sponsor only to the extent necessary and appropriate, as determined by the IRT.

C. At the end of the monitoring period, upon satisfaction of the performance standards, the Sponsor may submit a request to close out the bank site to the DE. The DE, in consultation with the IRT, shall use best efforts to review and comment on the request within 60 days of such submittal. If the DE determines the Sponsor has achieved the performance standards in accordance with the mitigation plan and all obligations under this MBI, the DE shall issue a close out letter to the Sponsor.

Section XIII: Miscellaneous

A. Any agency participant may terminate its participation in the IRT with notice in writing to all other parties to this agreement. Termination shall be effective seven (7) days from placing written notices in the United States mail. Member withdrawal shall not affect any prior sale of credits and all remaining parties shall continue to implement and enforce the terms of this MBI.

B. Modification of this MBI shall be in accordance with the procedures set forth in 332.8 of the mitigation rule.

C. No third party shall be deemed a beneficiary hereof and no one except the signatories hereof, their successors and assigns, shall be entitled to seek enforcement hereof.

D. This MBI constitutes the entire agreement between the parties concerning the subject matter hereof and supersedes all prior agreements or undertakings.

E. In the event any one or more of the provisions contained in this MBI are held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions hereof, and this MBI shall be construed as if such invalid, illegal or unenforceable provision had not been contained herein.

F. This MBI shall be governed by and construed in accordance with the laws of North Carolina and the United States as appropriate.

G. This MBI may be executed by the parties in any combination, in one or more counterparts, all of which together shall constitute but one and the same instrument.

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H. The terms and conditions of this MBI shall be binding upon, and inure to the benefit of the parties hereto and their respective successors.

I. All notices and required reports shall be sent by regular mail to each of the parties at their respective addresses, provided below.

Sponsor:

Restoration Systems, LLC
John Preyer
Chief Operating Officer
1101 Haynes Street, Suite 211
Raleigh, NC 27604

Corps:

Mr. James Lastinger
Regulatory Specialist
Raleigh Regulatory Field Office
US Army Corps of Engineers, Wilmington District
3331 Heritage Trade Drive, Suite 105 Wake Forest, NC 27587

EPA:

Ms. Becky Fox
Wetlands Section - Region IV
Water Management Division
U.S. Environmental Protection Agency
1307 Firefly Road
Whittier, NC 28789

FWS:

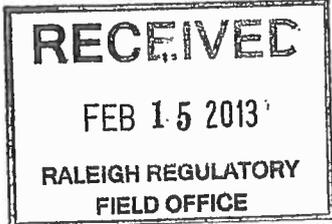
Mr. John Ellis
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

North Carolina Wildlife Resources Commission

Ms. Shari Bryant
N.C. Wildlife Resources Commission
P.O. Box 129
Sedalia, North Carolina 27342-0129

NCDWQ:

Sue Homewood
NC DENR Winston-Salem Regional Office
Division of Water Quality
585 Waughtown Street
Winston-Salem, NC 27107



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IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled "Agreement To Establish The Bass Mountain Stream Mitigation Bank In Alamance County, North Carolina":

Sponsor:

By: Jal Preyer

Date: 1-30-13

U.S. Army Corps of Engineers:

By: [Signature]

Date: 3/6/13

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**IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled
"Agreement To Establish The Bass Mountain Stream Mitigation Bank In Alamance
County, North Carolina":**

U.S. Environmental Protection Agency.

By _____ Date _____

U.S. Fish and Wildlife Service

By _____ Date _____

N.C. Division of Water Quality

By: Chris Wald Date 2/15/13

N.C. Wildlife Resources Commission

By _____ Date _____



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IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled
"Agreement To Establish The Bass Mountain Stream Mitigation Bank In Alamance
County, North Carolina":

U.S. Environmental Protection Agency:

By: _____

Date: _____

U.S. Fish and Wildlife Service:

By: _____

Date: _____

N.C. Division of Water Quality:

By: _____

Date: _____

N.C. Wildlife Resources Commission:

By: Shau L Bryant

Date: 2.18.13