

Bank Parcel Development Plan

Pancho Bank Parcel

Pursuant to:
Restoration Systems Umbrella Mitigation Banking Instrument
for Riparian Buffer and Nutrient Offset Mitigation Credits - Neuse River Basin



October 1, 2013

Prepared By:



Restoration Systems, LLC
1101 Haynes St. Suite 211
Raleigh, NC 27604
Phone: 919-755-9490
Fax: 919-755-9492

Pancho Bank Parcel Development Plan

Restoration Systems' Neuse River Riparian Buffer & Nutrient Umbrella Mitigation Bank

Restoration Systems (Sponsor) is pleased to provide this Bank Parcel Development Plan for the Pancho Bank Parcel (Parcel), proposed as part of the Restoration Systems' Neuse River Basin Riparian Buffer & Nutrient Umbrella Mitigation Banking Instrument (Banking Instrument) signed March 17, 2008 between Restoration Systems, and the North Carolina Division of Water Quality. This Parcel is designed to provide mitigation credits for unavoidable impacts due to development within the Neuse River Basin. Neuse River Riparian Buffer mitigation credits provided by this Parcel are available over the entire Neuse River Basin, United States Geological Survey (USGS) 6-digit Hydrologic Unit Code (HUC) 030202, per 15A NCAC 02B .0242 (Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Mitigation Program for Protection and Maintenance of Existing Riparian Buffers). Mitigation credits for Nutrient Offset are made available within the Neuse River Basin USGS 8-digit HUC 03020201 excluding the Falls Lake Drainage Basin. Supporting figures are located in Appendix A.

Parcel construction activities were concluded in early April of 2013. An onsite determination for applicability to the Neuse River Riparian Buffer Rules (15A NCAC 2B .0233) was conducted in June 2013 (Appendix B). The Sponsor currently owns the property in fee simple and has placed a Conservation Easement in perpetuity over the Parcel, attached as Appendix C. This Parcel was designed and implemented in concurrence with the Pancho Stream & Wetland Mitigation Bank (Corps Action ID # SAW-2010-00142), Approved by the Interagency Review Team on April 12, 2012 (Appendix E).

Table of Contents

1.0 Introduction..... 1
 1.1 Parcel Location 1
 1.2 Parcel Overview..... 1
2.0 Project Area – Existing Conditions..... 2
 2.1 Physiography 2
 2.2 Soils 3
 2.3 Vegetation..... 4
 2.4 Threatened and Endangered Species 4
 2.5 Environmental & Cultural Constraints 5
3.0 Restoration Plan 5
 3.1 Riparian Area Restoration Activates 6
4.0 Monitoring and Maintenance Plan 8
 4.1 Monitoring Protocol..... 8
 4.2 Parcel Maintenance..... 8
 4.3 Long Term Management Plan 8
5.0 Financial Assurance 8
6.0 Mitigation Potential 9
7.0 References..... 10

Appendix

Appendix A: Figures

 Figure 1 – Parcel Location

 Figure 2 – Service Area

 Figure 3 – NRCS Wayne County Soil Survey

 Figure 4 – Pre-Construction Parcel Conditions

 Figure 5 – Post Construction Credit Determination (a & b)

Appendix B: NCDWQ Stream Determination

Appendix C: Conservation Easement

Appendix D: Correspondence with the State Historic Preservation Office

Appendix E: Pancho Steam Mitigation Banking Instrument and Mitigation Plan
(Corps Action ID # SAW-2010-00142)

1.0 Introduction

1.1 Parcel Location

Restoration Systems (Sponsor) is pleased to provide this Bank Parcel Development Plan for the Pancho Bank Parcel (Parcel), proposed as part of the Restoration Systems' Neuse River Basin Riparian Buffer & Nutrient Umbrella Mitigation Banking Instrument (Banking Instrument) signed March 17, 2008 between Restoration Systems, and the North Carolina Division of Water Quality. This Parcel is designed to provide mitigation credits for unavoidable impacts due to development within the Neuse River Basin. Neuse River riparian buffer mitigation credits provided by this Parcel are available over the entire Neuse River Basin, United States Geological Survey (USGS) 6-digit Hydrologic Unit Code (HUC) 030202, per 15A NCAC 02B .0242 (Neuse River Basin: Nutrient Sensitive Waters Management Strategy: Mitigation Program for Protection and Maintenance of Existing Riparian Buffers). Mitigation credits for Nutrient Offset are made available within the Neuse River Basin USGS 8-digit HUC 03020201 excluding the Falls Lake Drainage Basin. Supporting figures are located in Appendix A.

Parcel construction activities were concluded in early April of 2013. An onsite determination for applicability to the Neuse River Riparian Buffer Rules (15A NCAC 2B .0233) was conducted in June 2013 (Appendix B). The Sponsor currently owns the property in fee simple and has placed a Conservation Easement in perpetuity over the Parcel, attached as Appendix C. This Parcel was designed and implemented in concurrence with the Pancho Stream & Wetland Mitigation Bank (Corps Action ID # SAW-2010-00142), Approved by the Interagency Review Team on April 12, 2012 (Appendix E). The Pancho Bank Parcel is located approximately 13 miles west of Goldsboro in western Wayne County; north of U.S. Highway 13 near the intersection of State Road 1008 (Stevens Mill Road) and State Road 1105 (Dobbersville Road) (Figure 1, Appendix A). The Parcel is located within the Neuse River Basin in the 14-digit United States Geological Survey (USGS) Cataloging Unit 03020201150050 of the South Atlantic/Gulf Region (North Carolina Division of Water Quality [NCDWQ] Subbasin Number 03-04-04) (Figure 3, Appendix A)

Directions to Parcel:

- From the City of Raleigh travel east on U.S. Highway 70
- Travel ~ 37 miles on U.S. Highway 70 to the intersection with Martin Livestock Road
- Turn right at Martin Livestock Road (0.7 mile)
- Turn right at Progressive Church Road (4 miles)
- Turn left at Brogden Road (0.5 mile)
- Turn right at Richardson Bridge Road (5.3 miles)
- Turn left at T-intersection onto Harper House Road, which turns into Stevens Mill Road (1.3 miles)
- The Parcel is located where Kennedy Mill Branch crosses Stevens Mill Road
 - Latitude: 35.333755° N, Longitude: -78.192699° W

1.2 Parcel Overview

The Parcel encompasses approximately 65.62 acres of land located along Kennedy Mill Branch at the confluence with Mill Creek. According to the Final Neuse River Basinwide Water Quality Plan (NCDWQ 2009), the lack of buffer and heavy agricultural practices along Kennedy Mill Branch make the watershed an ideal target for land acquisition to protect the nutrient sensitive Neuse River watershed. The restored riparian area will result in improved water quality within the Parcel and downstream of the Kennedy Mill Branch watershed. The Parcel is located in a region of the state dominated by agriculture and livestock; therefore, restoration of the riparian area is expected to result in immediate water quality benefits in the vicinity of the Parcel.

The entire Parcel is currently protected by a permanent Conservation Easement (Appendix C). Of the 65.62 acre Parcel, 14.84 acres of riparian area was restored through the establishment of native hardwood vegetation to generate Neuse riparian buffer and nutrient offset mitigation credits. Neuse riparian buffer and nutrient offset mitigation credits will not be generated within areas generating compensatory wetland mitigation credits through the Pancho Stream and Wetland Mitigation Bank.

Construction activities involved with the Pancho Stream & Wetland Mitigation Bank were concluded in April of 2013. Primary activities designed to restore the stream channels include 1) belt-width preparation and grading, 2) channel excavation, 3) installation of channel plugs, 4) backfilling of the abandoned channel, and 5) vegetative planting. Wetland restoration focused on the removal of fill materials, restoration of vegetative communities, filling drainage ditches, the reestablishment of soil structure and microtopographic variations, and redirecting normal surface hydrology from ditches back to Site floodplains. Riparian area restoration consisted of re-establishing deep-rooted native riparian vegetation.

Prior to construction activities the Parcel encompassed agricultural land utilized for livestock grazing, row crop production, and forest. Pasture areas were accessible to livestock and were routinely cleared and mowed for hay production, resulting in local disturbances to stream banks and wetland soil surfaces. Additional land use practices including the maintenance and removal of riparian vegetation; ditching of adjacent riparian wetlands; and relocation, dredging, and channelization of onsite streams resulting in degraded water quality and excessive sedimentation resulting from unstable banks (stream entrenchment, erosion, and bank collapse). Figure 4, Appendix A graphically displays pre-construction conditions. Staff from the Division of Water Resources (DWR) visited the Site in June 2013 and determined the Site to be viable for Neuse riparian buffer and nutrient offset mitigation. Livestock is no longer present on the Parcel.

Adjacent land use is currently characterized by pasture land for hay production and livestock grazing. Prior to construction activities adjacent landowners installed and will be responsible for the maintenance of fencing to protect from livestock trespassing and damage to Parcel assets. Figures 5a and 5b indicate the areas where fencing was installed.

2.0 Project Area – Existing Conditions

2.1 Physiography

The Parcel is located in the Southeastern Floodplains and Low Terraces ecoregion on the border of the Rolling Coastal Plain ecoregion within the Southeastern Plains of North Carolina USGS HUC 03020201 (NCDWQ Subbasin Number 03-04-06) of the Neuse River Basin. Regional physiography is characterized by broad interstream divides with gentle to steep side slopes dissected by numerous small, low to moderate gradient sandy bottomed streams and major river floodplains, associated terraces, and low gradient streams with sandy and silty substrates (Griffith et al. 2002a). Onsite elevations range from a high of 100 feet National Geodetic Vertical Datum (NGVD) on slopes to a low of approximately 75 feet NGVD at the lowest point of the Parcel (USGS Grantham, North Carolina 7.5-minute topographic quadrangle)

The Parcel provides water quality functions to a nearly 3.3-square mile watershed at the outfall of Kennedy Mill Branch. The watershed is dominated by pasture, agricultural land, forest, and sparse residential property. Impervious surfaces account for less than 5 percent of the upstream watershed land surface. Surrounding area land use is primarily agricultural, with some low-density residential housing. Onsite land use was characterized by hardwood forest, agricultural land (row crop production), and

pasture (livestock). Riparian zones and wetland areas were primarily composed of herbaceous vegetation with sparse hardwood canopy species along the streams. Riparian vegetation adjacent to restoration and enhancement reaches of the Parcel was sparse and disturbed due to livestock grazing, bush hogging, and regular maintenance activities.

2.2 Soils

Based on county soil survey mapping (USDA 1974), the Parcel contains seven soil series: Bibb sandy loam (Typic Fluvaquent), Chewacla loam (Fluvaquent Dystrudepts), Kalmia loamy sand (Typic Hapludults), Kenansville loamy sand (Arenic Hapludults), Johnston loam (Cumulic Humaquepts), Norfolk loamy sand (Typic Paleudults), and Wagram loamy sand (Arenic Kandiudults). Parcel soils are described in Table 1 below.

Table 1. Parcel Soils

Map Unit Symbol	Map Unit Name	Hydric Status	Description
Bb	Bibb sandy loam	Hydric	The Bibb series consists of very deep, poorly drained, moderately permeable soils that formed in stratified loamy and sandy alluvium. These soils are on floodplains of streams in the coastal plain. They are commonly flooded and water runs off the surface very slowly. Slopes range from 0 to 2 percent. The water table is within 8 inches of the surface from 6 to 11 months each year.
Ch	Chewacla loam	Hydric	The Chewacla series consists of very deep, somewhat poorly drained, moderately permeable soils that formed in stratified loamy and sandy alluvium. These soils are on floodplains of streams in the piedmont and coastal plain river valleys that drain out of the Piedmont. They frequently to rarely flood for brief to long periods. Slopes range from 0 to 2 percent. Depth to seasonal high water table is generally 6 to 24 inches from November to April. Bedrock occurs at a depth of more than 80 inches.
KaD	Kalmia loamy sand	Non-hydric	The Kalmia series consists of well drained, moderately permeable soils that formed in stratified loamy and sandy alluvium. These soils are on stream terraces that never or rarely flood for very brief periods. Slopes range from 0 and 6 percent. Depth to the seasonal high water table is 40 to 72 inches or more December to April. Bedrock occurs at a depth of more than 80 inches.
Ke	Kenansville loamy sand	Non-hydric	The Kenansville series consists of well drained, nearly level to gently sloping soils on Coastal Plain uplands and stream terraces. They have formed in marine and fluvial sediments. Slopes are generally between 0 and 10 percent. Depth to the seasonal high water table is greater than 48 inches for the wet substratum phase. Bedrock occurs at a depth of more than 80 inches.
Js	Johnston loam	Hydric	The Johnston series consists of very poorly drained, moderately rapid permeable soils that formed in alluvium. These soils are on floodplains and swamps of the lower and upper coastal plain. They frequently or occasionally flood for very brief to long periods of time. Slopes are generally between 0 and 2 percent. Depth to the seasonal high water table is 0 to 12 inches from November to May. Bedrock occurs at a depth of more than 80 inches.
NoC	Norfolk loamy sand	Non-hydric	The Norfolk series consists of well drained, moderately permeable soils that formed in marine and fluvial sediments. These soils are on uplands or marine terraces in the lower, middle, and upper coastal plain that never or rarely flood for very brief periods of time. Slopes are generally between 0 and 10 percent. Depth to seasonal high water table is 40 to 72 inches from January to March.
WaB	Wagram loamy sand	Hydric	The Wagram series consists of somewhat excessively drained, moderately permeable soils that formed in fluvial and marine sediments. These soils are on uplands in the middle and upper coastal plain that never or rarely flood for very brief periods of time. Slopes are generally between 0 and 15 percent. Depth to seasonal high water table is more than 60 inches. Bedrock occurs at a depth of more than 80 inches.

2.3 Vegetation

The Parcel was characterized primarily by agricultural and pasture land with mature disturbed hardwood forests. Agricultural land was dispersed along the margins of riparian zones in the northern half of the Parcel. Disturbed hardwood forest occupied the southern portion of the Parcel. Pasture dominated the majority of the Parcel and consisted primarily of fescue (*Festuca* sp.), crabgrass (*Digitaria* sp.), dog fennel (*Eupatorium capillifolium*), rushes (*Juncus* sp.), and sedges (*Carex* sp.). Disturbed hardwood forest are characterized by mesic, floodplain species adjacent to stream channels, such as river birch (*Betula nigra*), eastern red cedar (*Juniperus virginiana*), willow oak (*Quercus phellos*), red maple (*Acer rubrum*), sweetgum (*Liquidambar styraciflua*), black willow (*Salix nigra*), tulip tree (*Liriodendron tulipifera*), and American sycamore (*Platanus occidentalis*). Wetlands are dominated by emergent vegetation such as rushes, sedges, polygonum (*Polygonum* sp.), and meadow beauty (*Rhexia* sp.). Staff from DWR confirmed the Parcel was suitable for riparian restoration throughout.

Table 2: Reference Forest Ecosystem

On Site Observations + Mesic Mixed Hardwood Forest & Coastal Plain Bottomland Hardwoods	
Canopy Species	Understory Species
Red maple (<i>Acer rubrum</i>)	Red maple (<i>Acer rubrum</i>)
River birch (<i>Betula nigra</i>)	River birch (<i>Betula nigra</i>)
Pecan (<i>Carya illinoensis</i>)	Ironwood (<i>Carpinus caroliniana</i>)
American beech (<i>Fagus grandifolia</i>)	Coastal sweetpepperbush (<i>Clethra alnifolia</i>)
American holly (<i>Ilex opaca</i>)	Dogwood (<i>Cornus florida</i>)
Sweetgum (<i>Liquidambar styraciflua</i>)	Sourwood (<i>Diospyros virginiana</i>)
Tulip poplar (<i>Liriodendron tulipifera</i>)	American holly (<i>Ilex opaca</i>)
Black gum (<i>Nyssa biflora</i>)	Virginia sweetspire (<i>Itea virginica</i>)
Water oak (<i>Quercus nigra</i>)	Sweetgum (<i>Liquidambar styraciflua</i>)
Swamp chestnut oak (<i>Quercus michauxii</i>)	Tulip poplar (<i>Liriodendron tulipifera</i>)
Cherrybark oak (<i>Quercus pagoda</i>)	Common sweetleaf (<i>Symplocos tinctoria</i>)
Willow oak (<i>Quercus phellos</i>)	Winged elm (<i>Ulmus alata</i>)
Winged elm (<i>Ulmus alata</i>)	Highbush blueberry (<i>Vaccinium corymbosum</i>)
American elm (<i>Ulmus americana</i>)	

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.). One species is federally listed for Wayne County by the United States Fish and Wildlife Service (USFWS) (USFWS 2008): red-cockaded woodpecker (*Picoides borealis*). Additionally, the bald eagle (*Haliaeetus leucocephalus*) is protected by the Bald and Golden Eagle Protection Act. Habitat for red-cockaded woodpecker and bald eagle is not present within the Parcel.

In addition to the bald eagle and E, T, and P species, the USFWS list includes a category of species designated as "Federal Species of Concern" (FSC). A species with this designation is one that may or may not be listed in the future (formerly C2 candidate species or species under consideration for listing for which there is insufficient information to support listing). The FSC designation provides no federal protection under the ESA for the species listed. The nine FSC species listed on the current USFWS list are presented in the table below.

Table 3: USFWS FSC Species List

Common Name	Scientific Name
American elm	<i>Anguilla rostrata</i>
Carolina madtom	<i>Noturus furiosus</i>
Pinewoods shiner	<i>Lythrurus matutinus</i>
Rafinesques big-eared bat	<i>Corynorhinus rafinesquii</i>
Southern hognose snake	<i>Heterodon simus</i>
Atlantic pigtoe	<i>Fusconaia masoni</i>
Yellow lance	<i>Elliptio lanceolata</i>
Cuthbert turtlehead	<i>Chelone cuthbertii</i>
Pondspice	<i>Litsea aestivalis</i>

Proposed mitigation activities will result in positive benefits for these species through improved habitat and water quality.

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.

3.0 **Restoration Plan**

Restoration of riparian areas was accomplished in conjuncture with the goals and methods outlined by the Pancho Stream Mitigation Bank. The primary goals associated with the restoration of riparian areas focused on improving water quality, enhancing flood attenuation, and restoring wildlife habitat through the creation of a forested riparian buffer adjacent to stream channels, and was accomplished by the following.

1. Removing nonpoint sources of pollution associated with agricultural production including a) removing livestock and b) ceasing the broadcast application of fertilizer, pesticides, and other agricultural materials into and adjacent to Site streams through treatment of runoff within the forested buffer.
2. Reducing sedimentation within onsite and downstream receiving waters by a) reducing bank erosion, vegetation maintenance, plowing, and hoof shear adjacent to Site streams, and b) removing livestock from the Site.

3. Promoting floodwater attenuation by increasing frictional resistance on floodwaters crossing Site floodplains.
4. Improving aquatic habitat by enhancing stream bed shading and natural detritus input.
5. Providing a terrestrial wildlife corridor and refuge in an area extensively developed for agricultural production.
6. Restoring and reestablishing natural community structure, habitat diversity, and functional continuity.
7. Protecting the Sites full potential of stream, wetland and riparian buffer functions and values in perpetuity.

3.1 Riparian Area Restoration Activates

Restoration of floodplain forest and stream-side habitat will allow for development and expansion of characteristic species across the landscape. Eco-tonal 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. 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 were planted along the reconstructed stream banks, concentrated along outer bends.

Vegetative species composition mimicked reference forest data, onsite observations, and community descriptions from Classification of the Natural Communities of North Carolina (Schafale and Weakley 1990). Community associations utilized include 1) Mesic Mixed Hardwood Forest on slopes, 2) Coastal Plain Bottomland Hardwoods (brownwater subtype) in wetlands that are intermittently to seasonally inundated for long periods (NCWAM Bottomland Hardwood Forest and Headwater Forest), and 3) stream-side assemblage within 15 feet of stream banks. Plant species and the implemented planting plan was developed and preapproved by the Interagency Review Team (IRT) during the development of the Pancho Stream and Wetland Mitigation Bank.

Deep-rooted, riparian vegetation was restored over 49 acres of the Parcel in late April. Bare-root seedlings of tree species within the Mesic Mixed Hardwood Forest and Coastal Plain Bottomland Hardwoods (brownwater subtype) were planted at a density of approximately 900 stems per acre on 8-foot centers. The table below summarizes planted tree species. Table 3 on the next page summarizes the planted species.

Table 4: Planted Tree Species

Vegetation Association: Mesic Mixed Hardwood Forest & Coastal Plain Bottomland Hardwoods							Total
Area (Acres) Total= 48.9 acres	3.6		17.5		27.8		
Vegetation Association:	Streamside Assemblage		Mesic Mixed Hardwood Forest		Coastal Plain Bottomland Hardwoods		
Species	Number Planted	% of Total	Number Planted	% of Total	Number Planted	% of Total	
River birch (<i>Betula nigra</i>)	1,100	14.40%	1,000	2.84%			2,100
Silky dogwood (<i>Cornus amomum</i>)	4,200	55.30%	2,100	5.97%			6,300
American elderberry (<i>Sambucus canadensis</i>)	2,300	30.30%					2,300
American Beech (<i>Fagus grandifolia</i>)			1,850	5.26%			1,850
Northern red oak (<i>Quercus rubra</i>)			5,800	16.49%			5,800
White oak (<i>Quercus alba</i>)			5,850	16.63%			5,850
Black cherry (<i>Prunus serotina</i>)			5,000	14.21%			5,000
Persimmon (<i>Diospyros virginiana</i>)			5,300	15.07%			5,300
Flowering dogwood (<i>Cornus florida</i>)			2,000	5.69%			2,000
American tulip tree (<i>Liriodendron tulipifera</i>)			1,000	2.84%	1,000	6.91%	2,000
Southern red oak (<i>Quercus falcata</i> var. <i>pagodifolia</i>)			2,800	7.96%			2,800
Florida maple (<i>Acer saccharum</i> subsp. <i>floridanum</i>)			2,475	7.04%			2,475
Black tupelo (<i>Nyssa sylvatica</i>)					2,800	19.34%	2,800
Swamp chestnut oak (<i>Quercus michauxii</i>)					2,800	19.34%	2,800
Willow oak (<i>Quercus phellos</i>)					2,800	19.34%	2,800
Green Ash (<i>Fraxinus pennsylvanica</i>)					1,850	12.78%	1,850
Bald cypress (<i>Taxodium distichum</i>)					2,000	13.82%	2,000
Bitternut Hickory (<i>Carya cordiformis</i>)					975	6.74%	975
Shagbark hickory (<i>Carya ovate</i>)					250	1.73%	250
Total	7,600	100%	35,175	100%	14,475	100%	59,503

4.0 Monitoring and Maintenance Plan

4.1 Monitoring Protocol

Restoration monitoring procedures for vegetation will monitor plant survival and species diversity. Quantitative sampling of vegetation will be performed through sixteen (16) 10 x 10 meter plots as outlined in the *CVS Level 1-2 Protocol for Recording Vegetation, Version 4.0* (Lee et al. 2006) and will occur between late August and October of each year, with the 1st monitoring data to be collected in the fall of 2013 and not within five months from the original planting date. Monitoring of the restoration efforts will be performed for five years or until success criteria are fulfilled. Restoration Systems shall submit to NCDWQ an annual monitoring report, no later than December 31st of each year. 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 Parcels assets. Success criteria within the 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.

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 on the Parcel Site which was approved by the IRT in conjunction with the establishment of the Pancho Stream and Wetland Mitigation Bank. The Conservation Easement and appropriate title insurance documents are attached as Appendix B. 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

As stated in the Restoration Systems Neuse River Basin Riparian Buffer and Nutrient Mitigation Umbrella Banking Instrument Dated March 17th 2008. "Following approval of the BPD, Restoration Systems, LLC shall provide a Performance Bond from a surety that is rated on less than an 'A' as rated by A.M. best. The Performance Bond amount shall be two times the estimated cost for implementation for the restoration plan included in the BPD, but no less than \$150,000.00 in amount. After completion of construction, a Monitoring Bond will be substituted for the Performance Bond. The Penal Sum of said Monitoring Bond shall be for two time the estimated cost to implement the monitoring and maintenance plan but no less than \$150,000.00 in amount. The Monitoring Bond shall be in effect for a period of five years."

6.0 Mitigation Potential

The DWR has determined the nitrogen nutrient abatement of restored riparian area to be 2,273.02 lbs. per acre. Riparian buffer credits will be measured by the hundredth of an acre and converted into square feet.

The Parcel will generate 14.84 acres of restored riparian area. 11.34 acres will be used specifically for nutrient offset credit generating 25,776.04 lbs. of nitrogen offset credit. Restoration of the Neuse riparian buffer will generate 3.50 (152,460 sq. ft.) of Neuse riparian buffer credits. The mitigation provided in the Neuse riparian buffer can be used for either Neuse riparian buffer credits or nutrient offset credits, but not both. RS must request and receive approval of the transfer of any mitigation credits from DWR. All mitigation credit assets shall be shown on the credit ledgers. Table 4 summarizes the Parcel's components and mitigation credits.

Table 5. Project Components and Mitigation Credits

Mitigation Credits				
Nutrient Offset (Nitrogen only)				
Restoration			Restoration Equivalent	
11.34			--	
Projects Components				
Existing Acreage	Restoration/Mit. Ratio	Restoration Acreage	Mitigation / Acre	Comment
11.34	Restoration (1:1)	11.34	2,273.02 lbs. / acre	Cessation of current land use practices, removing invasive species, and planting with native forest vegetation.
Component Summation				
Restoration Level		Nutrient Offset Credits (lbs.)		
Restoration		11.34 acres = 25,776.04 lbs.		
Totals		11.34 acres = 25,776.04 lbs.		
Neuse Riparian Buffer				
Restoration			Restoration Equivalent	
3.5			--	
Projects Components				
Existing Acreage	Restoration/Mit. Ratio	Restoration Acreage	Mitigation / Acre	Comment
3.5	Restoration (1:1)	3.5	43,560 sq. ft. / acre	Cessation of current land use practices, removing invasive species, and planting with native forest vegetation.
Component Summation				
Restoration Level		Neuse Riparian Buffer Credits (sq. ft.)		
Restoration		3.5 acres = 152,460 sq. ft.		
Totals		3.5 acres = 152,460 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.
- Neuse River Nutrient Sensitive Waters Management Strategy 15A NCAC 2B .0233, 15A NCAC 02B .0241, and 15A NCAC 02B .0242
- 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/entylist/wayne.html> [March, 2013]. United States Fish and Wildlife Service.
- USDA, Soil Conservation Service, 1974. Soil Survey of Wayne County

Appendix A: Figures

Figure 1 – Parcel Location

Figure 2 – Service Area

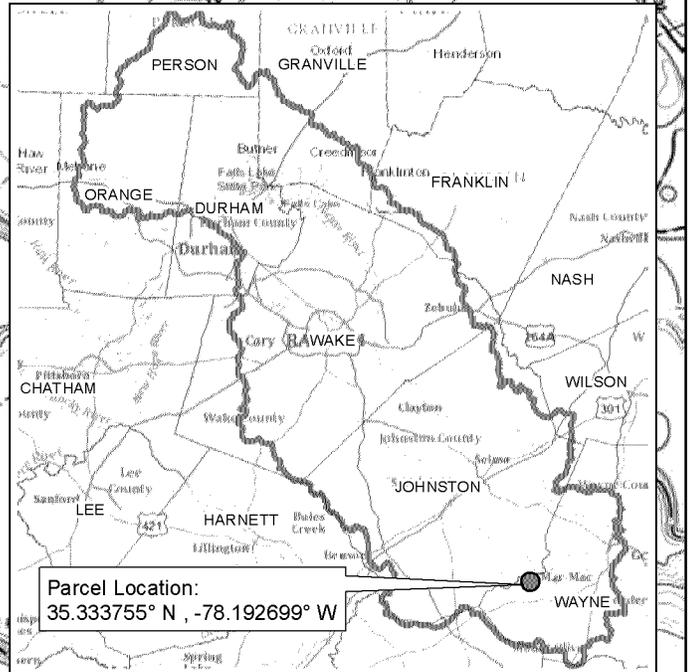
Figure 3 – NRCS Wayne County Soil Survey

Figure 4 – Pre-Construction Parcel Conditions

Figure 5 – Post Construction Credit Determination (a & b)

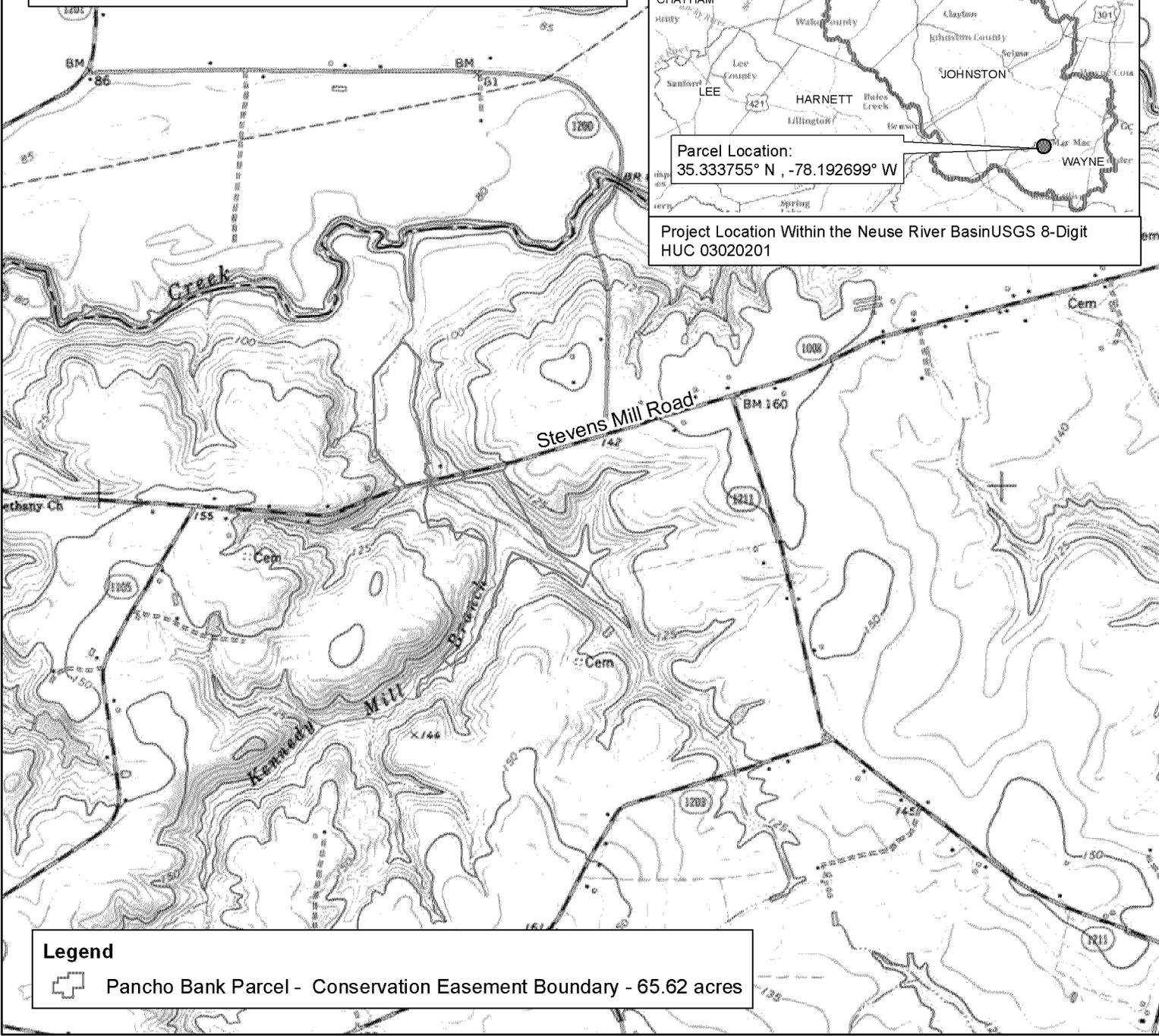
Directions to Parcel:

- From the City of Raleigh travel east on U.S. Highway 70
- Travel ~ 37 miles on U.S. Highway 70 to the intersection with Martin Livestock Road
- Turn right at Martin Livestock Road (0.7 mile)
- Turn right at Progressive Church Road (4 miles)
- Turn left at Brogden Road (0.5 mile)
- Turn right at Richardson Bridge Road (5.3 miles)
- Turn left at T-intersection onto Harper House Road, which turns into Stevens Mill Road (1.3 miles)
- The Parcel is located where Kennedy Mill Branch crosses Stevens Mill Road



Parcel Location:
 35.333755° N , -78.192699° W

Project Location Within the Neuse River Basin
 USGS 8-Digit HUC 03020201



Legend
 Pancho Bank Parcel - Conservation Easement Boundary - 65.62 acres



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

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 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.

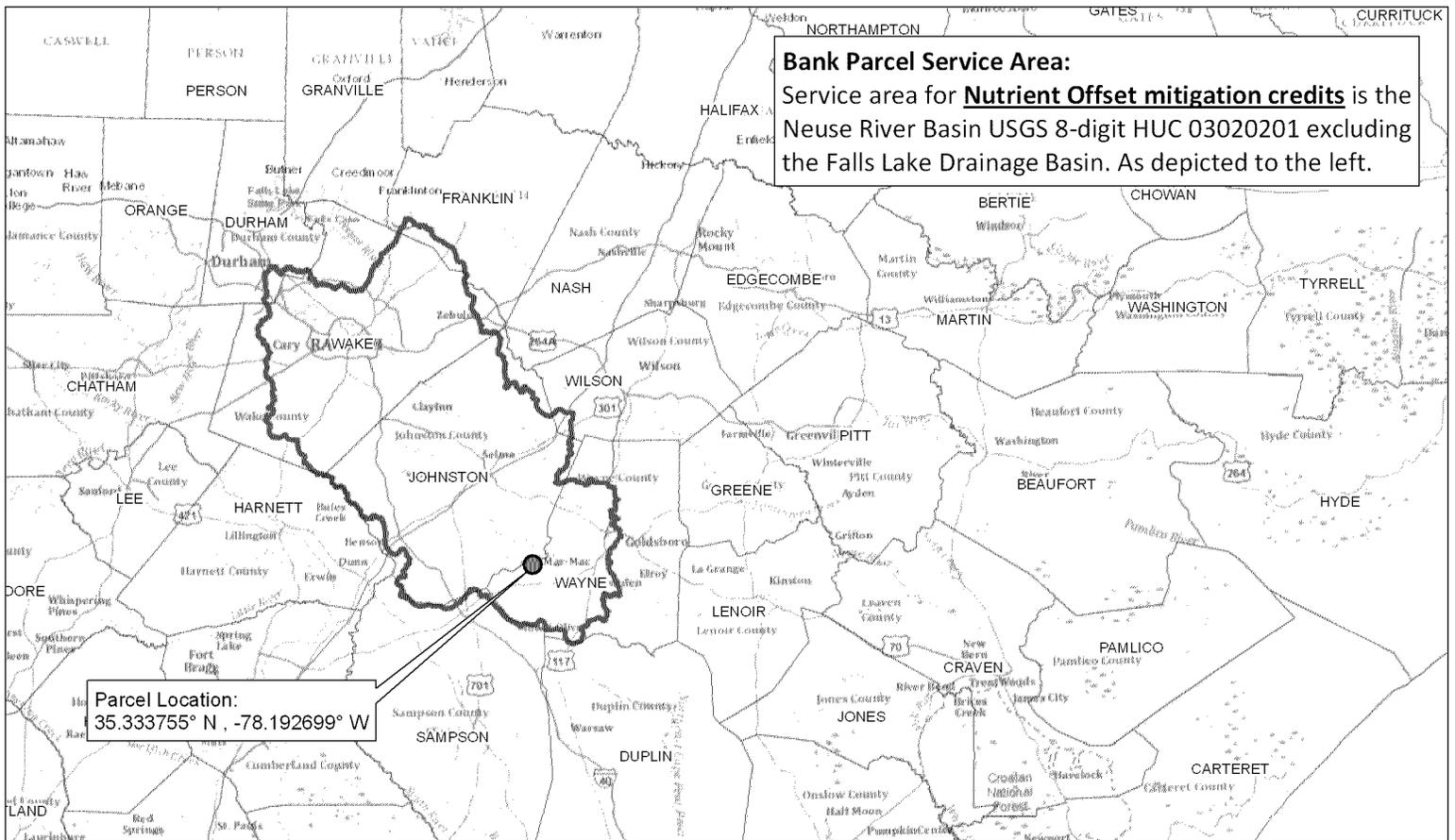
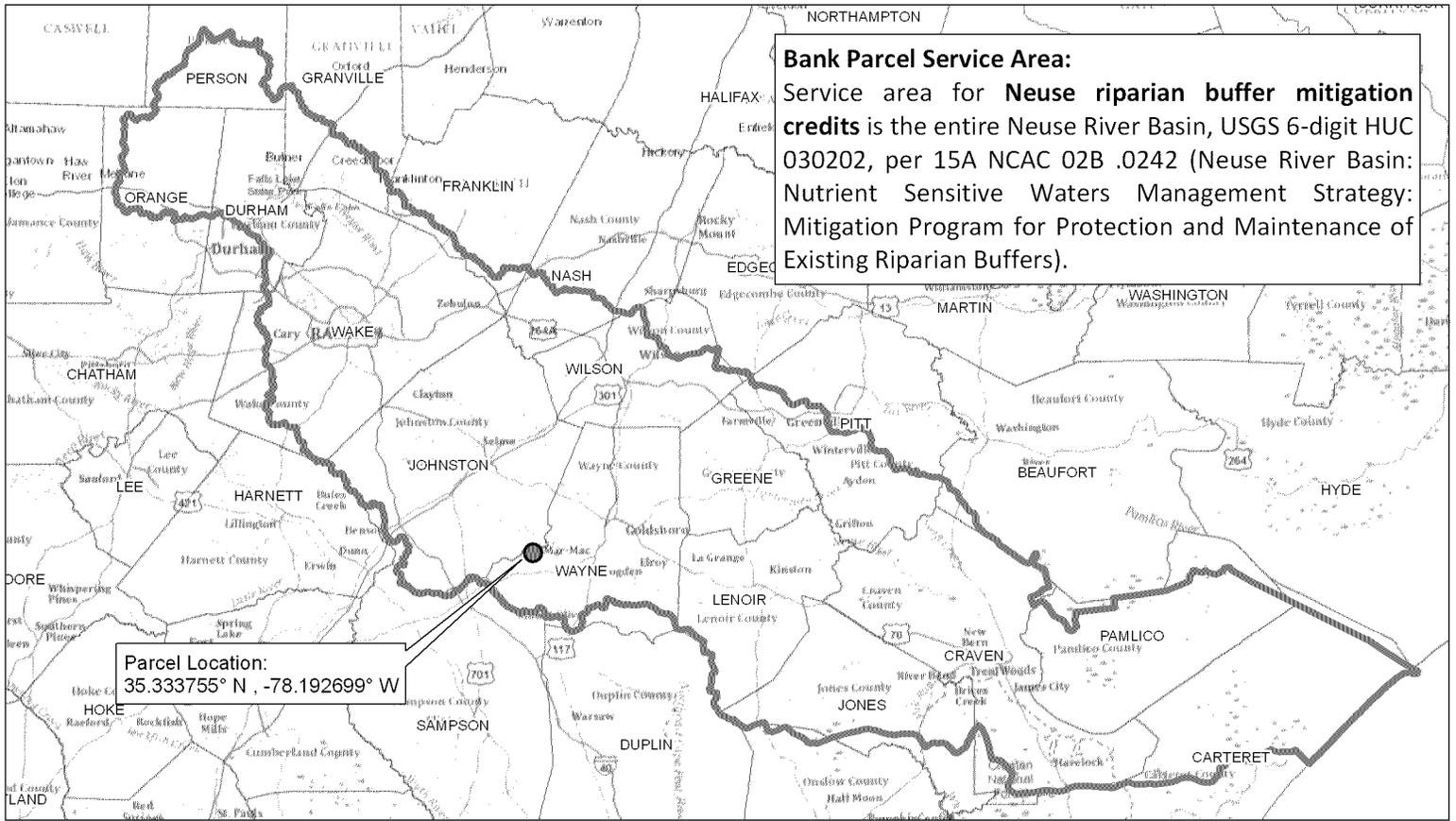
SCALE: 1 in = 2,000 ft
 DATE: 9 - 2013
 Project ID: Pancho BPDP



Figure 1
Parcel Location

Pancho BPDP

Aerial Imagery: (c) Microsoft
 Coordinate System:
 NAD_1983_SP_NC_FIPS_3200_Ft



 <p>RESTORATION SYSTEMS, LLC 1101 HAYNES ST, SUITE 211 RALEIGH, NC 27604 PHONE : 919.755.9490 FAX : 919.755.9492</p>	<p>SCALE:</p>	<p>Figure 2 Service Area</p>
	<p>DATE: 9 - 2013</p>	
	<p>Project ID: Pancho BDPD</p>	
<p>Pancho BDPD</p>		<p>Aerial Imagery: (c) Microsoft Coordinate System: NAD_1983_SP_NC_FIPS_3200_Ft</p>

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 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.

(Joins sheet 17)



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

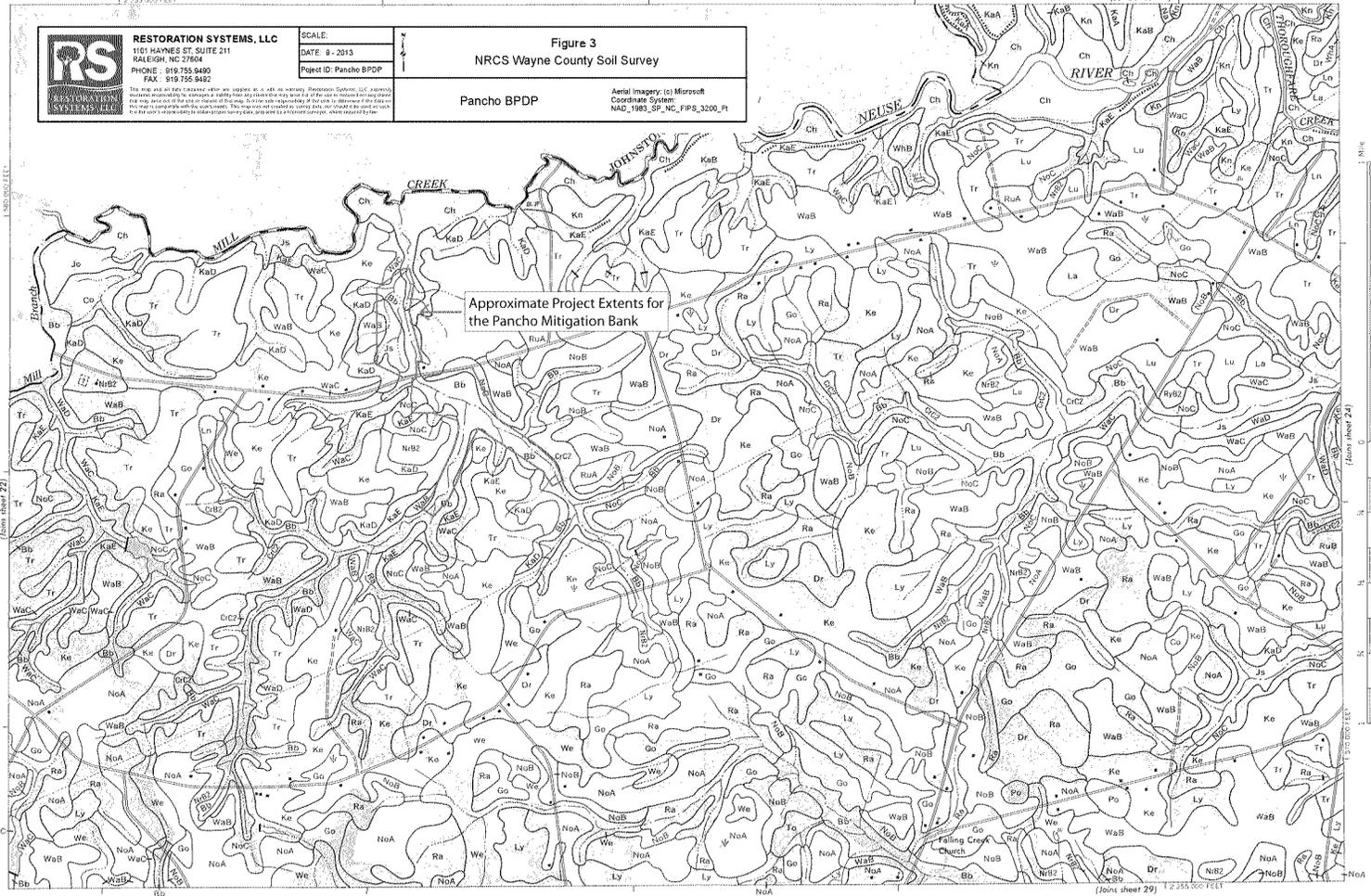
SCALE:
DATE: 9 - 2013
Project ID: Pancho BDPD

Figure 3
NRCS Wayne County Soil Survey

Pancho BDPD

Aerial Imagery: (c) Microsoft
Coordinate System:
NAD_1983_SP_NC_FIPS_3200_Ft

1:2,355,000 FEET



Approximate Project Extents for the Pancho Mitigation Bank



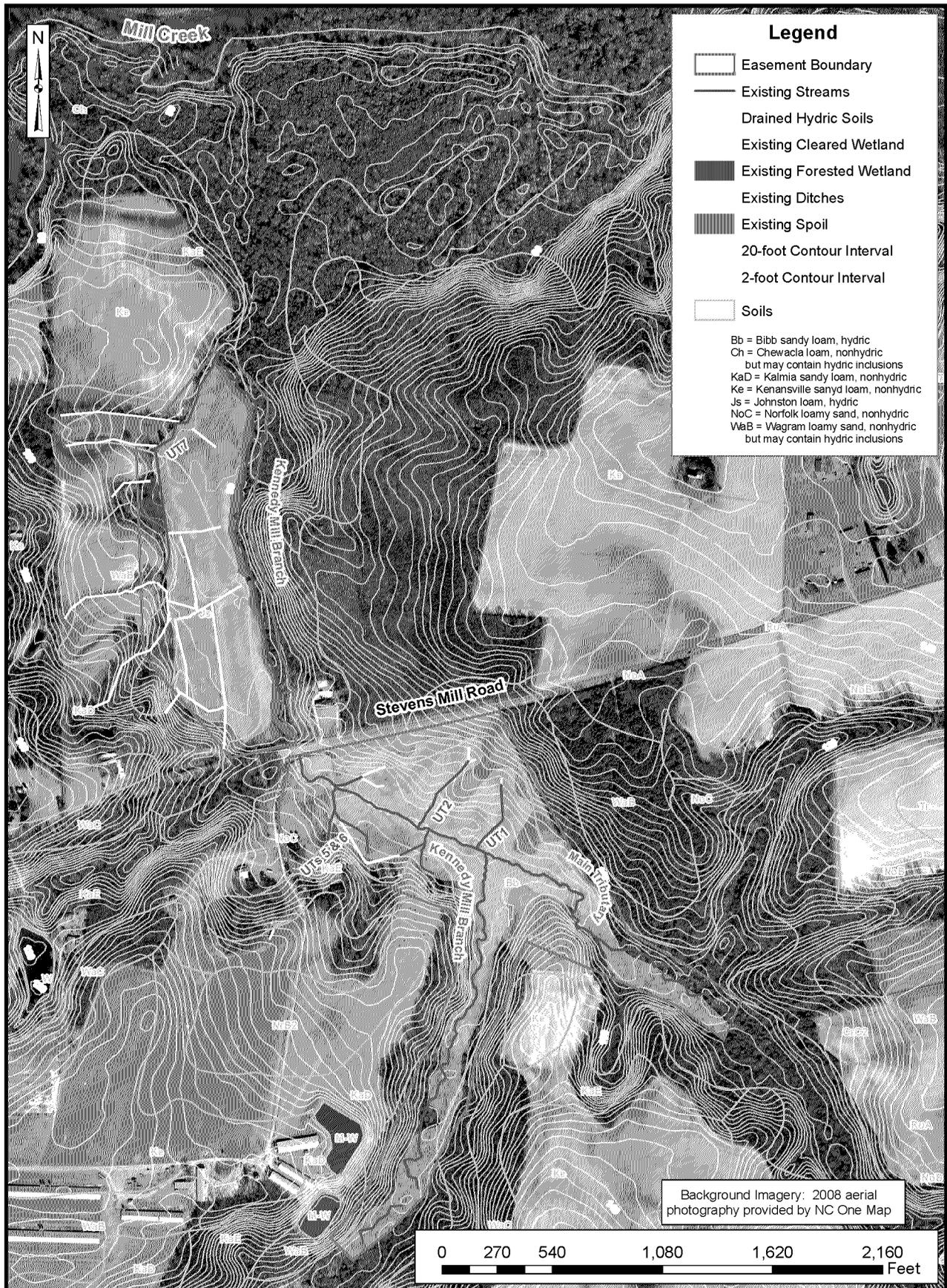
WAYNE COUNTY, NORTH CAROLINA, NO. 23
This map is part of a set compiled in 1972 as part of a soil survey for the State of North Carolina. It was prepared by the North Carolina Department of Agriculture, Soil Conservation Service, and the North Carolina Agricultural Experiment Station. Photographs from 1975 aerial photography, features of 5,000-foot grid, and other data are incorporated and based on the North Carolina coordinate system.

(Join sheet 22)

(Join sheet 24)

(Joins sheet 29)

1:2,355,000 FEET

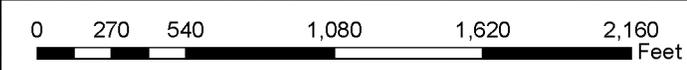


Legend

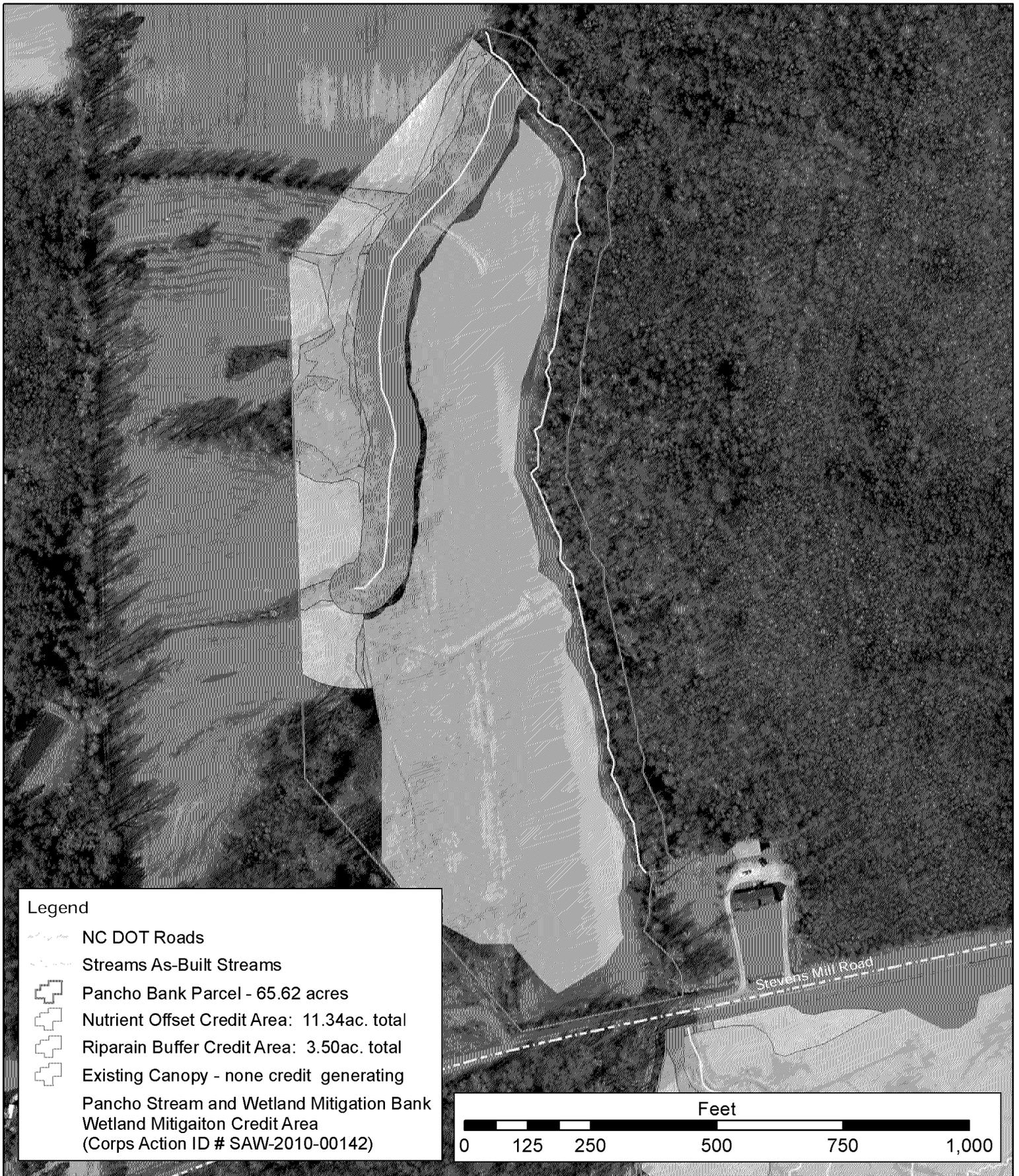
- Easement Boundary
- Existing Streams
- Drained Hydric Soils
- Existing Cleared Wetland
- Existing Forested Wetland
- Existing Ditches
- Existing Spoil
- 20-foot Contour Interval
- 2-foot Contour Interval
- Soils

Bb = Bibb sandy loam, hydric
 Ch = Chewacla loam, nonhydric but may contain hydric inclusions
 KaD = Kalmia sandy loam, nonhydric
 Ke = Kenansville sandy loam, nonhydric
 Js = Johnston loam, hydric
 NoC = Norfolk loamy sand, nonhydric
 WaB = Wagram loamy sand, nonhydric but may contain hydric inclusions

Background Imagery: 2008 aerial photography provided by NC One Map



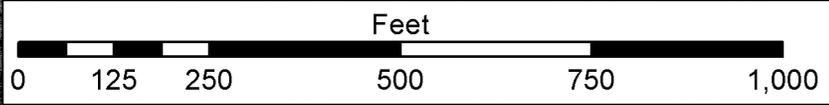
Prepared by: Axiom Environmental, Inc.	Prepared for: RESTORATION SYSTEMS, LLC	Drawn by: CLF Date: FEB 2012 Scale: 1:5400 Project No.: 10-010	Project: PANCHO MITIGATION BANK Wayne County, NC	Title: EXISTING PRE-CONSTRUCTION SITE CONDITIONS & SOILS	FIGURE Figure 4 4
---	---	---	---	--	---------------------------------------



Legend

-  NC DOT Roads
-  Streams As-Built Streams
-  Pancho Bank Parcel - 65.62 acres
-  Nutrient Offset Credit Area: 11.34ac. total
-  Riparain Buffer Credit Area: 3.50ac. total
-  Existing Canopy - none credit generating

Pancho Stream and Wetland Mitigation Bank
Wetland Mitigation Credit Area
 (Corps Action ID # SAW-2010-00142)



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

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 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.

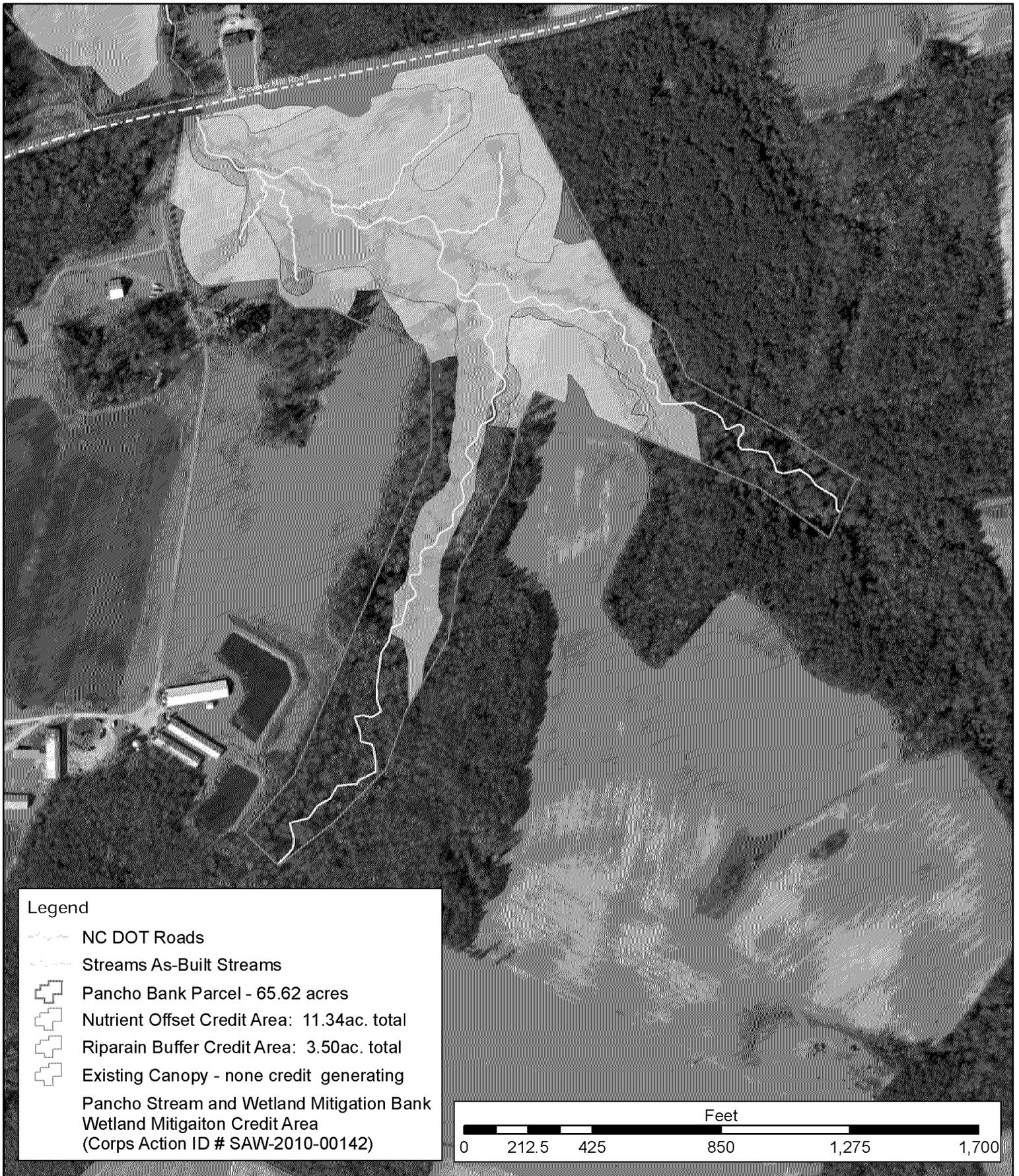
SCALE: 1 in = 250 ft
 DATE: 9 - 2013
 Project ID: Pancho



Figure 5a
Post Construction Credit Determination

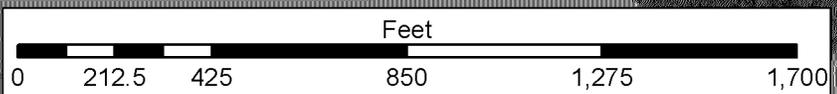
Pancho BPDP

Aerial Imagery: (c) Microsoft
 Coordinate System:
 NAD_1983_SP_NC_FIPS_3200_Ft



Legend

- NC DOT Roads
- Streams As-Built Streams
- Pancho Bank Parcel - 65.62 acres
- Nutrient Offset Credit Area: 11.34ac. total
- Riparain Buffer Credit Area: 3.50ac. total
- Existing Canopy - none credit generating
- Pancho Stream and Wetland Mitigation Bank Wetland Mitigation Credit Area (Corps Action ID # SAW-2010-00142)



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

SCALE: 1 in = 417 ft
 DATE: 9 - 2013
 Project ID: Pancho

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 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.

Figure 5b
Post Construction Credit Determination

Pancho BPDP

Aerial Imagery: (c) Microsoft
 Coordinate System:
 NAD_1983_SP_NC_FIPS_3200_Ft

Appendix B: NC DWQ Stream Determination



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Pat McCrory
Governor

Thomas A. Reeder
Acting Director

John E. Skvarla, III
Secretary

June 20, 2013

DWQ # 10-0099 V3
Pitt County

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

Subject Property: Pancho Nutrient and Riparian Buffer Bank Parcel
UTs to Kennedy Mill Branch and Kennedy Mill Branch, Neuse River Basin

On-Site Determination for Applicability to the Neuse River Riparian Area Protection Rules (15A NCAC 2B .0233)

Dear Mr. Holz:

On June 18, 2013, at your request Anthony Scarbraugh conducted an on-site determinations to review unnamed tributaries (UTs) to Kennedy Mill Branch and Kennedy Mill Branch located on the subject property for applicability to the Neuse Buffer Rules (15A NCAC 2B .0233). The features are labeled as "2010-0099 V3A, 2010-0099 V3B, 2010-0099 V3C, and 2010-0099 V3D" on the attached maps initialed by Mr. Scarbraugh on June 20, 2013. The project is at 4439 Stevens Mill Road in Wayne County.

At your request, Mr. Scarbraugh conducted on-site determinations as stated above. During his review, he evaluated the features using the DWQ Stream Classification Form. He evaluated the stream reach 2010-0099 V3A at N 35.33607, W 78.19479 and calculated the score to be 19.25 points. He evaluated the stream reach 2010-0099 V3B at N 35.33224, W 78.19158 and calculated the score to be 19.25 points. He evaluated the stream reach 2010-0099 V3C at N 35.33088, W 78.18957 and calculated the score to be 41 points. He evaluated the stream reach 2010-0099 V3D at N 35.33171, W 78.18800 and calculated the score to be 35 points. The form states that if the score is "greater than or equal to 19 points the stream is at least intermittent".

The Division of Water Quality (DWQ) has determined that the portions of the features labeled as "2010-0099 V3A, 2010-0099 V3B, 2010-0099 V3C, and 2010-0099 V3D" on the attached maps, and highlighted in blue are subject to the Neuse Buffer Rules. The portion of feature labeled "13-0529 A" that is circled and highlighted in red is not subject to the Tar-Pamlico Buffer Rules. The feature and its associated buffers should be identified on any future plans for this property. The owner (or future owners) should notify the DWQ (and other relevant agencies) of this decision in any future

° 13' 00.00" W

078° 12' 00.00" W

078° 11' 00.00" W

035° 21' 00.00" N

035° 21' 00.00" N

035° 20' 00.00" N

035° 20' 00.00" N

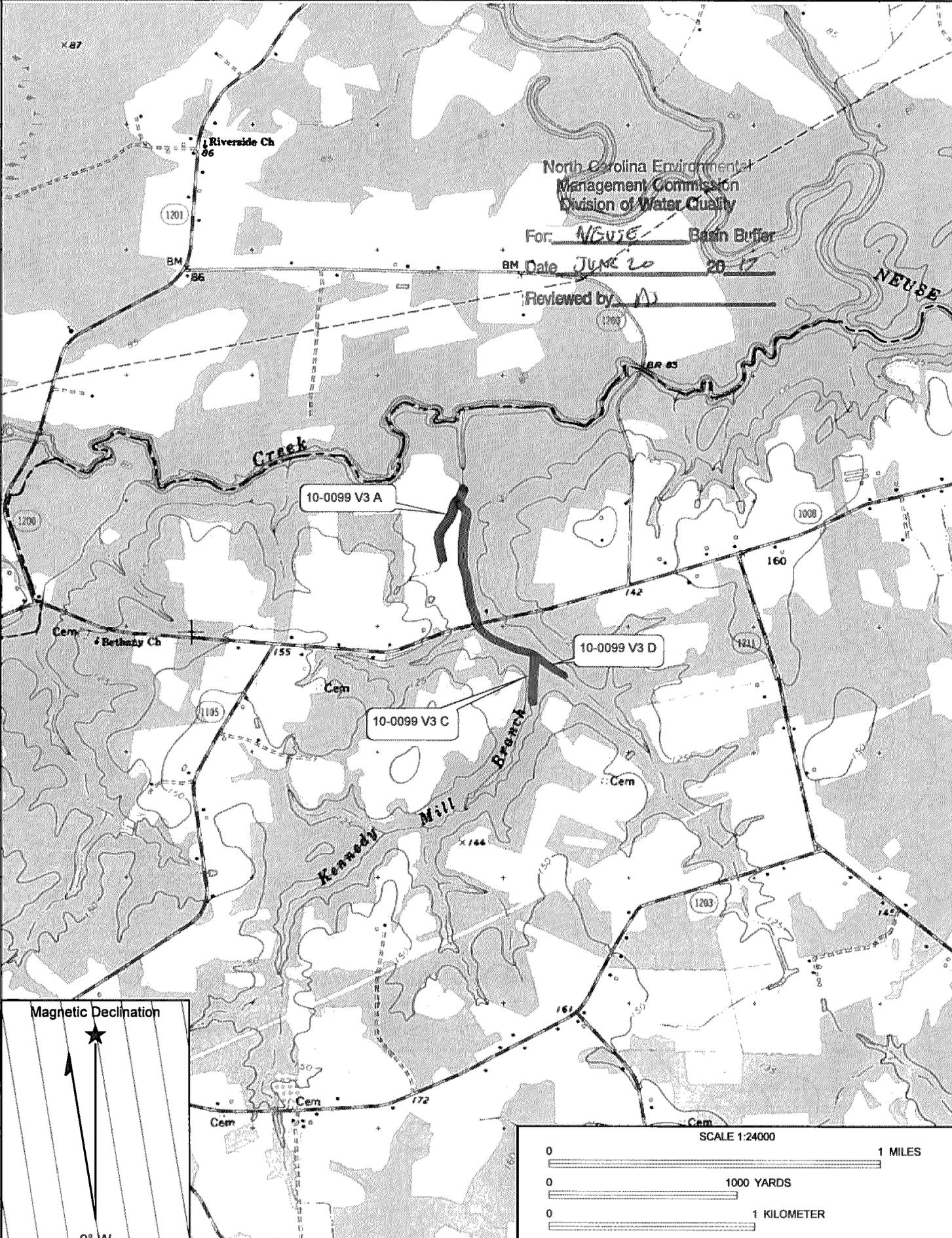
035° 19' 00.00" N

035° 19' 00.00" N

078° 13' 00.00" W

078° 12' 00.00" W

078° 11' 00.00" W

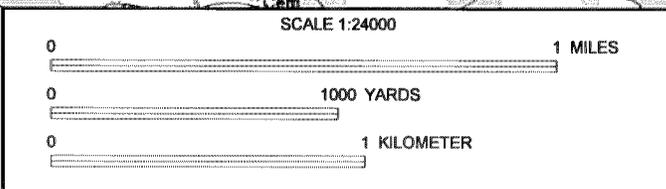
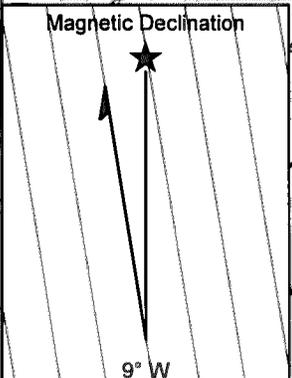


North Carolina Environmental
 Management Commission
 Division of Water Quality

For: Neuse Basin Buffer

BM Date JUNE 20 2017

Reviewed by: (Signature)



Appendix C: Conservation Easement

Doc ID: 010689220008 Type: CRP
Recorded: 04/19/2012 at 02:34:06 PM
Fee Amt: \$26.00 Page 1 of 10
WAYNE COUNTY, NC
LOIS J MOORING REGISTER OF DEEDS
BK 2923 PG 198-205-B

INDEXED

10 pages 2012

Prepared by and return to: William P. Aycock II, Attorney
Aycock & Aycock PLLC
301 N. Elm Street, Suite 400
Greensboro, NC 27401

STATE OF NORTH CAROLINA

PERMANENT CONSERVATION
EASEMENT

COUNTY OF WAYNE

THIS PERMANENT CONSERVATION EASEMENT ("Conservation Easement") made this 18th day of April, 2012 by and between PANCHO MITIGATION COMPANY, LLC, a North Carolina limited liability company ("Grantor") and RESTORATION SYSTEMS, LLC, a North Carolina limited liability company ("Grantee").

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 Grantham Township, Wayne County, North Carolina, more particularly described in Exhibit A attached hereto and incorporated herein ("Property"); and

WHEREAS, Grantor and Grantee desire 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 mitigation and restoration to be accomplished on the Property as more particularly set forth herein and, upon completion of such restoration and mitigation, 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, the Property subject to this Conservation Easement has been divided into two (2) parcels as follows: the "Pancho Bank Parcel" containing 10.48 +/- acres to be utilized to provide nutrient offsets within the Neuse River Basin HUC 030202; and the "Wetland and Stream Bank Parcel" containing 55 +/- acres to provide stream and wetlands mitigation; and

WHEREAS, both the Pancho Bank Parcel (nutrient offset area) and the Wetland and Stream Bank Parcel (compensatory mitigation area) are identified on Exhibit A attached hereto and incorporated herein by reference and on the Map of Record; and

WHEREAS, the preservation of the Pancho Bank Parcel is required and governed by Grantee's Neuse River Basin Riparian Buffer and Nutrient Mitigation Umbrella Banking Instrument ("Nutrient Mitigation Banking Instrument") on file with the North Carolina Division of Water Quality ("DWQ"); and

PC-N 5L-76F-I

WHEREAS, the preservation of the Property is required by a Mitigation Banking Instrument for the Pancho Stream and Wetland Mitigation Bank, Department of the Army Action ID Number SAW-2010-00142. The Mitigation Bank is intended to be used to compensate for unavoidable stream and 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 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, 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 natural 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 natural condition, or the protection of its environmental systems, is prohibited.

ARTICLE III
GRANTOR'S RESERVED RIGHTS

The Grantor expressly reserves for itself, and its 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 reserves for Grantor, 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.

ARTICLE IV.
GRANTEE'S RIGHTS

The Grantee or its authorized representatives, successors and assigns, and the Corps and DWQ 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 its 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 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 easement as the Grantee.

B. No failure on the part of the Grantee 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 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 it owns 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 sixty (60) 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 and DWQ.

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 in perpetuity the conservation purposes described in this document.

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 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:

Pancho Mitigation Company, LLC
 1101 Haynes Street, Suite 211
 Raleigh, North Carolina 27604

To Grantee:

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

To the Corps:

Regulatory Project Manager
 Washington Regulatory Field Office
 U.S. Army Corps of Engineers – Wilmington District
 2407 West Fifth Street
 Post Office Box 1000
 Washington, NC 27889-1000

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 5, Appendix A-Mitigation Plan of the Mitigation Banking Instrument, dated April 12, 2012, 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, the Grantor has hereunto set his hand and seal, the day and year first above written.

GRANTOR:

Pancho Mitigation Company, LLC

By: *John E. Swartz*
Manager

GRANTEE:

Restoration Systems, LLC

By: *John P. Papp*
Manager

STATE OF NORTH CAROLINA

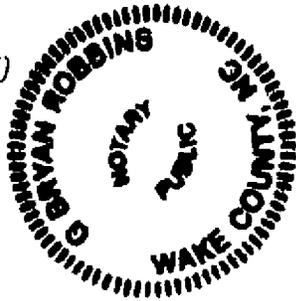
COUNTY OF Wake

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 E. Skverla III

WITNESS my hand and official seal, this 18th day of April, 2012.

(Official Seal)



[Signature]
Notary's Official Signature

G. Bryan Robbins
Notary's Printed or Typed Name

My Commission Expires: 5-25-2015

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 18th day of April, 2012.

(Official Seal)



[Signature]
Notary's Official Signature

G. Bryan Robbins
Notary's Printed or Typed Name

My Commission Expires: 5-25-2015

Appendix D: Correspondence with State Historic Preservation Office



**North Carolina Department of Cultural Resources
State Historic Preservation Office**

Ramona M. Bartos, Administrator

Beverly Eaves Perdue, Governor
Linda A. Carlisle, Secretary
Jeffrey J. Crow, Deputy Secretary

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

May 31, 2012

Worth Creech
Restoration Systems, LLC
1101 Haynes Street
Suite 211
Raleigh, NC 27604

Re: Pancho Mitigation Bank, Wayne County, ER 10-0675

Dear Mr. Creech:

Thank you for your letter of May 29, 2012, 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,

Renee Gledhill-Earley

for Ramona M. Bartos

Tracking #: ER 10-0675 Other #'s

County: Wayne

Applicant: Restoration Systems, LLC

Status:

Project: Pancho Stream and Wetland Mitigation Bank

Initial IN: 4/13/2010 Current IN: 4/13/2010 Client: 4/8/2010 DUE: 4/27/2010 OUT: 4/27/2010

Program: EEP To: A

Info. Req.: By: Info Type: Received:

<u>FLAG INFO</u>		<u>Archaeology</u>	<u>Survey/Rest.</u>	
Survey Req:	By:	Report:	Report:	<input type="checkbox"/> DoE
Testing Req:	By:	Report:	Report:	UNK Effect
Mitigation:	By:	Report:	Report:	

Bib #: Sites: 0 Forms IN:

Quads: Grantham Acres: 104 Miles:

Notes:

Project Area Map DoE NR Map Cleared Archaeology: 4/22/2010
 Survey Area Map Microfiched Cleared Survey:
 Reviewer(s): SGM

Comments

Arch Comments: 4/14/10: Rec'd ACOE public notice review. Due 4/27/10. To SGM. BJS.

4/22/10. No sites recorded w/in tract, which is mix of soils, but mostly Bb (Bibb sandy loam, poorly drained). See Soils Map 23. Fair amount of slope to other soils. DAH reviewed and cleared tract to west for swine facility in 1994 (ER 94-8795), saying soils eroded and significant resources unlikely. Taking these factors into account, no comment on current project. SGM Survey Comments: HPO Comments:

**Appendix E: Pancho Stream Mitigation Banking Instrument & Mitigation Plan
(USACE # SAW-2010-00142)**

(Version June 2009)

**AGREEMENT TO ESTABLISH THE PANCHO STREAM & WETLAND MITIGATION
BANK
IN WAYNE COUNTY, NORTH CAROLINA**

This Mitigation Banking Instrument (MBI) is made and entered into on the 12th day of April, 2012, 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 National Marine Fisheries Service (NMFS), 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 wetland 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 two certain parcels of land, totaling approximately 65 acres and comprising the Pancho Stream & Wetland Mitigation Bank located in Wayne County, North Carolina, described in the **Pancho Stream & Wetland Mitigation Bank** Mitigation Plan (Mitigation Plan – Appendix A), and as shown on the attached survey (Property – 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 wetland and stream 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 **riparian wetland and associated** stream systems and their functions to compensate in appropriate circumstances for unavoidable wetland and stream impacts authorized by Section 404 of the Clean Water Act permits and or

(Version June 2009)

Section 10 of the Rivers and Harbors Act permits in 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 wetland 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 wetland 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, in-kind compensatory mitigation is preferred.

Section II: Geographic Service Area

The Geographic Service Area (GSA) is the designated area within which the bank is authorized to provide compensatory mitigation required by Department of Army permits. The GSA for this Bank is the Neuse River Basin 8-digit Cataloging Unit 03020201 of North Carolina (as shown in Appendix C). This 8-digit unit is comprised of approximately 3125 square miles that is characterized by two Level II ecoregions – the Southeastern Plains and the Piedmont.

The Piedmont ecoregion comprises a transitional area between the mountainous regions of the Appalachians and the relatively flat Coastal Plain. The Piedmont is an erosional terrain of moderately dissected irregular plains with some hills. Soils are generally finer-textured than those found in the Coastal Plain regions with less sand and more clay. The Level IV ecoregions of the Piedmont contained within the 8-digit Cataloging Unit tend to have less relief, lower elevations, and wider floodplains than other Level IV ecoregions in the Piedmont. The Southeastern Plains are characterized by irregular plains with broad interstream areas.

(Version June 2009)

Elevations and relief are greater than in the Southern Coastal Plain ecoregion, but generally less than in the Piedmont and Blue Ridge ecoregions (Griffith et al. 2002a, 2002b).

Ecoregion boundaries are often portrayed by a single line, but in reality are transition zones that can be represented by a distinct and abrupt change, or a blurred boundary that can be more difficult to determine as the result of a heterogeneous mosaic of characteristics from each of the adjacent areas. The Bank is located within the Southeastern Floodplains and Low Terraces on the border of the Rolling Coastal Plain in the Southeastern Plains ecoregion; however, the Bank also exhibits characteristics of the Piedmont ecoregion (Griffith et al. 2002a, 2002b). The change in topographic relief, moderately sloping valleys, varying floodplain widths (narrow upstream to wider downstream), moderate side-slope to the east of Kennedy Mill Branch proposed for Enhancement (Level II), and irregularly dissected plains with moderately gradient streams, which characterize the Bank and adjacent land are more representative of the Piedmont ecoregion while soil series are more typical of the Southeastern Plains. Therefore, this Bank is proposed to offset impacts with unavoidable impacts associated with projects located within the entire 8-digit Cataloging Unit 03020201. Use of the Bank to compensate for impacts beyond the GSA may be considered by the Corps or the permitting agency on a case-by-case basis.

The Bank is located within the Neuse River Basin in 14-digit United States Geological Survey (USGS) Cataloging Unit and **Targeted Local Watershed 03020201150050** of the South Atlantic/Gulf Region (North Carolina Division of Water Quality [NCDWQ] Subbasin Number 03-04-04) (Figure 2, Appendix A). 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 and agriculture pressure. More specifically, considerations include desired aquatic resource functions, hydrologic conditions, soil characteristics, aquatic habitat diversity, habitat connectivity, 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 hardwood forest, pasture, and agricultural land. The Bank is located in an area protected by state water supply classification and riparian buffer rules; however, clearing of vegetation for row crop production and livestock grazing adjacent to streams has resulted in stream bank erosion, a decrease in flood attenuation, and stream entrenchment. If the proposed stream and wetland mitigation does not occur, erosion and nutrient inputs into the nutrient sensitive Neuse River basin are expected to continue. In addition, continued wetland loss through livestock disturbance, ditch maintenance, stream channel degradation, and repetitive maintenance will occur.

The Bank is located along Kennedy Mill Branch at the confluence with Mill Creek. According to the *Final Neuse River Basinwide Water Quality Plan* (NCDWQ 2009), due to the lack of buffer along Kennedy Mill Branch, this watershed should be targeted for land acquisition to protect the nutrient sensitive Neuse River watershed. The proposed restoration and enhancement will result in improved water quality within the Bank and downstream of the Kennedy Mill Branch watershed. The Bank is located in a region of the state dominated by agriculture and

(Version June 2009)

livestock; therefore, restoration and enhancement of streams and wetlands is expected to result in immediate water quality benefits in the vicinity of the Bank.

Section III: Mitigation Plan

The Mitigation Plan for the Pancho Mitigation Bank is submitted herewith and included as Appendix A. The Mitigation Plan contains the information listed in 332.4(c)(2) through (14) of the Compensatory Mitigation Rule.

A. The proposed Bank encompasses agricultural land utilized for livestock grazing, row crop production, and forest. Approximately 9,830 linear feet of Kennedy Mill Branch and unnamed tributaries to Kennedy Mill Branch, as well as 35.9 acres of hydric soil and drained wetlands exhibit mitigation potential within the Bank parcels. Currently, pasture areas are accessible to livestock and are routinely cleared and mowed for hay production, resulting in local disturbances to stream banks and wetland soil surfaces. Additional on-site land use practices including the maintenance and removal of riparian vegetation; ditching of adjacent riparian wetlands; and relocation, dredging, and channelization of onsite streams have resulted in degraded water quality and excessive sedimentation resulting from unstable banks (stream entrenchment, erosion, and bank collapse).

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 24 through 31 of the Mitigation Plan, including, (1) restoration (priority I) of 5,322 linear feet of streams; (2) restoration of 1,137 linear feet of braided Coastal Plain stream; (3) enhancement (level II) of 1,837 linear feet of stream; (4) preservation of 1,176 linear feet of stream; (5) restoration of 29.0 acres of jurisdictional wetland; (6) enhancement of 1.5 acres of cleared jurisdictional wetlands; (7) preservation of 0.5 acres of forested jurisdictional wetland; and (8) establishment of a permanent conservation easement to encompass all mitigation activities, as well as a minimum 50-foot wooded riparian buffer adjacent to wetlands and streams.

The purpose of this work, and the objective of the Bank, is to compensate for the loss of aquatic functions in the GSA associated with permitted impacts. Goals of this stream and wetland mitigation project focus on improving water quality, enhancing flood attenuation, and restoring aquatic and riparian habitat within the Kennedy Mill Branch watershed. Protection of restored aquatic resources (riparian wetlands and streams) with a conservation easement is likely to result in net gains in water quality and habitat functions of streams and wetlands located within the Bank. Primary goals will be accomplished through the following measures.

- Removing nonpoint sources of pollution associated with agricultural activities including a) removal of livestock from streams, stream banks, wetlands, and floodplains; b) eliminating the application of fertilizer, pesticides, and other agricultural materials into and adjacent to streams and wetlands; and c) establishing a vegetative buffer adjacent to

(Version June 2009)

streams and wetlands to treat surface runoff, which may contain pollutants such as sediment and/or agricultural pollutants from the adjacent landscape.

- Reducing sedimentation onsite and downstream by a) reducing bank erosion associated with hoof shear and vegetation maintenance and b) planting a diverse woody vegetative buffer adjacent to Kennedy Mill Branch and associated unnamed tributaries to Kennedy Mill Branch.
- Reestablishing stream stability and the capacity to transport watershed flows and sediment loads by restoring stable dimension, pattern, and profile supported by natural in-stream habitat and grade/bank stabilization structures.
- Promoting floodwater attenuation by a) reconnecting bankfull stream flows to the abandoned floodplain terrace, b) restoring secondary, entrenched tributaries thereby reducing floodwater velocities within smaller catchment basins c) restoring depressional floodplain wetlands, resulting in increased storage capacity for floodwaters within the Bank, and d) revegetating the Bank's floodplains to increase frictional resistance on floodwaters crossing the Bank.
- Providing shallow wetland marsh treatment areas to intercept surface waters draining through agricultural areas prior to discharging into Bank streams and wetlands.
- Improving aquatic habitat by promoting stable stream banks, shading open waters, and providing in-stream structures within the Bank.
- Providing wildlife habitat corridors within fragmented parcels in the Neuse River watershed.

C. The Sponsors shall monitor the Bank Site as described on pages 34 through 35 of the Mitigation Plan, until such time as the IRT determines that the success criteria described on pages 32 through 34 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 page 32 of the Mitigation Plan.

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.

(Version June 2009)

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 Wetland Community Types:

A. Wetland community types found in a mitigation bank will be described in accordance with the procedures found in the NC Wetland Assessment Method (NC WAM, USACE, 2007). It is expected that impacts to the NC WAM types listed below will be compensated by the Mitigation Types as listed in order to qualify as “In-Kind” mitigation. Exceptions to the use of “In-Kind” mitigation may be allowed at the discretion of the permitting agencies on a case-by-case basis.

Mitigation Wetland Group	NCWAM Type
CAMA CoastalWetland	Salt/Brackish Marsh*
Riverine	Riverine Swamp Forest/Non-Tidal Freshwater Marsh, Tidal Freshwater Marsh
Riparian/Nonriverine	Bottomland Hardwood Forest, Headwater Forest, Flood-Plain Pool, Mountain Bog*, Estuarine Woody Wetland
Non-Riparian	Non-Riverine Swamp Forest, Seep, Basin Wetland, Pocosins, Estuarine Woody, Pine Flat, Pine Savannah, Hardwood Flat

(Version June 2009)

Proposed Mitigation Activity	Proposed Mitigation		Mitigation Ratio	Proposed Credits	
	Streams (linear feet)	Riparian Wetlands (acres)		Stream Credits	Riparian Wetland Credits
Stream Restoration	6459		1:1	6459	
Stream Enhancement I	803		1.5:1	535	
Stream Enhancement II	1837		2.5:1	735	
Stream Preservation	1176		5:1	235	
Wetland Restoration		29.0	1:1		29.0
Wetland Enhancement		1.5	2:1		0.8
Wetland Preservation		0.5	5:1		0.1
Totals	10,683	31.0		7,964	29.9

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 wetland impacts authorized by Section 404 permits and/or Section 10 permits, that the Restoration Equivalents, as 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 of impact, at least one acre 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.

(Version June 2009)

A. Credit Release Schedule for Forested Wetlands: 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.

The Sponsor must complete the initial physical and biological improvements to the Bank site pursuant to the Mitigation Plan no later than the first full growing season following initial debiting of the Bank. Subject to the Sponsor's continued satisfactory completion of all required success criteria and monitoring, additional restoration mitigation credits will be available for sale by the Sponsor on the following schedule:

1. 15 % upon completion of all initial physical and biological improvements made pursuant to the Mitigation Plan (total 30%);
2. 10% after first year, if interim success measures are met (total 40%);
3. 10% after second year, if interim success measures are met (total 50%);
4. 10% after third year, if interim success measures are met (total 60%);
5. 10% after fourth year, if interim success measures are met (total 70%);
6. 10% after fifth year, if Success Criteria are met (total 80%);
7. 10% after sixth year, if vegetative Success Criteria are met (90%); and
8. 10% after seventh year, if vegetative Success Criteria are met (100%).

Interim success criteria will be measured and documented in an annual Monitoring Report to be submitted to the IRT no later than December 31 of each calendar year after construction is complete. Performance standards for the wetlands are described in Section 9 of the Mitigation Plan. Provided that all Success Criteria are met, the IRT may allow the Sponsor to discontinue hydrologic monitoring after the fifth year. The Sponsor will be required to monitor vegetation for an additional two years after the fifth year for a total of seven years.

B. Credit Release Schedule for Streams:

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;

(Version June 2009)

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.

The Sponsor must complete the initial physical and biological improvements to the Bank site pursuant to the Mitigation Plan no later than the first full growing season following initial debiting of the Bank. Subject to the Sponsor's continued satisfactory completion of all required success criteria and monitoring, additional restoration mitigation credits will be available for sale by the Sponsor on the following schedule:

1. 15 % upon completion of all initial physical and biological improvements made pursuant to the Mitigation Plan (total 30%);
2. 10% after first year, if interim success measures are met (total 40%);
3. 10% after second year, if interim success measures are met (total 50%);
4. 5% after third year, if interim success measures are met (total 60%);
5. 10% after fourth year, if interim success measures are met (total 70%);
6. 10% after fifth year, if Success Criteria are met (total 80%);
7. 5% after sixth year, if vegetative Success Criteria are met (90%); and
8. 10% after seventh year, if vegetative Success Criteria are met (100%).

10% after bankfull event performance standard has been met.

Interim success criteria will be measured and documented in an annual Monitoring Report to be submitted to the IRT no later than December 31 of each calendar year after construction is complete. Performance standards for the wetlands are described in Section 9 of the Mitigation Plan.

If the monitoring of the site demonstrates that the site is successful by year 5 and no concerns have been identified (vegetation, stream stability, etc.), the Sponsor may propose to terminate monitoring of the site and forego the monitoring requirements of years 6 and 7. This provision is only applicable if the site has consistently met all performance standards, and at year 5 meet the year 5 vegetation density standards (260 plants/acre) and the year 7 average height requirement of 10 feet. Early closure will only be provided through written approval from the USACE in consultation with the NCIRT.

Section VIII: Accounting Procedures

A. The Sponsor shall provide accounting procedures acceptable to the IRT for maintaining accurate records of debits made from the Bank. Such procedures include the generation of a ledger by the Sponsor showing credits used at the time they are debited from the Bank (see Appendix D). 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

(Version June 2009)

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.

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

- a. Additionally, the Conservation Easement will designate 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 \$1,091,060.00, which will be split between construction in the amount of \$774,653 and, subsequently, monitoring in the amount of \$316,407. 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.

(Version June 2009)

Pancho Cost Estimates & Bonding Worksheet

Item	Total Project Cost	Cost of Completed Work	Future (Bonded) Cost	Contingency Fees (30%)
Land	\$1,101,590	\$1,101,590	\$0	
Surveying	\$50,000	\$19,500	\$30,500	
Easement	\$70,000	\$0	\$70,000	
Restoration Plan	\$108,638	\$108,638	\$0	
Project Construction	\$523,800	\$0	\$523,800	\$157,140
Vegetation Planting	\$51,000	\$0	\$51,000	\$15,300
As-Built Survey & Report	\$11,940	\$0	\$11,940	
Project Monitoring	\$210,000	\$0	\$210,000	
Company Labor	\$23,400	\$7,020	\$16,380	
Legal Fees	\$20,000	\$15,000	\$5,000	
Total	\$2,170,368	\$1,251,748	\$918,620	\$172,440

Financial assurances to complete all remaining tasks for the project will be divided into two instruments, one for Construction (including the As-Built Survey and Report) and one for Monitoring. Contingency fees (30% of the cost) for grading and planting are included in the Construction Bond. Remaining costs for the Sponsor's labor and legal fees were prorated. Based on these calculations, the Construction Bond presented will be for \$774,653 and the Monitoring Bond will be for \$316,407.

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 Bank is comprised of two parcels, both of which are owned by Pancho Mitigation Company, LLC in fee simple. Pancho Mitigation Company acquired three parcels to form the Bank property. Two were combined at closing so that now there are two parcels. Documentation of these transactions is included in Appendix B. Prior to the first credit release a Permanent Conservation Easement, substantially in the form included as Appendix F, will be submitted to the Wilmington District's Office of Counsel for review. Upon written approval by the Corps Office of Counsel, the CE will be recorded in the land records at the Office of the Clerk of the Superior Court in the county in which the land lies. A copy of the recorded CE, showing book and page numbers of the recorded location, shall be provided to Office of Counsel. Pancho Mitigation Company, LLC shall grant a CE to be held by the Sponsor, in form acceptable to the IRT, sufficient to protect the Bank site in perpetuity. The CE shall be 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

(Version June 2009)

educational value of wetlands or streams within the Bank site, consistent with the Mitigation Plan. The purpose of the CE will be to 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 shall deliver a title opinion acceptable to the DE 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 G. As the owner of the property, the Sponsor will remain in the chain of title. The Sponsor is responsible for ensuring that the CE is re-recorded to ensure that it remains within the chain of title. The terms and conditions of this conveyance shall not conflict with the intent and provisions of the CE nor shall such conveyance enlarge or modify the uses specified in the CE. The CE will contain 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 will retain primary oversight of the property throughout Bank implementation and monitoring. At project closeout, the Sponsor shall implement the long-term management plan described in Section 11 of the Mitigation Plan.

B. The long-term management plan includes a one-time payment to the NCWHF sufficient 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.

(Version June 2009)

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 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.

(Version June 2009)

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.

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:

Mr. John Preyer
Restoration Systems, LLC
1101 Haynes Street, Suite 211
Raleigh, NC 27604

Corps:

Ms. Tracey L. Wheeler
Regulatory Project Manager
Department of the Army
Wilmington District, Corps of Engineers
Washington Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

EPA:

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

FWS:

Mr. John Ellis
U.S. Fish and Wildlife Service
Ecological Services – Raleigh Field Office
Post Office Box 33726
Raleigh, NC 27636-3726

(Version June 2009)

NMFS:

Mr. Ron Sechler
National Marine Fisheries, NOAA
Habitat Conservation Division
101 Pivers Island Road
Beaufort, NC 28516

NCWRC:

Mr. David Cox
North Carolina Wildlife Resources Commission
1142 I-85 Service Road
Creedmoor, NC 27522

NCDWQ:

Mr. Ian McMillan
Division of Water Quality
North Carolina Department of Environment and
Natural Resources
Mail Service Center 1650
Raleigh, NC 27699-1650

IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled "Agreement To Establish The Pancho Mitigation Bank In Wayne County, North Carolina":

Sponsor:

By: Gerrit Lind

Date: April 10, 2012

U.S. Army Corps of Engineers:

By: S. Kenneth Jolly

Date: 4/12/12

(Version June 2009)

**IN WITNESS WHEREOF, the parties hereto have executed this Agreement entitled
“Agreement To Establish The * Mitigation Bank In * County, North Carolina”:**

U.S. Environmental Protection Agency:

By: _____ Date: _____

U.S. Fish and Wildlife Service:

By: _____ Date: _____

National Marine Fisheries Service:

By: _____ Date: _____

N.C. Division of Water Quality:

By: _____ Date: _____

N.C. Wildlife Resources Commission:

By: _____ Date: _____

N.C. Division of Coastal Management:

By: _____ Date: _____

(Version June 2009)

List of Appendices

Appendix A: Final Mitigation Plan

Appendix B: Property Surveys and Legal Description

Appendix C: Geographic Service Area

Appendix D: Bank Ledger

Appendix E: Model Performance Bond

Appendix F: Model Conservation Easement

Appendix G: North Carolina Wildlife Habitat Foundation Letter