



North Carolina Department of Environment and Natural Resources

Division of Water Resources

Water Quality Programs

Pat McCrory
Governor

Thomas A. Reeder
Director

John E. Skvarla, III
Secretary

February 18, 2014

DWQ Project # 2009-0858

EBX-EM, LLC
Attn: Mr. Thomas L. Rinker
909 Capability Drive, Suite 3100
Raleigh, NC 27606

Re: Cape Fear Riparian Buffer & Nutrient Umbrella Mitigation Banking Instrument

Dear Mr. Rinker:

On February 17, 2014, the North Carolina Division of Water Resources (DWR) received a signed Umbrella Mitigation Banking Instrument (UMBI) by Norton Webster on behalf of EBX-EM, LLC (EBX). The UMBI submitted was a modification to the original UMBI signed and approved on October 9, 2009. This UMBI was developed to provide EBX with the ability to perform the following functions in the Jordan Lake Watershed of the Cape Fear River Basin, within the 8-digit Hydrologic Unit Code 03030002:

- Improve water quality through the restoration of riparian buffer habitat, the installation of new stormwater best management practices ("BMP"), and the renovation of existing stormwater BMPs.
- To provide mitigation for buffer impacts and development (both existing and proposed) requiring nutrient offset payments, and to sell any resulting credits to third parties.

On February 17, 2014, Thomas Reeder, on behalf of DWR, approved the UMBI modification.

A copy of the signed UMBI is attached with this letter. Please feel free to contact Katie Merritt at (919) 807-6371 if you have any questions regarding this correspondence.

Sincerely,

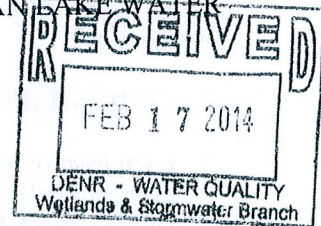
Karen Higgins, Supervisor
401 & Buffer Permitting Unit

KAH/kym

cc: Tommy Cousins – EBX-EM, LLC (via electronic mail)
File Copy-Katie Merritt

AGREEMENT TO ESTABLISH THE CAPE FEAR RIPARIAN BUFFER AND NUTRIENT
MITIGATION BANKING INSTRUMENT PURSUANT TO THE JORDAN LAKE WATER
SUPPLY NUTRIENT STRATEGY

**UMBRELLA BANKING INSTRUMENT
HUC 03030002**



I. PREAMBLE

This Riparian Buffer and Nutrient Mitigation Umbrella Banking Instrument, regarding the establishment, use, operation, and maintenance of the Cape Fear River Basin Riparian Buffer and Nutrient Mitigation Umbrella Bank (Bank) is made and entered into by and among EBX-EM, LLC, (EBX-EM), acting as the Bank Sponsor, and the North Carolina Department of Environment and Natural Resources – Division of Water Resources (DWR).

The purpose of the Bank is to:

1. Improve water quality through the restoration of riparian buffer habitat, the installation of new stormwater best management practices (BMPs), and the renovation of existing stormwater BMPs within the Jordan Lake Watershed of the Cape Fear River Basin in the State of North Carolina, United States Geological Survey (USGS) Hydrologic Unit Code (HUC) 03030002.
2. To provide mitigation for buffer impacts and development (both existing and proposed) requiring nutrient offset payments within the Jordan Lake Watershed of the Cape Fear River Basin, and to sell any resulting credits to third parties.

II. AUTHORITIES

The Bank will be used to provide nutrient offset and riparian buffer mitigation in accordance with the Jordan Water Supply Nutrient Strategy requirements of the following proposed administrative code sections:

1. 15A NCAC 2B .0264 Agriculture,
2. 15A NCAC 2B .0265 Stormwater Management for New Development,
3. 15A NCAC 2B .0266 Stormwater Management for Existing Development,
4. 15A NCAC 2B .0268 Mitigation for Riparian Buffers
5. 15A NCAC 02 .0269 Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program
6. 15A NCAC 2B .0270 Wastewater Discharge Requirements, and
7. 15A NCAC 2B .0271 Stormwater Requirements for State and Federal Entities.
8. 15A NCAC 2B. .0273 Options for Offsetting Nutrient Loads

All activities will be consistent with permanent rules for the Jordan Water Supply Nutrient Strategy approved by the Environmental Management Commission and approved by the North Carolina Office of Administrative Hearings - Rules Review Commission (RRC) on October 16, 2008 and November 20, 2008.

Any changes to the proposed Jordan Water Supply Nutrient Strategy legislation that occur during review by the General Assembly will also be adhered to as part of this banking instrument.

III. ESTABLISHMENT OF BANK PARCEL(S)

- A. Each tract of land subject to a conservation easement or restrictive covenants described in Section III-E ("Bank Parcel") to be included in the Bank shall require a Bank Parcel Development Package (BPDP), including detailed information concerning site location, existing conditions, proposed buffer restoration activities or stormwater best management practice (BMP's) activities, monitoring and maintenance plans, financial assurances, and associated buffer mitigation/nutrient credit calculations (to include credit generation, service area, and accounting as appropriate for each regulatory authority cited above). Additional Parcels may be added to the Bank at any time upon approval of the associated BPDP by the DWR and prior to use of the parcel for mitigation purposes. Please note the service area for each Bank Parcel will be limited to the affected arm/subwatershed of B. Everett Jordan Lake (i.e., Upper New Hope, Lower New Hope, or Haw River) in which the Bank Parcel is located.
- B. For each BPDP, EBX-EM agrees to perform all necessary work, in accordance with the provision of this Banking Instrument, to establish and / or maintain and monitor riparian buffers or to install and / or renovate stormwater BMPs until it is demonstrated to the satisfaction of the DWR that the restored property (buffers) or installed / renovated BMPs comply with all conditions contained herein, or until all credits from that Bank Parcel are sold, whichever is later but at a minimum of (5) years.
- C. EBX-EM will obtain all appropriate environmental documentation, permits, or other authorizations needed to construct and maintain the Bank Parcel. This Banking Instrument does not qualify or substitute for such authorization.
- D. Financial Assurance Requirements: Following approval of the BPDP, EBX-EM shall provide a Performance Bond from a surety company that is rated no less than an "A-" as rated by A.M. Best. The Performance Bond amount shall be 100% of the estimated cost for implementation of the buffer restoration / stormwater management plan included in the BPDP, but no less than \$150,000.00 in amount. Alternatively, in lieu of posting the Performance Bond, EBX-EM may elect to construct the project prior to the first credits release. After completion of the restoration / construction, a Monitoring Bond will be substituted for the Performance Bond. The sum of said Monitoring Bond shall be for 100% of the estimated cost to implement the monitoring and maintenance plan but no less than \$100,000.00 in amount. The Monitoring Bond shall be in effect for a period of five years but may be lowered each year based on the adjusted cost to finish the monitoring.
- E. Property Disposition: Prior to the release of any credits, EBX-EM shall acquire a permanent conservation easement(s) or record restrictive covenants at the county clerk's office to the deed(s) on all Bank Parcels to provide protection to the restored riparian buffer and / or stormwater BMPs in perpetuity from activities that would impair their ability to provide nutrient abatement to waters of the Cape Fear River Basin, including B. Everett Jordan Lake. The form of the conservation easement or restrictive covenants shall be consistent with the standards employed by the State of North Carolina in the protection of restored riparian buffers and / or stormwater BMPs and shall be approved by the DWR prior to the certification of any credits. EBX-EM shall not grant additional easements, rights of way, or any other property interest in or to the project areas without the written consent of the DWR or its designee. In the case of a conservation easement,

EBX-EM will hold the easement until a qualified holder under N.C. General Statute ("G.S.") 121-34 et seq. and 170(h) of the Internal Revenue Code is identified. The holder shall be a land trust or stewardship program that will hold and enforce the conservation easement and the interests in perpetuity. The Sponsor shall choose a land trust or stewardship program that is accredited by the Land Trust Accreditation Commission and/or has been approved by DWR prior to the end of the fourth year monitoring period. A land trust must be certified under 501(c) (3) of the Internal Revenue Code and must have the qualifications outlined in G.S. 105-130.24 and G.S. 105-151.12

- F. Operation and Maintenance Agreements: Prior to the release of any credits, EBX-EM will provide DWR with the necessary operation and maintenance agreements for the newly constructed or renovated stormwater BMPs (if applicable). These agreements shall be consistent with the standards adopted by DWR and shall be approved by the DWR prior to the certification of any credits.
- G. As-Built Reports: EBX-EM will submit an as-built plan and report for each Bank Parcel within 30 days after completing the establishment of the buffer and / or construction or renovation of stormwater BMPs (if applicable). The as-built report will describe in detail any deviation from the BPD. In addition, the as-built report will document the appropriate aspects of the Bank depending upon the type as follows:
 - a. Buffer restoration: planting details, invasive species control, monitoring device locations, vegetation plot locations, photo point locations, surface and groundwater elevations, as appropriate.
 - b. Stormwater BMPs: outlet structure information, surface area / volume computations, hydrograph routing information, planting details, monitoring device locations, photo point locations as appropriate.
 - c. Boundary Survey of easement area

IV. MAINTENANCE AND MONITORING OF BANK PARCEL(S)

- A. Operation and Maintenance Provisions: EBX-EM agrees to perform all necessary work to operate and maintain the Bank Parcel(s) consistent with the operation and maintenance criteria established in Section III-F of this instrument. EBX-EM shall continue with such activities until Items J (2) (a) and J (2) (b) of Section VI have been satisfied. Deviation from the approved BPD is subject to review and written approval by DWR or its designee.
- B. Monitoring Provisions: EBX-EM shall monitor the Bank Parcel as described in the BPD for each Bank Parcel until such time as DWR determines that the success criteria described below have been met. The monitoring period shall be a minimum of five (5) years.

Riparian Buffer Restoration

- C. Vegetative Success Criteria: Vegetative Success Criteria will be based upon the density and growth of character tree species. "Character Trees" are defined as planted or volunteer species identified from a survey of local vegetation on less degraded sections of the specified stream and from reference literature that details native species. A list of Character Tree species for each Bank Parcel will be detailed in that Parcel's BPD. Vegetative Success Criteria will be based upon guidelines set forth in the Guidelines for

Riparian Buffer Restoration prepared by the North Carolina Ecosystem Enhancement Program (or subsequent updated versions of this Guidance in place at the date of acceptance of a BDP). Success is defined as the survival of an average density of 320 desirable trees per acre after five (5) years. If vegetative success criteria are not met, supplemental plantings may be required. Supplemental plantings will be utilized until the required densities have been achieved after five (5) years. Success criteria of the riparian buffer restoration and enhancement shall be based on the CVS-EEP Protocol for Recording Vegetation Level 1-2 Plot Sampling Only Version 4.0.

D. Monitoring Reports: EBX-EM shall submit to the DWR an annual monitoring report, no later than December 31 each year for five years after the first full growing season, describing the conditions of each Bank Parcel and relating those conditions to the success criteria. Reports shall be submitted annually and shall contain the following:

1. A U.S. Geological Survey map showing location of the Bank Parcel(s);
2. A detailed narrative summarizing the condition of the Bank Parcel(s) and all regular maintenance activities;
3. Appropriate topographic survey showing location of sampling plots, permanent photo points, location of transects, etc.;
4. Monitoring data, including specific vegetative counts and photographs; and
5. A copy of the Bank credit/debit ledger.

E. Contingency Plans/Remedial Actions: In the event the Bank fails to achieve the success criteria described in this instrument, EBX-EM shall develop necessary contingency plans in coordination with the DWR or designee and implement appropriate remedial actions for the Bank. Depending on the degree of remedial actions required, DWR reserves the authority to extend or re-start the monitoring period as necessary to demonstrate site success.

If the DWR determines that the Bank is operating at a deficit (i.e., EBX-EM is closing on sales and transferring credit not yet available), the sale/transfer of credits will immediately cease, and the DWR, in consultation with EBX-EM, will determine what remedial actions are necessary to correct the situation.

Construction / Renovation of Stormwater BMPs

F. Stormwater BMP Success Criteria: The success of a stormwater BMP will be based upon the type and its associated design criteria, as approved by DWR at time of submission of the BDP. For purposes of this agreement, the design criteria shown in the North Carolina Division of Water Quality Stormwater Best Management Practices Manual (October 2007), or as amended / updated, and the approved operation and maintenance agreement from Section III-F of this agreement shall be the basis for judging the success of a specific device.

G. Monitoring Reports: EBX-EM shall submit to the DWR an annual monitoring report, no later than December 31 each year for five years after the initial installation / renovation of the stormwater BMP, describing the conditions of each Bank Parcel and relating those conditions to the success / approved design criteria. Reports will be submitted annually and shall contain the following:

1. A U.S. Geological Survey map showing location of the Bank Parcel(s);

2. A detailed narrative summarizing the condition of the Bank Parcel(s) and all regular maintenance activities;
 3. A copy of the Bank credit/debit ledger.
- H. Contingency Plans/Remedial Actions: In the event the Bank fails to achieve the success criteria described in this instrument, EBX-EM shall develop necessary contingency plans in coordination with the DWR or designee and implement appropriate remedial actions for the Bank.
- If the DWR determines that the Bank is operating at a deficit (i.e., EBX-EM is selling or transferring credit not yet available), the sale/transfer of credits will immediately cease, and the DWR, in consultation with EBX-EM will determine what remedial actions are necessary to correct the situation.

V. OPERATION OF BANK

- A. Nutrient Abatement of Restored Riparian Buffer: EBX-EM and DWR agree the pounds of nitrogen offset per acre of restored riparian buffer shall be two thousand two hundred and seventy three pounds per acre (2,273 lbs/acre) and the pounds of phosphorus offset per acre of restored riparian buffer shall be one hundred forty six and four-tenths pounds per acre (146.4 lbs/acre), or the amount of nitrogen and phosphorus offset per acre per DWR policy at the time the BPD is approved, and shall be applied to riparian buffer-based nutrient abatement sites across the State of North Carolina.

EBX-EM and DWR further agree that the amount of nutrient offset per acre shall be fixed as part of the approval of each individual Bank Parcel, with the fixed amount not changing during the development and credit release schedule of each Bank Parcel(s).

Please note nutrient credits sold or transferred from approved Bank Parcels to prospective purchasers shall account for DWR-approved transport factors between the Bank Parcel site and the location of the site or development wishing to utilize credits.

- B. Nutrient Abatement of Installed / Renovated Stormwater Best Management Practices: EBX-EM and DWR agree that the pounds of nitrogen and phosphorus available for credit release from newly renovated or constructed stormwater BMPs shall be based upon the design calculations / nutrient export calculations submitted to and approved by DWR as part of the BPD.

- C. Establishment and Release of Credits: Within thirty (30) days upon submittal of all appropriate documentation by EBX-EM, and subsequent approval by DWR or its designee, it is agreed that the mitigation credits associated with this Bank will become available for sale to a third party in accordance with the following schedules:

Table I - Credit Release Schedule for Riparian Buffer and Nutrient Offset Credits (excluding Stormwater BMPs)		
Task	Project Milestone	% Credit Available for Sale
1	BPDP Approved by DWR, Conservation Easement Recorded* and Financial Assurance Posted	20*
2	Mitigation Site Earthwork, Planting and Installation of Monitoring Devices Completed	20
3	Monitoring Financial Assurance Posted and Approval of As-Built Report	10
4	Monitoring Report #1: Approved by the DWR**	10
5	Monitoring Report #2: Approved by the DWR**	10
6	Monitoring Report #3: Approved by the DWR**	10
7	Items J (2a) of Section VI in this Instrument has been completed and approved by DWR.	5
<i>No remaining credits will be released until Task 7 has been satisfied</i>		
8	Monitoring Report #4: Approved by the DWR**	5
9	Monitoring Report #5: Approved by the DWR** and final site visit by DWR has been conducted	10
Total		100%

* For specification, please see Item E of Section III in this Instrument

** DWR Approval provided upon a determination that the site is meeting success criteria contained within the approved BPDP

Table 2 - Credit Release Schedule for Nutrient Offset Credits – Stormwater BMPs		
Task	Project Milestone	% Credit Available for Sale
1	BPDP Approved by DWR, Bank Closure Agreement, Drainage and Access Easements Recorded* and Financial Assurance Posted, and Operation and Maintenance Agreement Approved by DWR	20*
2	Installation / Renovation of Stormwater BMP in accordance with approved design plans completed	20
3	Approval of As-Built Package	10
4	O&M Report #1: Approved by the DWR*	10
5	O&M Report #2: Approved by the DWR*	10
6	O&M Report #3: Approved by the DWR*	10
7	Items J (2a) of Section VI in this Instrument has been completed and approved by DWR.	5
<i>No remaining credits will be released until Task 7 has been satisfied</i>		
8	O&M Report #4: Approved by the DWR*	5
9	O&M Report #5: Approved by the DWR* and final site visit by DWR has been conducted	10
Total		100%

* For specification, please see Item E of Section III in this Instrument

** DWR Approval provided upon a determination that the site is meeting success criteria contained within the approved BPDP

D. Projects Eligible to Use the Bank: Projects eligible for utilization of the credits are those requiring authorization under the requirements of the following administrative code sections:

1. 15A NCAC 2B .0264 Agriculture,
2. 15A NCAC 2B .0265 Stormwater Management for New Development,
3. 15A NCAC 2B .0266 Stormwater Management for Existing Development,
4. 15A NCAC 2B .0268 Mitigation for Riparian Buffers
5. 15A NCAC 02 .0269 Riparian Buffer Mitigation Fees to the NC Ecosystem Enhancement Program
6. 15A NCAC 2B .0270 Wastewater Discharge Requirements, and
7. 15A NCAC 2B .0271 Stormwater Requirements for State and Federal Entities.
8. 15A NCAC 2B. .0273 Options for Offsetting Nutrient Loads

E. Procedure for Debiting or Crediting the Bank: EBX-EM shall maintain three (3) credit ledgers: one accounting for buffer mitigation credits (in square feet), which are generated by buffer areas of ≥ 50 feet in width; one accounting for nitrogen offset credits, which are generated from buffer areas up to 200 feet in width and from the installation / renovation of stormwater BMPs, and the third accounting for Phosphorus release and debits. The ledgers shall record the area of available buffer credits and pounds of available nutrient credits for each Bank Parcel and all associated debits and credits. Credits can be converted and transferred from buffer mitigation to nitrogen offsets, but the opposite shall not occur. All debits or credits shall be entered into the ledger and notification provided to DWR or its designee within thirty (30) days of each transaction. All transactions shall be kept in the ledger. Key documents are the Credit Reservation Letter confirming the credits are available for transfer and debiting and have been legally contracted and reserved for a specific project. The final document for verification and transfer is the Transfer Certificate that is issued to DWR along with the updated credit ledger after the purchaser's permit application is approved and permittee fully funds the purchase of credits. This is the final documentation for DWR that verifies the permittee has met the mitigation requirement. Notification of all credit sales shall be provided to DWR until all credits that have been released have been sold.

F. Geographical Service Area (GSA): The GSA is the designated area wherein a bank can reasonably be expected to provide appropriate riparian buffer and/or nutrient offsets for impacts due to development activities. The GSA for this Bank shall include the Jordan Lake Watershed of the Cape Fear River Basin Hydrologic Unit Code (HUC) 03030002 in North Carolina. The GSA for each Bank Parcel will be restricted to the affected arm/subwatershed of B. Everett Jordan Lake (i.e., Upper New Hope, Lower New Hope, or Haw River) in which each Bank Parcel is located.

VI. OTHER PROVISIONS

A. EBX-EM and the landowner will allow, or otherwise provide for, access to the Parcel(s) by the DWR or other parties authorized by the DWR, as necessary, for the purpose of inspection and compliance with the terms and conditions of this Banking Instrument and the conservation easement or restrictive covenants. Inspecting parties shall provide reasonable notice, of not less than 24 hours, to EBX-EM, prior to inspection of Bank.

- B. Force Majeure: After the sale of all available credits, EBX-EM will not be responsible for Bank failure that is attributed to natural catastrophes such as but not limited to flood, drought, disease, regional pest infestation, etc. that are beyond the control of EBX-EM.

However, while EBX-EM may not have control of such events, if an event occurs before the final sale of all credits, EBX-EM shall take remedial action to restore the property to its condition prior to this event, in a manner sufficient to provide adequate mitigation to cover credits that were sold prior to the occurrence of the event. Such remedial action shall be taken by EBX-EM only to the extent necessary and appropriate, as determined by DWR and EBX-EM, in order to offset authorized impacts to buffers or to satisfy nutrient offset buy down requirements imposed during land development activities and satisfied through payment into the affected Bank Parcel.

DWR must concur in writing that a *force majeure* event has occurred.

- C. Validity, Modification, and Termination of the Banking Instrument: This Banking Instrument will become valid on the date of the last party's signature. This Banking Instrument may be amended or modified only with written approval of all signatory parties.
- D. Specific Language of Banking Instrument Shall Be Controlling: To the extent that specific language in this document changes, modifies, or deletes terms and conditions contained in those documents that are incorporated into the Banking Instrument by reference, and that are not legally binding, the specific language within the Banking Instrument shall be controlling.
- E. Dispute Resolution: Any disputes between the Bank Sponsor and the DWR regarding the attainment of success criteria and release of credits from a specific site and appropriate monitoring, maintenance and/or remedial onsite activities shall first be addressed among the field staff of DWR and MAM field personnel and then, if not resolved, raised to the level of the individual signatories to the Banking Instrument or their designees.
- G. Notices: Unless otherwise provided herein, all notices and other communications which may be or are required to be given or made by any party to the other in connection herewith shall be in writing and shall be deemed to have been properly given and received on the date delivered in person or deposited in the United States mail, registered or certified, return receipt requested, to the addresses set out below, or at such other addresses as specified by written notice delivered in accordance herewith.

If to EBX-EM: EBX-EM, LLC
10055 Red Run Boulevard, Suite 130
Owings Mills, MD 21117
Attn: Mr. Thom Rinker

Copy to: EBX-EM
909 Capability Drive, Suite 3100
Raleigh, North Carolina 27606
Attn: Mr. Tommy Cousins

If to DWR:

NC Division of Water Resources
Attn: Ms. Katie Merritt, Nutrient Offset Program Coordinator
1650 Mail Service Center
Raleigh, NC 27699-1650

H. Entire Agreement: This Agreement constitutes the sole and entire agreement among the parties hereto and no modification of this Agreement shall be binding unless in writing and signed by all parties hereto.

I. Applicable Law: This Agreement shall be construed under the laws of the State of North Carolina.

J. Bank Parcel Closure:

1. Bank Parcel Closure shall be identified as the event when the Sponsor is relieved of all of its responsibilities to the Bank Parcel and there are no mitigation credits left to sell.

2. Bank Parcel Closure shall commence only after all of the following events have occurred:

a. Transfer or assign the conservation easement and all of its interests, in perpetuity, to a land trust or stewardship program as described in Item E of Section III of this agreement.

b. All five years of monitoring completed and all monitoring reports submitted and approved by DWR.

c. All credits have been released and debited and updated ledgers showing a zero credit balance have been submitted and approved by DWR.

EBX-EM, LLC

By: _____

Name: _____

Title: _____

Date: _____

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES - DIVISION OF WATER RESOURCES

By: _____

Name: THOMAS A REEDER

Title: DIVISION DIRECTOR

Date: 2/17/14