

FLAT SWAMP NEUSE RIVER RIPARIAN BUFFER AND NUTRIENT OFFSET MITIGATION BANKING INSTRUMENT

I. PREAMBLE

This Mitigation Banking Instrument, is for the establishment, use, operation, and maintenance of the Flat Swamp Neuse Buffer and Nutrient Offset Mitigation Bank (Bank) and is made and entered into by and among GreenVest/Flat Swamp, L.L.C. (GV/FS) and the North Carolina Department of Environment and Natural Resources -Division of Water Quality (DWQ).

GreenVest Flat Swamp LLC owns fee simple title to the three hundred and eighty six (386) acre tract (the "Property") in Craven County, North Carolina within the Neuse River Basin upon which the Bank will be established.

The purpose of the Bank is (a) to improve water quality through the restoration of forested riparian buffers within the Neuse River Basin in the State of North Carolina, United States Geological Survey (USGS) including Hydrologic Unit Code (HUC) 03020202. The goal of improving water quality will be achieved by (1) restoring agricultural fields to riparian buffer dedicated to Neuse Nutrient Offset Credits and Neuse Buffer Credits. The objective of this document is to establish Nutrient Offset Credits (NOCs), and Neuse Buffer Credits (RBCs) to provide mitigation to third parties, public or private, within the Neuse River Basin, and/or to sell resulting credits to third parties public or private.

II. AUTHORITY

The Bank will be used to provide Nutrient Offset and Neuse River buffer mitigation in accordance with the requirements of 15A NCAC 2B .0234 (Wastewater Discharge Requirements), 15A NCAC 2B .0235 (Basinwide Stormwater Requirements), 15A NCAC 2H .0506(h) (NC Stream, Wetland and Buffer Mitigation), 15A NCAC 2B .0233 (Neuse Buffer Rule), 2B .0240 (Nutrient Offset Payments) under such authority as established in SL 2007-438 and any amendments thereto. All activities will be consistent with rules adopted by the Environmental Management Commission and all other applicable authorities.

III. ESTABLISHMENT OF BANK PARCEL(S)

- A. Portions of the Property aforementioned hereinafter referred to as the "Bank Parcel" will be subject to a conservation easement or restrictive covenant as described in Section III-E ("Parcel") included in the BPD. The Bank Parcel Development Package (BPD), contains detailed information concerning site location, existing conditions, proposed restoration activities, monitoring and maintenance plans, financial assurances (III(D)), and associated mitigation potential (including credit generation, service area, and accounting as appropriate for each regulatory authority cited above).
- B. GV/FS agrees to perform all necessary work, in accordance with the provisions of this Banking Instrument, to establish and/or maintain riparian buffer and nutrient offset buffer until it is demonstrated to the satisfaction of the DWQ that the Bank Parcel complies with all conditions contained herein, or until all credits are sold, whichever is later.
- C. GV/FS will obtain all appropriate environmental documentation, permits or other authorizations needed to establish and maintain the Bank. This Banking Instrument does not qualify or substitute for such authorization.
- D. Financial Assurance Requirements: Following approval of the BPD, GreenVest/Flat Swamp, LLC shall provide a Performance Bond, Letter of Credit or other form of financial assurance acceptable to DWQ from a surety that is rated no less than an "A-" as rated by A.M. Best. The Financial Assurance amount shall be one hundred and twenty-five percent (125%) the estimated cost for implementation of the restoration plan included in the BPD, but no less than one hundred thousand dollars (\$100,000.00). After completion of the construction, a Monitoring Bond will be substituted for the initial assurance vehicle. The Penal Sum of said Monitoring Bond shall be for two times the estimated cost to implement the monitoring and maintenance plan but no less than one hundred thousand dollars (\$100,000.00) in amount. The Monitoring Bond shall be in effect for a period of five (5) years.
- E. Real Estate Provisions: Prior to the certification of any credits, GV/FS shall record a permanent conservation easement(s) or record restrictive covenants to the deed(s) on all Bank Parcels to provide protection to the restored riparian buffer from activities that would impair its ability to provide nutrient abatement to waters of the Neuse River Basin. 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 shall be approved by the DWQ prior to the certification of any credits. GV/FS shall not grant additional easements, right of way, or any other property interest in or to the project areas without the written consent of the DWQ or its designee. In the case of a conservation easement, GV/FS will hold the easement until all credits are released from the Bank Parcel. At the conclusion of Bank activities, the conservation easement(s) may be permanently transferred to a DWQ approved land trust

and/or vegetative planting.

- D. **Monitoring Reports:** GV/FS shall submit to the DWQ an annual monitoring report, no later than December 31 each year for five (5) years after the first full growing season, describing the conditions of each Bank Parcel and relating those conditions to the success criteria. Reports will be submitted annually and shall contain the following:
1. A U.S. Geological Survey map showing location of the Bank;
 2. A detailed narrative summarizing the condition of the Bank and all regular maintenance activities;
 3. Appropriate topographic maps 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, GV/FS shall develop necessary contingency plans and implement appropriate remedial actions for the Bank in coordination with the DWQ or designee. If the DWQ determines that the Bank is operating at a deficit (i.e., GV/FS is selling or transferring credits not yet available), the sale/transfer of credits will immediately cease, and the DWQ, in consultation with GV/FS, will determine what remedial actions are necessary to correct the situation.

V. OPERATION OF BANK

- A. **Nutrient (nitrogen (N)) Abatement of Restored Riparian Buffer:** GV/FS and DWQ agree that the pounds of nitrogen offset per acre of restored riparian buffer shall be two thousand two hundred and seventy three point zero two (2,273.02 lbs N/acre) as established by the DWQ and applied to existing riparian buffer-based nutrient abatement sites across the State of North Carolina.

If additional parcels are added to the bank in the future, GV/FS and DWQ further agree that the amount of nitrogen offset per acre shall be determined at the time of approval of individual Bank Parcel Development Packages per DWQ policy at that time, with the approved amount not changing during the development and credit release schedule of each parcel.

Riparian Buffer: GV/FS and DWQ agree that the credit ratio shall be a 1:1 for every acre of Riparian Buffer restored.

or non-profit group to be held in perpetuity. Please refer to the BPDP for a sample conservation easement.

- F. As-Built Reports: GV/FS agrees to submit an as-built report for each Bank Parcel within thirty (30) days after completing the establishment of the project. The as-built report will describe in detail any deviation from the BPDP. In addition, the as-built report will document finished grades, and surface and groundwater elevations, as appropriate.

IV. MAINTENANCE AND MONITORING OF BANK PARCEL(S)

- A. Maintenance Provisions: GV/FS agrees to perform all necessary work to maintain the Parcel(s) consistent with the maintenance criteria established in this instrument. GV/FS shall continue with such maintenance activities until all credits are sold or the maintenance and monitoring provisions are completed to the satisfaction of DWQ. Deviation from the approved BPDP is subject to review and written approval by DWQ or its designee.
- B. Monitoring Provisions: GV/FS agrees to perform all necessary work to monitor the Bank to demonstrate compliance with the Success Criteria established in this Banking Instrument specific to the conditions of the attached BPDP.
- 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 reference site and from reference literature that details native species. A list of Character Tree species for this project is detailed in a planting plan and planting schedule within the BPDP. 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 BPDP). Success is defined as the survival of an average density of three hundred and twenty (320) Character Trees per acre. Planted species must account for a minimum of thirty percent (30%) of the above densities. If vegetative success criteria are not achieved based on acreage density calculations from combined monitoring plots over the entire restoration area, supplemental planting may be performed with tree species approved by DWQ. Supplemental planting may be performed as needed until vegetative success criteria are met. No quantitative measurements of herb assemblages will be required to meet the vegetative success criteria. The quantity of monitoring plots will be determined in accordance with *The Carolina Vegetative Sampling Protocol* (Levels I & II), such that no more than two percent (2%) of any one Parcel is encompassed in monitoring plots (see BPDP). Visual estimates of the percent cover of herbaceous species and photographic evidence will be reported for informational purposes. Visual observation of streambank stability will also be made. Areas of significant bank erosion will be repaired through matting

B. Establishment and Release of Credits: Upon submittal of all appropriate documentation by GV/FS, and subsequent approval by DWQ or its designee and unless sooner approved by DWQ, 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 schedule:

Task	Project Milestone	% Credit Available for Sale
1	Mitigation Banking Instrument signed, BPDP Approved, Conservation Easement or Restrictive Covenants Recorded and Performance Bond Purchased	20
2	Mitigation Site Earthwork, Planting and Installation of Monitoring Devices Completed	20
3	Approval of As-Built Report and Monitoring Bond Purchased	10
4	Submit Monitoring Report #1 to DWQ (meets success criteria)	10
5	Submit Monitoring Report #2 to DWQ (meets success criteria)	10
6	Submit Monitoring Report #3 to DWQ (meets success criteria)	10
7	Submit Monitoring Report #4 to DWQ (meets success criteria)	10
8	Submit Monitoring Report #5 to DWQ (meets success criteria)	10
	Total	100%

C. Projects Eligible to Use the Bank. Projects eligible for utilization of the credits are those requiring authorization under the requirements of 15A NCAC 2B .0233 (Neuse Buffer Rule), 15A NCAC 2B .0234 (Wastewater Discharge Requirements), 15A NCAC 2B .0235 (Basinwide Stormwater Requirements), and NCAC 2B .0242 (Mitigation Program for Protection and Maintenance of Existing Riparian Buffer) 15A NCAC 2H .0506(h) (NC Stream, Wetland and Buffer Mitigation), 15A NCAC 2B .0240 (Nutrient Offset Payments) under such authority as established in SL 2007-438 and any amendments thereto provided such use has met all applicable requirements and is authorized by the appropriate authority and any others as deemed appropriate by DWQ.

D. Available mitigation credits (credits that have been released by DWQ but not sold by the Sponsor) that are generated within the DWQ riparian buffer, as defined by 15A NCAC 02B .0233 and

per 15A NCAC 02B .0242, can be converted and transferred from Riparian Buffer Credits to Nutrient Offset Credits and from Nutrient Offset Credits to Riparian Buffer Credits. Available Nutrient Offset Credits that are generated outside of the DWQ riparian buffer cannot be converted or transferred to Riparian Buffer Credits.

- E. The Bank Sponsor shall maintain three credit ledgers, if applicable, for each Bank Parcel under this Instrument: one accounting for buffer mitigation credits in square feet, one accounting for nitrogen offset credits in pounds, and one accounting for phosphorus offset credits in pounds.
- F. Each credit ledger shall be submitted on a separate 8 ½in X 11in spreadsheet with legible font style and font size. At a minimum and unless otherwise requested by DWQ, credit ledgers shall contain the following information:
 - 1. Bank Details listed in a header: (1) name of the approved banking instrument as it appears on the instrument document, (2) sponsor name, (3) bank parcel name as it appears on the BPDP, (4) DWQ project number for the BPDP, (5) date the ledger was last updated, (6) total credits released to date.
 - 2. Credit Details Table with the following for each credit sale: (1) date of credit sale, (2) purchaser name, (3) project name and corresponding HUC, (4) name of local government, (4) credits released by DWQ to the Bank listed in pounds for Nutrient Offset Credits and in square feet for Riparian Buffer Credits, (5) credits debited/sold from bank listed in pounds for Nutrient Offset Credits and in square feet for Riparian Buffer Credits, (6) available credits listed in pounds and acres for Nutrient Offset Credits and in square feet and acres for Riparian Buffer Credits, (7) local government requiring offset credits.
- G. All credit and debit transactions for each Bank Parcel under this Instrument shall be accurately depicted in the credit ledgers. DWQ shall be notified of each credit sale or credit transfer within thirty (30) calendar days by electronically submitting an updated credit ledger to DWQ. At a minimum, DWQ shall receive a hard copy of updated credit ledgers twice a year. Notification of all credit sales shall be provided to DWQ until all credits that have been released have been sold.
- H. All credit sales will include a Mitigation Credit Receipt (“Receipt”) that will include, at a minimum, the following information:
 - 3. Bank Details: (1) sponsor Name, (2) name of the approved banking instrument as it appears on the instrument document, (3) bank parcel name as it appears on the BPDP, (4) DWQ project number for the BPDP.

4. Credit Details: (1) date of receipt, (2) identify if full or partial payment, (3 – when applicable) amount of nitrogen credits purchased in pounds and confirmation from the local government of the amount required, (4 – when applicable) amount of phosphorous credits purchased in pounds and confirmation from the local government of the amount required, and (5 – when applicable) amount of Riparian Buffer Credits purchased in square feet and the confirmation from DWQ or the local government of the amount required.
 5. Project Details: (1) project name as it appears on DWQ or local government permits and/or certifications, (2) 8-digit HUC (or the sub-watershed if for the Jordan Lake Nutrient Strategy), (3) river basin, (4) nutrient strategy applicable to the project, (5 – when applicable) local government requiring Nutrient Offset Credits or Riparian Buffer Credits for this project.
- I. If the DWQ determines that the Bank is operating at a deficit (e.g. the Sponsor is closing on sales and/or transferring credit that is not available), the sale/transfer of credits will immediately cease, and the DWQ, in consultation with the Sponsor, will determine what remedial actions are necessary

VI. OTHER PROVISIONS

- A. GV/FS will allow, or otherwise provide for, access to the Parcel(s) by the DWQ or other parties authorized by the DWQ, 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 twenty-four (24) hours, to GV/FS, prior to inspection of Bank.
- B. Force Majeure: GV/FS will not be responsible for Bank failure that is attributed to natural catastrophes such as flood, drought, disease, regional pest infestation, etc. that are beyond the control of GV/FS. DWQ must concur in writing that *a. force majeure* event has occurred. If such an event occurs before the final sale of all credits, the GV/FS 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 the GV/FS only to the extent necessary and appropriate, as determined by DWQ 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 Flat Swamp Bank.

- 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 the 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 DWQ 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 DWQ and GV/FS field personnel and then, if not settled, raised to the level of the individual signatories to the Banking Instrument or their designees.
- J. 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 setut below, or at such other addresses as specified by written notice delivered in accordance herewith.

If to GV/FS: 4405 DeWees Court
Raleigh, NC 27612

If to DWQ: NC Division of Water Quality– Wetlands & Stormwater Branch
Attn: 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.

SPONSOR NAME:

By: GreenVest/Flat Swamp, LLC:



June 13, 2012

Name: Douglas Lashley
Title: Managing Member
Date:

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

By: 

Name: Charles Waddell

Title: Director, DWQ

Date: 6/27/12

