



**MITIGATION BANKING INSTRUMENT  
AMENDMENT**

**Roanoke River Wetlands and Stream Mitigation Bank**  
Franklin County, Virginia  
Henry County, Virginia

**Prepared for:**

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## TABLE OF CONTENTS

<b>I. Mitigation Bank Purpose and Description</b>	
B. Goals and Objectives.....	2
C. Location & Ownership .....	2
D. Project Description .....	3
E. Site Selection Factors .....	3
F. Baseline Conditions .....	3
G. Establishment and Use of Credits .....	4
H. IRT members.....	4
I. Disclaimer.....	5
J. Exhibits .....	5
<b>II. Definitions.....</b>	<b>6</b>
<b>IV. Establishment of the Bank</b>	
A. Scope of Approval .....	9
D. Financial Assurance Requirements .....	10
F. Real Estate Provisions .....	13
<b>V. Operation of the Bank</b>	
A. Service Area .....	15
F. Schedule of Credit Availability .....	16
<b>VII. Authorities of the IRT .....</b>	<b>24</b>
<b>VIII. Other Provisions</b>	
C. Dispute Resolution .....	26
D. Validity, Modification, and Termination of the MBI .....	26
E. Specific Language of MBI Shall Guide Interpretation of Exhibits ..	27
G. Entire Agreement.....	28
K. Binding.....	28
L. Transfer of Mitigation Responsibility .....	29
<b>Exhibit A. Vicinity and Location Maps</b>	
<b>Exhibit B. Master Plan</b>	
<b>Exhibit C. Plat and Title Search/Property Assessment &amp; Warranty for the Bank Expansion Property</b>	
<b>Exhibit G. Maintenance and Monitoring Fund</b>	
<b>Exhibit H. Long-Term Management Fund</b>	
<b>Exhibit I. Catastrophic Event Fund</b>	
<b>Exhibit J. Declaration of Restrictions for the Bank Expansion Property</b>	
<b>Exhibit L. Crediting and Debiting Procedure for the Bank</b>	
<b>Exhibit Q. Long-Term Management Plan</b>	

This Addendum to the Roanoke River Wetland and Stream Mitigation Bank Mitigation Banking Instrument ("MBI") (approved in May 2011) is a regulatory authorization and approval of Roanoke River Wetlands and Stream Mitigation Bank, LLC's (hereinafter "the Sponsor") proposal to establish, operate, and maintain the Roanoke River Wetlands and Stream Mitigation Bank (hereinafter, the "Bank"), as specifically proposed and described herein. The Interagency Review Team ("IRT") has determined that this Bank, provided it conforms to all the MBI's terms and conditions, would be an environmentally acceptable source for purchase of compensatory mitigation credits by third-party permittees undertaking activities with specified categories of impacts within the service area of the Bank.

USACE approval of this instrument constitutes the regulatory approval required for the Roanoke River Wetland and Stream Mitigation Bank to be used to provide compensatory mitigation for Department of the Army permits pursuant to 33 C.F. R. 332.8(a)(1). This instrument is not a contract between the Sponsor or Property Owner and USACE or any other agency of the federal government. Any dispute arising under this instrument will not give rise to any claim by the Sponsor or Property Owner for monetary damages. This provision is controlling notwithstanding any other provision or statement in the Instrument to the contrary.

Additional regulatory authorizations may be required for wetland or stream impacts associated with establishment of the bank.

As more specifically identified herein, the IRT is composed of representatives of the U.S. Army Corps of Engineers ("Corps"), the U.S. Environmental Protection Agency ("EPA"), the U.S. Fish and Wildlife Service ("FWS"), the Virginia Department of Environmental Quality ("DEQ"), and the Virginia Marine Resources Commission ("VMRC"), as applicable.

All terms and conditions of the original MBI approved in May 2011 not specifically amended by this addendum remain in full force and effect.

## I. MITIGATION BANK PURPOSE AND DESCRIPTION

**B. Objectives:** A primary objective of the Bank is to create a self-sustaining natural aquatic system that achieves the intended level of aquatic ecosystem functionality with minimal human intervention, including long-term site maintenance. The Sponsor's objectives of the Bank include improvements to wildlife habitat, water quality, flood conveyance and storage, and erosion control through the implementation of natural stream channel design, bank stabilization and bioengineering techniques, grade control and in-stream structures, the reestablishment and/or enhancement of riparian buffers, and the removal of detrimental land use activities (i.e., livestock exclusion) in riparian corridors.

Below is a summary of the proposed stream and riparian buffer mitigation work for the entire Bank. The linear footage and acres for the Bank Expansion Property are in parenthesis.

Stream restoration is proposed on approximately 5,576 (original) + 92 (Bank Expansion) linear feet of stream channel. The restoration of dimension, pattern, and profile of these stream reaches is proposed to improve the overall channel condition, stabilize channel banks, and re-establish hydraulic connectivity to flood prone areas. As depicted in the Bank Development Plan (Exhibit D, MBI), existing unstable E4, G4, and B4 stream types will be restored to stable B4 and C4 stream types. The slopes on these streams range from 1% to 30%.

Stream enhancement is proposed on approximately 5,317 (original) + 0 (Bank Expansion) linear feet of stream channel. In-stream structures, which provide grade control and aquatic habitat, are proposed to enhance the overall stream channel condition and stabilize channel banks. Bank grading and creating bankfull benches are proposed to provide access to floodplains and lower shear stress on the banks. Stream bank plantings are proposed to improve stream bank stability and provide shade for temperature regulation.

Stream preservation is proposed on approximately 4,393 (original) + 22,894 (Bank Expansion) linear feet of stream channel. These reaches exhibit stable pattern, profile and dimension with adequate riparian vegetation.

Riparian buffer preservation, and enhancement and/or re-establishment is proposed on approximately 1.7 acres (original) + 220.8 acres (Bank Expansion), and 153.9 acres (original) + 0 acres (Bank Expansion), respectively, which encompasses an area approximately 300 feet on either side of the stream channel, where appropriate. The goal is to provide overall health of the stream by filtering runoff, absorbing nutrients, and enhancing habitat for terrestrial and aquatic wildlife. In addition, the newly established riparian buffer will provide stream stability and restore the forest that once existed.

**C. Location and Ownership of Parcel:** The Bank Sponsor has sufficient and legal property interest in 419.82-acres of land in Henry and Franklin Counties, Virginia, as shown on the vicinity map (Exhibit A) and on the Master Plan dated July 29, 2014 (Exhibit B). The approved MBI, dated May 2011, contains 182.0 acres and the Bank Expansion with this amendment adds 237.82 acres, as shown on the location map (Exhibit A). Said parcels are

hereinafter referred to as the “Bank”. (2) The Bank Sponsor may elect to propose inclusion of additional lands in the Roanoke River watershed to be part of this MBI by proposing a Bank Development Plan for each new parcel as an amendment to this MBI.

The original Property encompasses approximately 358.9-acres, with 182.0-acres designated for the Bank, and is bisected by the Franklin and Henry County line. The Property is bounded by State Route 608 (Pawnee Lane / Fork Mountain Road) to the west and County Road 657 (Old Quarry Road) to the south. Parcels that fall within Franklin County are recorded in Deed Book 925, page 0706 and those that fall within Henry County are recorded in Deed Book 800, page 580. Table C-1 summarizes the property information and is included in Exhibit C.

The Bank Expansion Property encompasses approximately 392.95-acres, with 237.82-acres designated for the Bank, and is bisected by the Franklin and Henry County line. The Bank Expansion Property borders the existing Bank to the East. The additional parcels are recorded in Deed Book 265, page 0748, and Deed Book 771, page 1455 in Franklin County, Virginia.

Easements within the Property limits, including the Bank Expansion Property, include several overhead electric distribution lines, an Appalachian Power Company (APCO) transmission line, a buried cable utility line, a Lee Telephone Company easement, and a Plantation Pipe Line Company gas line. At the locations of the three culverts, VDOT maintains a drainage easement which extends approximately 25-feet upstream or downstream from the edge of the culvert. In addition, the entire Property has a Virginia Outdoors Foundation (VOF) easement which limits future development. Besides allowing agricultural and forestry practices, the easement also allows 1) wetland and stream bank restoration, or erosion control, pursuant to a governmental permit, 2) fencing along or within the buffer area, 3) construction and maintenance of stream crossings that do not obstruct water flow, and 4) creation and maintenance of foot or horse trails with unimproved surfaces. A plat depicting all known easements and the limits of the Bank is included in Exhibit C.

A title search of the property has been completed and results are included in Exhibit C.

**D. Project Description:** In accordance with this MBI, the Bank Sponsor will establish and/or maintain aquatic habitats and upland buffers (The “Bank”) in compliance with the provisions of this MBI and the Bank Development Plan (Exhibit D), and shall then maintain each phase of the Bank in such condition for ten (10) years. The Bank Sponsor shall be responsible for compliance with this MBI and the Bank Development Plan (BDP) until the Bank is closed in accordance with the Bank Closure Procedures or until all Credits are sold, whichever is later. The Bank area shall consist of a mixture of stream preservation, enhancement, and restoration; and riparian buffer preservation, enhancement, and re-establishment as described in Exhibit D.

**E. Site Selection Factors:** The Bank area has been evaluated in terms of the Virginia Offsite Mitigation Site Location Guidelines (dated February 12, 2008 or subsequent versions). The results of the evaluation are described in Exhibit E.

**F. Baseline Conditions:** The original Bank area is currently dominated by active livestock pastures, while the Bank Expansion property is dominated by hardwood forest, late succession regenerative growth, and pine stands. These features will be modified where appropriate so as to restore, enhance, or preserve existing stream functions on this site.

An on-site wetland and stream delineation was completed on the original property in July 2009 by Williamsburg Environmental Group, Inc. (WEG) and confirmed by the Corps in December 2009. The investigation identified 3.7 acres of non-tidal wetland and approximately 14,867 linear feet of non-tidal stream channel. Existing wetlands within the Bank site are classified as palustrine emergent (PEM) with small areas of palustrine forested (PFO).

An on-site wetland and stream delineation was completed on the Bank Expansion Property in October 2013 by WEG. The investigation identified 1.58-acres of non-tidal wetland and approximately 23,094 linear feet of non-tidal stream channel. This was confirmed by the Corps in the field in March 2014. Existing wetlands within the Bank Expansion Property are classified as palustrine forested (PFO).

The Bank Original Property is a mix of open and active farm pasture, mature hardwood forests, regenerative growth areas, and a few pine stands in the uplands. The farmed portion of the site is characterized by grassy knolls and steep slopes with small wooded areas centered on the existing stream channels. The vegetation along the riparian corridor over the majority of this area consists of pasture grasses with a mix of wetland herbaceous species in low-lying areas. The riparian buffer adjacent to some streams range from immature to mature. The mature areas generally have sufficient canopy coverage with scattered shrub and understory plant communities. Invasive species are also present in certain areas on the farmed portion of the site, specifically *Ailanthus altissima* (Tree-of-Heaven).

The Bank Expansion Property is characterized by mature bottomland and riparian hardwood forest; late-succession regenerative growth; forested and emergent wetlands; and few areas of pine stands in the uplands. The southern and eastern portion of the Expansion Property was harvested for timber eight-ten (8-10) years ago, while the northern and western portions have not been harvested for several decades. The elevation within the entire Bank ranges from 1,480 feet in the uplands in the north-eastern portion of the site to approximately 1,080 feet along the stream as it exits the southern portion of the site.

A baseline survey was completed in February 2010 for the stream channels designated as restoration or enhancement on the original property. The survey included profile data within restoration reaches and cross-section data in restoration and enhancement areas. Most stream channels are first order, originating on the Property while the largest streams (S1 and R3) are a third order stream. Detailed survey and geomorphological data for the restoration and enhancement reaches noted above are included in the BDP (Exhibit D, MBI).

**G. Establishment and Use of Credits:** In accordance with the provisions of this MBI and after IRT determination the Success Criteria contained herein have been satisfied, Mitigation

Credits (or "Credits" and as defined further herein) determined in accordance with Exhibit D of this MBI may serve as Mitigation in accordance with all applicable requirements for permits issued under Section 401 and 404 of the CWA, Section 10 of the Rivers and Harbors Act and Section 62.1-44.15:20-23 of the Code of Virginia. The sale, conveyance, or transfer of Credits includes all natural services, functions, and values associated with the resource from which Credits were derived. No Credit may be resold or used in any way in relation to another permit requirement, as compensation for another resource, or to satisfy the requirements of any other program. The preliminary number of Credits and the number of Credits available for initial release will be determined by the IRT based upon the approved concept plan. If the number of total Credits varies as a result of the approval of the mitigation site plan, the as-built plan, or subsequent monitoring reports, the number of Credits available will be adjusted accordingly in accordance with the terms and conditions contained herein.

H. IRT Members: As of the date of the MBI and subject to execution of the MBI by a duly authorized representative of the participating agencies described below, the Interagency Review Team (IRT) consists of the following agencies, though the individual representatives may change:

1. Corps, Chair, represented by Vinny Pero; and
2. EPA, represented by Stephanie Kubico; and
3. FWS, represented by Jennifer Stanhope; and
4. DEQ, Chair represented by Sarah Woodford; and
5. Virginia Department of Game and Inland Fisheries ("VDGIF"), represented by Amy Ewing; and
6. Virginia Department of Forestry ("DOF") represented by Edward Zimmer.

Each entity represented on the IRT may replace its representative upon written notice to the IRT Chair(s), the other IRT members, and the Bank Sponsor.

I. Disclaimer: This MBI does not warranty the ultimate viability of the Bank as a mitigation mechanism. Furthermore, all parties acknowledge that the permitting and resource agencies have statutory responsibilities concerning natural, cultural, and historic resources that are independent and separate from the actions identified in this MBI. The parties understand that agency signature to this MBI has no effect on the need for consultation between the Corps and resource agencies or in the nature and extent of recommendations or conditions made in any future project consultation. Nor can this MBI be considered to circumscribe or to limit the extent of any potential consultative recommendation made by a resource agency in the future.

J. Exhibits: The following Exhibits are incorporated by reference to this Addendum:

1. "Exhibit A," Vicinity and Location Maps
2. "Exhibit B," Master Plan
3. "Exhibit C," Plat and Title Search for the Bank Expansion Property
4. "Exhibit G," Escrow Agreement for Maintenance and Monitoring Fund
5. "Exhibit H," Escrow Agreement for Long-Term Management Fund

6. "Exhibit I," Escrow Agreement for Catastrophic Event Fund
7. "Exhibit J," Declaration of Restrictions for the Bank Expansion Property
8. "Exhibit L," Crediting and Debiting Procedure for the Bank
9. "Exhibit Q," Long-Term Management Plan

## II. DEFINITIONS

22. MITIGATION PERFORMANCE – The outcome of the IRT's application of success criteria to a mitigation site, to include whether the Sponsor has met or satisfied the goals and objectives the Sponsor set forth in this MBI.

## IV. ESTABLISHMENT OF THE BANK

A. Scope of Approval: The approval to sell credits is contingent upon the Bank Sponsor's compliance with the conditions contained herein during all phases of establishing, monitoring, and maintaining aquatic habitats and associated uplands buffers, as described in Exhibit D. The BDP (Exhibit D) is incorporated into the MBI, and the Bank Sponsor is responsible for the implementation of the BDP (Exhibit D).

### D. Financial Assurance Requirements:

2. The Bank Sponsor may, at its discretion, with written approval of the IRT, replace such entities with a different company, agent, or entity registered to do business in the Commonwealth of Virginia. The Bank Sponsor shall provide the IRT with notice of its desire to replace the entity and a draft of the new assurance for review. The provisions of the new assurance shall conform to the provisions of the former assurance.

The Bank Sponsor shall provide notice to the IRT through the Chair(s) at least 120 days in advance of any planned termination or revocation of any Financial Assurance. Financial Assurance must be maintained, renewed, extended or replaced, and approved by the IRT so that it remains effective until the IRT certifies that satisfaction has been met and the Financial Assurance can be released.

3. Amounts from sale of Mitigation Credits are to be placed in the following funds:

b. Long Term Management Fund: The IRT intends that Banks and their functions and values be self-sustaining and not require any more long-term maintenance and monitoring than similar areas occurring naturally. A sufficient percentage of all proceeds from sale of mitigation credits based on an itemized analysis of the funds necessary for long-term management shall be placed within a separate escrow account to be called the Long-Term Management Fund (Exhibit H). The itemized analysis of the necessary funds may include, but is not limited to, expected long-term management costs that are required after the initial 10-year monitoring period, such as posting, fencing, maintenance of structures, control of invasive species, and legal

defense of any easements or restrictive covenants recorded to protect the Bank property. This itemized analysis shall be based upon the MBI, the mitigation plan, and an accepted methodology and must be approved by the Chair(s) prior to approval of the MBI. The itemized analysis will state the required percentage of proceeds and/or the dollar amount required for this Fund.

This Long-Term Management fund may be funded through a single lump sum payment upon approval of the MBI, through an IRT approved schedule of payments to be completed within five (5) years of approval of the MBI, or with 0.95% of proceeds from the sale of mitigation credits as stated in the previous paragraph. The Long-Term Management Fund will be fully funded with \$76,622 no later than five (5) years after original MBI approval, and an additional \$28,502 no later than five (5) years after approval of the Bank Expansion Addendum for a total of \$105,124, and no additional cash proceeds shall be placed into the account.

These funds shall be placed in a federally insured financial institution in an interest bearing account. No Long-Term Management Fund monies shall be used to finance any expense or activity other than those specified in the Long-Term Management and Maintenance Plan for long-term maintenance and management of the Bank unless approved by the IRT.

c. **Catastrophic Event Fund.** The IRT intends that Banks and their functions and values be self-sustaining and not incur any more Catastrophic Events than similar acreages, functions and values that exist naturally. Accordingly, the Catastrophic Event Fund is intended to provide funds to remediate damage caused by catastrophic events to features (e.g., created, enhanced or restored wetlands or streams) that are not self-sustaining and that are likely more vulnerable to such damage because of their location, design and/or construction to ensure that they continue to provide adequate compensatory mitigation. A sufficient percentage of all proceeds from the sale of Credits to address potential catastrophic events shall be placed within a separate escrow account to be called the Catastrophic Event Fund (Exhibit I). The Catastrophic Event Fund will be funded with 1.34% of proceeds from sale of mitigation credits until the fund has reached \$148,212, at which point the Catastrophic Event Fund shall be deemed fully funded and no additional cash proceeds shall be placed into the account. These funds shall be placed in a federally insured financial institution in an interest bearing account separate from any other accounts. No Catastrophic Event Fund monies shall be used to finance work or activities other than those repairs to the bank necessitated by the events specified in Section IV.E unless approved by the IRT, acting through the Chair(s).

In the event of a catastrophic event, as determined by the IRT that affects the long term viability of the Mitigation Bank, the IRT may: (i) inform the Bank Sponsor, if said event occurs while the Bank Sponsor's maintenance period is

in effect, that it is responsible to implement corrections which may be funded by a release of an appropriate amount of said funds; (ii) inform the escrow agent that it may release a specific amount of funds to the Long-Term Steward of the Mitigation Bank to make necessary corrections and/or manage the Bank, or (iii) inform the escrow agent that it may release a specific amount of funds to an Agency represented on the IRT, or its designee, to effect the necessary corrections. Any unspent funds shall remain in this fund if not utilized for a Catastrophic Event. The Catastrophic Event Fund and the Long-Term Management Fund will be transferred to the designated Long-Term Steward of the land for use in addressing future Catastrophic Events or land management requirements once all monitoring has been completed, and all Credits from the Bank have been Debited.

**F. Real Estate Provisions:** The Bank Sponsor is responsible for providing sufficient legal protection by means of a Protection Document (i.e. conservation easement, declaration of restrictions, etc.) of the Bank to insure that all requirements of the MBI are fulfilled and the Bank is protected in perpetuity consistent with the terms and conditions set out in the MBI (through the "Protection Document"). The Protection Document must be approved in writing by the IRT before it is recorded. The Bank Sponsor shall provide a copy of the recorded Protection Document to the IRT prior to sale or transfer of any Credits. The Protection Document shall be recorded in the chain of title for the Bank lands and must, among other things, ensure the right of ingress and egress for the Bank Sponsor, IRT, and Long-Term Steward of the Bank Site. A template Declaration of Restrictions is attached in Exhibit J, and it is preferred that this be used as the Protection Document.

The IRT agrees that, if a Protection Document approved by the IRT is recorded over the property with a non-profit conservation organization or government conservation organization named as Easement Holder, credit yield for the proposed mitigation may be considered by the IRT to have increased value of up to 5%. The IRT will consider the nature of the Protection Document, the identity of the easement holder, potential facilitated implementation and enforcement, reduction in potential of future disturbance such as government taking or eminent domain actions, and other such factors. Any proposed changes in Credit composition must be proposed and justified in the MBI and approved by the IRT.

A copy of the recorded Protection Document shall be provided to the Corps and DEQ within thirty (30) days of recording. Notwithstanding anything in this MBI or any related documents or Agreements, such as the Bank Development Plan, in NO EVENT can any Credits be released or sold or debited or credited until the Chair(s) receives proof of recording of approved Protection Document on the portions of the Bank over which Credits are sought. Such Protection Documents may not be altered, amended, terminated or vacated without written approval of the Chairs of the IRT.

The Bank Sponsor, Easement Holder, or Long-Term Steward shall provide the Chair(s) with sixty (60) day advance notice before any action is proposed to be taken to modify the Protection Document, management plan, or long-term protection mechanism, EXCEPT THAT the Protection Document, management plan or long-term protection mechanism MAY NOT be

altered, amended, modified, vacated or terminated in whole or in part in any way without the express written approval of the IRT, acting through the Chair(s).

## **V. OPERATION OF THE BANK**

**A. Service Area:** The Bank is established to provide Mitigation to compensate for impacts to Waters of the United States and/or State Waters, including wetlands, within the service area depicted on the excerpt of the most current version of the National Watershed Boundary Dataset as shown in Exhibit K. This service area shall include Hydrologic Units 03010101 (except Montgomery, Roanoke, and Botetourt Counties), 03010103, 03010104, and 03010105 within the State of Virginia. The Service Area of the Bank is depicted in Exhibit K. At the sole discretion of the IRT, acting through its Chair, the Bank may be used to compensate for impacts outside this Service Area on a case-by-case basis through project specific permit decisions.

**F. Schedule of Credit Availability:** Upon submittal of all appropriate documentation by the Bank Sponsor, and subsequent approval by the IRT, acting through the Chair(s), the IRT Chair(s) will provide in writing the release of Credits to the Bank Sponsor in accordance with Corps regulations (33 CFR 332.8(g)(2) and (o)(8) and the following schedule:

1. Up to fifteen percent (15%) of anticipated Credits (excluding Credits derived from Stream Buffer Preservation) per phase/site plus 100% of Stream Buffer Preservation and 100% of Adjustment Factor Credits for livestock exclusion and watershed preservation may be available for Debiting upon implementation of the following:
  - (a) Approval of this MBI and the Bank Development Plan described in Exhibit D;
  - (b) Implementing (including funding) Financial Assurances necessary to secure the initial release of credits (Exhibit F) as well as establishing Escrow Accounts for the Monitoring and Maintenance, Long-Term Management, and Catastrophic Event Funds (Exhibits G-I);
  - (d) Securing the Property interests necessary for the Mitigation Bank (e.g. fee simple acquisition, easement, necessary or appropriate property interests) in its entirety (not just one or more phases of the bank site);
  - (e) A copy of the approved and recorded Protection Document that protects the site in perpetuity is provided to the IRT (Exhibit J);
  - (f) A schedule is submitted to the IRT that shows that the initial (i.e., Phase I) physical and biological improvements will be completed no later than the first full growing season following initial Debiting from the Bank;
  - (g) A Long-Term Management and Maintenance Plan approved by the IRT acting through the Chair(s) (Exhibit Q); and
  - (h) An electronic version of this MBI, the BDP, and associated exhibits is submitted to the IRT Chair(s) and/or uploaded to the Corps Regional Internet Bank Information Tracking System (RIBITS); and
  - (i) An updated title insurance policy that indicates no new encumbrances have been placed on the Property.

The first phase of the bank site should be large enough to offset this initial Credit release. The first phase shall begin construction within one year of the first sale or transfer of the initially released Credits. No additional releases of Credits will take place until a sufficient amount of compensatory mitigation meets success criteria to offset all debits from this initial release of Credits.

2. Wetland Credits beyond the initial release of Credits (typically 15%) can be released by the IRT, (acting through the Chair(s)) on the following schedule: 75% of potential Credits (90% cumulative) shall be released upon meeting the success criteria in Exhibit M, Section V 4.(a), (b), (c), (d), and (h) for intended forested wetlands. The remaining Credits for intended forested wetland areas (10% or 100% cumulative), shall be released at Monitoring Year 5 upon meeting success criteria (g) for wetlands.
3. Stream Buffer Enhancement/Restoration/Reestablishment Area: For those Credits associated with buffer area enhancement/restoration/reestablishment activities (as defined in Section II), release of Credits beyond the initial 15% will adhere to the following schedule:
  - a. Construction release:
    - o 10% (25% cumulative) upon completion of all initial physical and biological improvements made pursuant to the mitigation plan
  - b. After year 1 (the first year) following completion of construction:
    - o 65% of total credits (90% cumulative) derived from the area meeting success standards in Exhibit M, Section 3 a-c and subject to IRT approval, acting through the Chair(s) of the first year monitoring report
  - c. The final 10% of total credits (100% cumulative) shall be released when all success criteria (3a-d in Exhibit M) are met.
4. Stream Restoration and Enhancement: For those credits associated with stream restoration and enhancement activities (defined in Section II), release of credits beyond the initial 15% will adhere to the following schedule:
  - a. Construction release:
    - o 10% (25% cumulative) upon completion of all initial physical and biological improvements made pursuant to the mitigation plan
  - b. After Year 1 following completion of construction:
    - o if a bankfull event has not occurred this year and all success criteria are met and channel is stable, 10% credit release (35% cumulative)
    - o if a bankfull event has occurred this year, channel is stable and all success criteria are met, 25% credit release ( 50% cumulative).
  - c. After year 2 following completion of construction:

- if a bankfull event has not occurred and all success criteria are met and channel is stable, 10% credit release (up to 45% cumulative)
- if a bankfull event has occurred this year, channel is stable and all success criteria are met, 25% credit release (up to 75% cumulative).
- d. After year 3 following completion of construction:
  - if a bankfull event has not occurred and all success criteria are met and channel is stable, 10% credit release (up to 55% cumulative)
  - if a bankfull event has occurred this year, channel is stable and all success criteria are met, 25% credit release (up to 100% cumulative).
- e. After year 4:
  - if a bankfull event has not occurred and all success criteria are met and channel is stable, 10% credit release (up to 65% cumulative)
  - if a bankfull event has occurred this year, channel is stable and all success criteria are met, 25% credit release not to exceed the remaining available credits (up to 100% cumulative).
- f. No additional credits will be released after Year 4 until a bankfull event occurs. For each additional monitoring year, no more than 25% of total credits will be released not to exceed the remaining available credits if a bankfull event occurs that year, the channel is stable, and all success criteria are met.

## **VII. AUTHORITIES OF THE INTERAGENCY REVIEW TEAM (IRT)**

A. The agencies represented on the IRT provide regulatory oversight of the Sponsor's activities related to establishing and carrying out provisions of this MBI. Where this document refers to an action by the IRT, it is intended that the IRT acts through its chairs.

B. The agencies represented on the IRT will review and provide comments on all project plans, proposed additions of land to the Bank, annual monitoring reports, credit review reports, contingency plans, and necessary permits for the Bank. Comments, if any, on the final construction documents for each phase as described in Exhibit D, additions of land to the Bank, monitoring reports, Credit review reports, contingency plans, and permits for Mitigation Bank construction and operation will be reviewed within thirty (30) calendar days from the date that the Corps provides a complete submittal to the IRT. The Corps Chair shall coordinate such review with members of the IRT so that comments can be provided within the ninety (90) day comment period.

C. The Corps Chair or the Corps RIBITS Administrator will update the credit ledger for the bank in RIBITS, within thirty (30) days of receiving reports or credit ledgers, unless the Bank Sponsor updates the Bank ledger in RIBITS.

D. The agencies represented on the IRT will review and approve reports on evaluation of Success Criteria prior to approving Credits within each phase of the Bank.

E. The agencies represented on the IRT may conduct compliance inspections, as necessary to verify Credits available in the Mitigation Bank, assess site conditions, and recommend corrective measures (if any) to the Bank Sponsor, until the terms and conditions of the BDP have been determined to be fully satisfied or until all Credits have been sold, whichever is later.

## VIII. OTHER PROVISIONS

C. Dispute Resolution: Resolution of disputes regarding this MBI shall be in accordance with the Department of the Army and Environmental Protection Agency regulations entitled "Compensatory Mitigation for Aquatic Resources" (33 CFR Parts 325 and 332 and 40 CFR Part 230). Disputes related to satisfaction of Success Criteria may be subject to independent review from government agencies or academia that is not part of the IRT. The IRT will evaluate such review and conclusions or recommendations and determine whether the success criteria are met.

D. Validity, Modification, and Termination of the MBI: This MBI will become valid on the latter date of either the Bank Sponsor's signature or the signature of the representative of the Corps and DEQ.

This MBI may only be amended or modified with the written approval of all signatory parties. In the event the Bank Sponsor determines that modifications must be made in the BDP to ensure successful establishment of the Bank, the Bank Sponsor shall submit a written request for such modification to the IRT for approval. The IRT will not unreasonably withhold or delay such approval. Documentation of implemented modifications shall be made consistent with this agreement.

Any proposed modification to the Bank or Bank site, including but not limited to addition of lands to the Bank, establishment of additional Bank sites, additions of different types of mitigation Credit resources (e.g. stream or wetland Credits), or alteration of success criteria will require IRT review and likely amendment of the approved MBI to comply with Corps regulations at 33 CFR 332.8(g) and will likely require use of the most current approved MBI template in use in Virginia.

Any of the IRT members may terminate his/her participation upon written notification to all signatory parties without invalidating this MBI. Participation of the IRT member seeking termination will end thirty (30) days after such written notification.

This MBI (or any approved mitigation plans under an Umbrella Mitigation Bank Instrument) may be considered null and void by the IRT if the physical improvements identified in the mitigation plan (excluding the recordation of real estate instruments) have not been completed within five (5) years of the last date of signature or approval. The Bank Sponsor may reinitiate the process by submitting a new prospectus (or mitigation plan for a Bank Site under an Umbrella Banking Instrument) consistent with the latest MBI template approved for use in Virginia.

**E. Specific Language of MBI Shall Guide Interpretation of Exhibits:** Any documents executed in accordance with this MBI shall be consistent with the terms herein. The parties agree that MBI exhibits and associated documents will be interpreted in accordance with the terms, conditions, and requirements of MBI.

**K. Binding:** This MBI shall be immediately valid upon execution by the Bank Sponsor and the Corps, even though it may not, at that time or in the future, be executed by the other potential parties to this MBI. The execution of this MBI by EPA, DEQ, or the USFWS, or other agency, city or county shall grant the executing agency's approval to the proposed Mitigation Bank, under the terms and conditions contained in this MBI, even though all or any of the other potential parties have not signed the MBI. Execution does not signify the agencies' approval of the use of Credits from this Bank in connection with any specific permit or project.

**L. Transfer of Mitigation Responsibility:** For projects in the service area of this Mitigation Bank that require Department of the Army authorization pursuant to Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, or the Virginia Water Protection Permit Regulations (9 VAC 25-210), if such authorizations require compensatory mitigation, credits from this Mitigation Bank may be used to satisfy those compensatory mitigation requirements if the Bank Sponsor and the Permittee reach a mutually acceptable financial agreement, subject to Corps and/or DEQ written approval on a case-by-case basis. **Notwithstanding anything in this Agreement, the Corps and DEQ have sole discretion over how many and what type of Credits are required for permits issued by such agency and whether Credits from this Bank are acceptable as mitigation.**

Upon approval of a proposal by the Permittee to secure mitigation bank Credits through a contract with this Mitigation Bank to satisfy all or part of the compensatory mitigation requirements for that Department of the Army and/or DEQ permit, a fully executed contract between the Bank Sponsor and the Permittee shall act to transfer to this Mitigation Bank the responsibility for the required compensatory mitigation to be provided, in perpetuity, by the Mitigation Bank in accordance with the permit.

IN WITNESS WHEREOF the Sponsor and the various IRT agencies have executed this Instrument on the date herein below last written.

  
Bank Sponsor, Authorized Agent

8-19-17  
Date

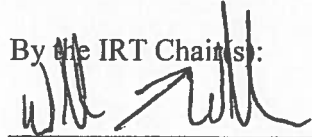
  
Land Owner(s)

8-18-17  
Date

IN WITNESS WHEREOF the Sponsor and the various IRT agencies have executed this Instrument on the date herein below last written.

INTERAGENCY REVIEW TEAM

By the IRT Chair(s):



U.S Army Corps of Engineers, Norfolk District

By: William T. Wallen

Its: Chief, Regulatory Branch

8/3/2017

Date

IN WITNESS WHEREOF the Sponsor and the various IRT agencies have executed this Instrument on the date herein below last written.

INTERAGENCY REVIEW TEAM

By the IRT Chair(s):



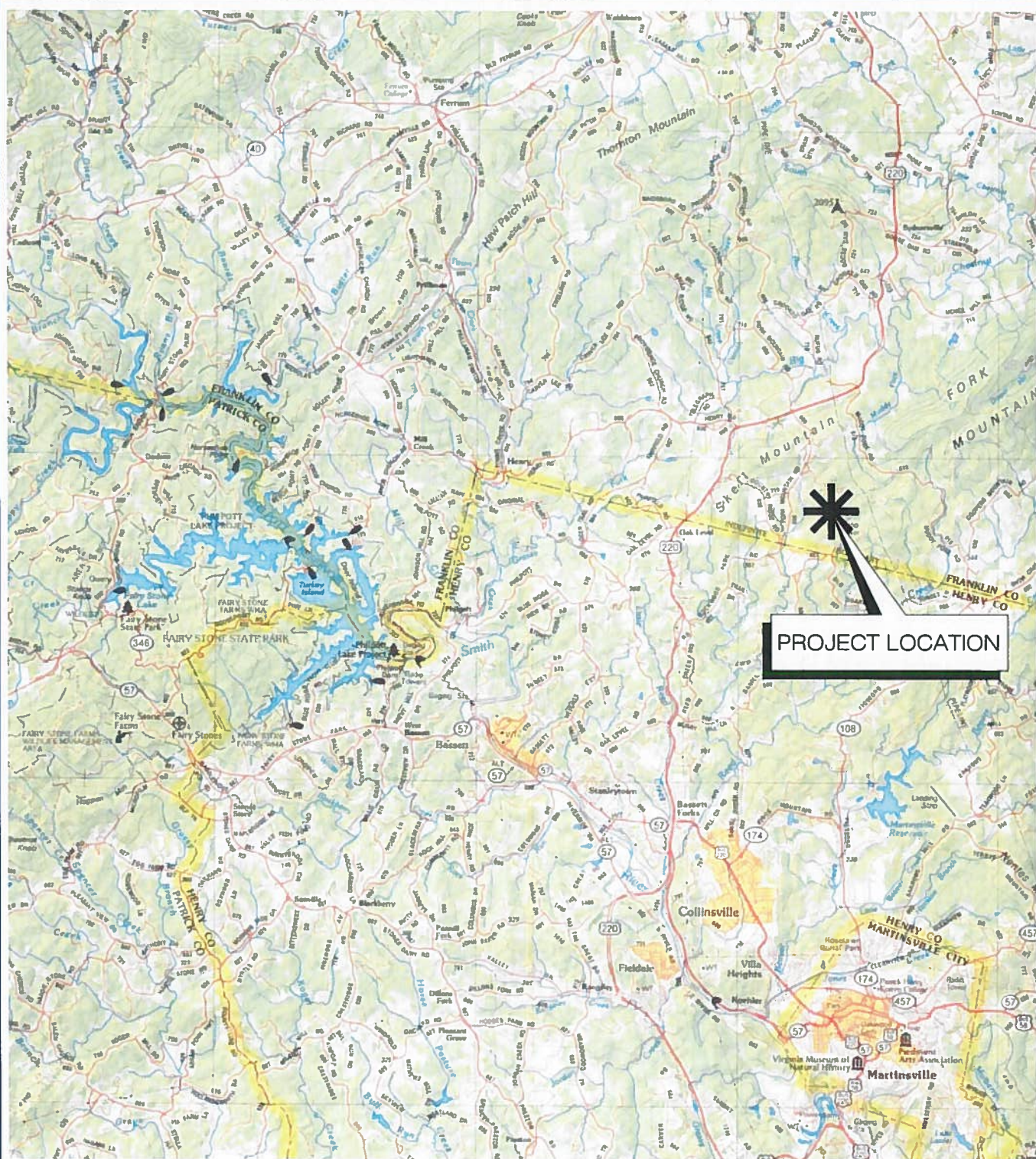
Virginia Department of Environmental Quality

08/16/2017  
Date

By: DAVID L. DAVIS

Its: Dir., Ofc. of Wetlands & Stream Protection

**Exhibit A**  
**Vicinity and Location Maps**



2.4 MILES 1.2 0 MILES 2.4 MILES  
SCALE: 1 INCH = 2.4 MILES



**WILLIAMSBURG  
ENVIRONMENTAL  
GROUP, INC.**

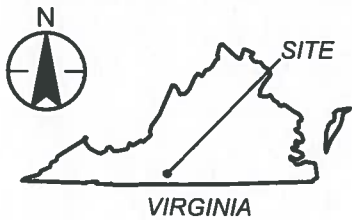
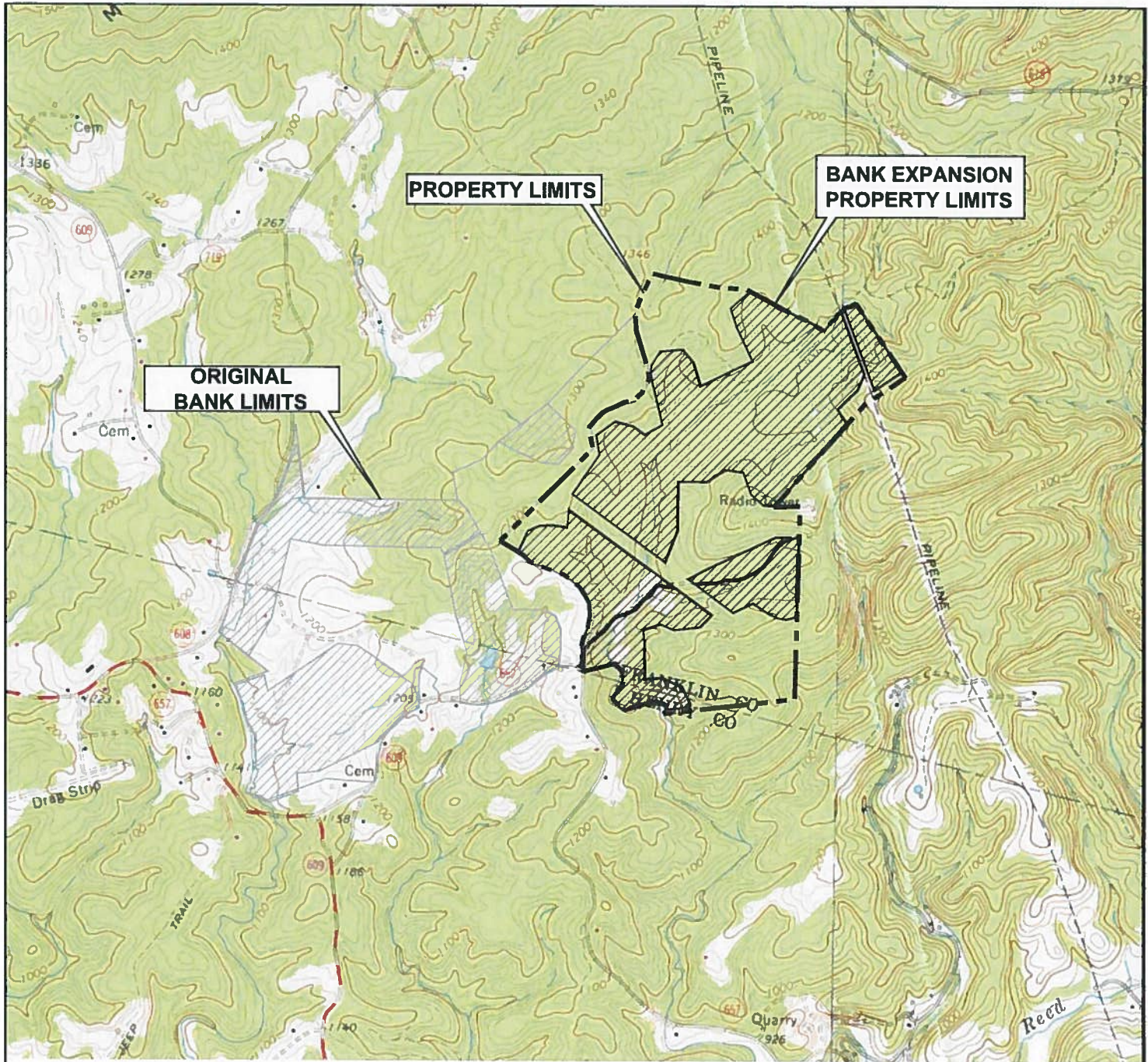
**FIGURE 1**

**PROJECT VICINITY MAP**  
ROANOKE RIVER WETLANDS AND STREAM  
MITIGATION BANK - ADDITIONAL PARCELS

SOURCE: VIRGINIA ATLAS AND GAZETTEER,  
DeLORME MAPPING CO., 2005.

FRANKLIN CO., VA  
AND HENRY CO., VA

MAY 2014



Latitude: 36° 48' 37.9" N  
Longitude: 79° 53' 41.5" W

Image courtesy of the U.S.G.S. 7.5 Minute Series Topographic Map, Bassett, VA Quadrangle and Snow Creek, VA, 1965 (Revised 1978).



1011 Boulder Springs Drive, Suite 225  
Richmond, VA 23225  
PHONE: (804) 267-3474 FAX: (804) 267-3470

FOR:

ROANOKE RIVER WETLANDS AND  
STREAM MITIGATION BANK  
FRANKLIN AND HENRY CO.  
VIRGINIA

JOB NUMBER:  
203441891

DRAWN BY:  
MAC

CHECKED BY:

APPROVED BY:

MK

FIGURE:

EXHIBIT A-2  
SITE LOCATION MAP

DATE:  
2016-08-11

FILEPATH: U:\203441891\07\_cad\41891\_locvic\_20160811.dwg|slook|Aug 11, 2016 at 12:50|Layout: Loc and Vic Maps

**Exhibit B**  
**Master Plan**

**Exhibit C**  
**Plat and Title Search &**  
**Property Assessment & Warranty**  
**Checklist**

***Property Assessment & Warranty Checklist (If items are applicable to this Bank):***

- ☒ *Submittal and approval of the instrument confirming Sponsor or Bank Ownership of Bank lands or necessary interests in Bank land; may include land owner's grant, to the Bank Sponsor or Long-Term Steward of interests and access rights to the land. This instrument should demonstrate that the Bank Sponsor has the right to perform and protect in perpetuity all work, functions and values under the MBI. Such instrument must be recorded in the Bank land chain of title and must identify contact information for the Bank Sponsor or Long-term Steward. (file name = ExhC-Deed\_of\_Easement 2014)*
- ☐ *Protective document recorded by the landowner(s). (will use Exhibit J Declaration of Restrictions)*
- ☐ *N/A An executed conservation easement that includes a legal description prepared by a registered surveyor incorporating the conservation easement area and the proper recording fee. (will use Exhibit J Declaration of Restrictions)*
- ☒ *A title insurance policy insuring the Bank (title binder with filename = ExhC-Title Binder - 20140730)*
- ☒ *A 50-year ownership history of the Bank lands including copies of all documents that affect any interest in the Bank lands, including but not limited to easements, licenses, encumbrances, encroachments, mineral rights. (covered under the title insurance policy)*
- ☒ *Subordination of any property interest (e.g., mineral rights, mortgages, easements) which interferes with or is in conflict with establishment and protection of the mitigation Bank and/or Protection Document. (file name = ExhC-Subordination\_Agreement\_2014)*
- ☒ *A written statement and warranty from the owner of the Bank lands that there are no easements, encumbrances, or transfers of the property, in whole or in part, not disclosed in the title search. (covered under the title insurance policy)*
- ☐ *N/A A written statement from the owner of the Bank lands identifying any monies received, or expected to be received, for natural resources protection, enhancement, or restoration within the proposed Bank lands from federal or state agencies, grants, or non-profits. Acceptance and use of such funds does not prevent the approval of a mitigation Bank, however, credits may be adjusted accordingly as Credits will not be given under the MBI for functions, services or values that have already been considered as the basis for compensation or mitigation under any other program .*
- ☐ *N/A If the owner of the Bank lands is not an individual, documentation that the person executing the Protection Document has the authority to convey land on behalf of the company. (not necessary because owner of the additional lands is two individuals, both whom will sign documents)*

*This information is necessary to determine if the bank sponsor has authority to enter into the wetland mitigation banking agreement and conservation easement, and to determine if there are defects in the property which would interfere with the establishment and protection of the mitigation bank. When the mitigation banking agreement and conservation easement are signed, they will be recorded by the DEQ with the county register of deeds.*

☒ *Documents affecting the Bank lands, including the Protection Document must grant the Long-Term Steward enforcement authority concurrent with commencement of his/her/its responsibilities.*

☒ *If the Bank Sponsor is a company, documentation that the person signing the MBI has the authority to sign. (No. 10 from JPA – Contractor Certification). (file name = ExhC-Certificate\_of\_Incumbancy-signed.)*

CERTIFICATION: I am hereby requesting approval of a mitigation Bank by the IRT, DEQ, VMRC, U.S. Army Corps of Engineers, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the Bank lands at reasonable times to inspect and photograph site conditions, review proposals to approve the Bank and after Bank establishment, to determine compliance with the MBI.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

---

Bank Sponsor

---

Date

**Notary Seal**

**Exhibit G**

**ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC  
MAINTENANCE AND MONITORING FUND**

**ESCROW AGREEMENT**

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and among ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC, a Virginia limited liability company ("Sponsor") whose address is 5209 Center Street, Williamsburg, VA 23188, and KAUFMAN & CANOLES, P.C. ("Escrow Agent") whose address is 4801 Courthouse Street, Suite 300, Williamsburg, VA 23188, and this Escrow Agreement contains the agreements among the parties specifically described herein, and governs distribution of escrow funds associated with the Mitigation Banking Instrument as described below:

**STATEMENT OF PURPOSE**

Sponsor has entered into the Roanoke River Wetlands and Stream Mitigation Banking Instrument ("MBI") with the Interagency Review Team ("IRT"), which consists of the U.S. Army Corps of Engineers, Norfolk District ("Corps"); the Environmental Protection Agency ("EPA"); the U.S. Fish and Wildlife Service ("FWS"); the Virginia Department of Environmental Quality ("DEQ"), the Virginia Department of Game and Inland Fisheries ("VDGIF"), the Virginia Department of Conservation and Recreation ("DCR"), and the Virginia Department of Forestry ("VDOF"), represented by its Chair, the Corps, dated as of \_\_\_\_\_, 2010, governing the design, construction, monitoring, maintenance and use of a wetlands and stream mitigation bank on a parcel of land consisting of approximately 419.82 acres (182.0 acres original + 237.82 acres Bank expansion) located in Franklin and Henry Counties, Virginia, as more particularly described in the Mitigation Banking Instrument (the "Property"). The Sponsor desires to have the Escrow Agent hold certain funds in escrow and distribute said funds resulting from the sale of Mitigation Credits as required and detailed under the Mitigation Banking Instrument and pursuant to the terms of this Escrow Agreement.

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. **Appointment.** The Sponsor hereby appoints the law firm of Kaufman & Canoles, P.C. as Escrow Agent hereunder, and by its execution thereof, Kaufman & Canoles, P.C. agrees to accept such appointment.
2. **Mitigation Sale Proceeds.** Sponsor shall cause Eight Percent (8%) of funds from any mitigation sales relating to the Property to be disbursed, delivered and deposited in a maintenance and monitoring fund escrow with the Escrow Agent as required by Section IV.D. of the Mitigation Banking Instrument. The Escrow Agent agrees to immediately deposit said funds in an escrow account at a federally insured depository institution, and to

hold and disburse said funds, and any interest earned thereon (together the "Mitigation Sales Proceeds") as hereinafter provided.

3. Notification of Receipt of Mitigation Sales Proceeds. Upon receipt of any Mitigation Sales Proceeds, Escrow Agent shall provide written confirmation to the Sponsor of receipt of such funds. The Sponsor shall forward copies of this confirmation to the Corps and DEQ

4. Release of Funds. The Escrow Agent may only disburse funds in accordance with a written and signed request of the Sponsor or the Long-Term Steward (if applicable), and the IRT.

5. Notification of Disbursement of Funds from Escrow Account. The Sponsor, the IRT, acting through its Chair, and/or the Long-Term Steward defined in the Mitigation Banking Instrument (if one has been designated) shall only request that Escrow Agent disburse said funds in accordance with the criteria established in Sections IV.D of the Mitigation Banking Instrument as necessary. The Escrow Agent agrees that it shall only honor requests for disbursements that are made in writing or via electronic mail. A copy of each request for disbursement shall be simultaneously sent by the Sponsor, IRT, or Long-Term Steward to the Escrow Agent.

Upon receiving written approval from the IRT Chair, including email approval, for any requested disbursement, the Escrow Agent shall release said funds requested by the Sponsor, the IRT, or the Long-Term Steward (if one has been designated) within five (5) days of receiving said approval.

6. Instructions. Escrow Agent is instructed and directed by the parties to comply with Section IV.D and E and Section VI. F, H, I, and J. of the Mitigation Banking Instrument and by its execution hereof agrees to comply with Section IV.D and E and Section VI. F, H, I, and J of the Mitigation Banking Instrument.

7. Duties of Escrow Agent/Exculpation. The Sponsor agrees that in performing any of its duties under this Agreement, that Escrow Agent shall not be liable to the Sponsor for any loss, costs or damage that it may incur as a result of its service as Escrow Agent hereunder, except for any loss, costs or damage arising out of its willful default or gross negligence. Accordingly, the Escrow Agent shall not incur any liability with respect to (a) any action taken or admitted to be taken in good faith with respect to any questions relating to its duties and responsibilities, or (b) to any action taken or admitted to be taken in reliance upon any document, including any written notice of instruction provided for in this Escrow Agreement, not only as to its due execution and validity and effectiveness of its provisions, but also as to the truth and accuracy of any information contained therein, which Escrow Agent shall in good faith believes to be genuine, believes to have been signed or presented by a proper person or persons and, in good faith believes to conform with the provisions of this Escrow Agreement. All requests for disbursement requires written approval by the IRT, so disbursements made without such approval are by definition willful or negligent and cannot

provide exculpation to the Escrow Agent. Note that this Agreement does not affect Sponsor's responsibility, obligation and liability under the MBI.

8. Indemnification. The Sponsor hereby agrees to indemnify and hold harmless the Escrow Agent and any and all of its partners, agents and/or employees acting hereunder, against any and all losses, claims, damages, liabilities and expenses, including, without limitation, reasonable attorneys' fees and costs, which may be imposed upon or incurred by Escrow Agent in connection with its service as Escrow Agent, unless such losses, claims, damages, liabilities and expenses are the result of Escrow Agent's willful default or gross negligence.

9. Disputes. In an event of dispute between the Sponsor and the IRT, the Escrow Agent shall comply with the IRT, and the Sponsor agrees to defer to the IRT. With regard to disputes not involving the IRT, where circumstances warrant, the Escrow Agent may pay or interplead into the custody of any court of competent jurisdiction all money or Property held by it under the terms of this Escrow Agreement, together with such legal pleadings as it deems appropriate and immediately thereupon it shall be discharged from all duties and responsibilities hereunder.

10. Amendment. This Agreement may not be altered or amended except by a writing signed by all parties hereto.

11. Termination. Escrow Agent reserves the right to terminate this Escrow Agreement upon sixty (60) days written notice to Sponsor. Escrow Agent shall tender all money or property held by it under the terms of the Escrow Agreement to a successor escrow agent designated by Sponsor. Should Sponsor fail to designate a successor escrow agent within ninety (90) days of notice of termination from Escrow Agent, Sponsor agrees that Escrow Agent may (i) designate a successor escrow agent and tender all money or property held by it under the terms of the Escrow Agreement to the said designated successor escrow agent, or (ii) interplead all money or property held by it as permitted by paragraph 8 above.

12. Miscellaneous.

a. Severability. In the event that any provisions or portions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity and enforceability of the remaining provisions or portions hereof shall not be affected thereby.

b. Headings. The headings, subheadings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

c. Assignability. This Agreement may not be assigned by any party without the express written consent of all parties hereto.

d. Successors/Assigns. This Agreement shall be binding upon the parties, their agents, successors, permitted assigns, executors, heirs, administrators, and personal representatives and any other person or entity claiming a right on or through their behalf.

e. Governing Law. This Agreement shall be subject to and governed by the laws of the Commonwealth of Virginia.

f. Counterparts. This Agreement may be executed in separate counterparts, and taken together shall have the same effect as if all signatures were contained on the same page. Facsimile signatures shall be given the same effect as originals.

g. Defined Terms. Capitalized terms used in this Escrow Agreement and not otherwise defined shall have the meanings given them in the Mitigation Banking Instrument.

13. Revocation, Modification/Termination. In accordance with regulations at 33 CFR 332.3(n)(5), the Escrow Agent shall provide notice to the IRT through the Chair(s) at least 120 days in advance of any planned termination or revocation of financial assurances. Revocation or termination of financial assurances is subject to approval by the IRT.

IN WITNESS WHEREOF, the undersigned have caused this instrument to be duly executed and sealed as of the day and year first above written.

SPONSOR:

**ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC**  
a Virginia limited liability company

By: \_\_\_\_\_

ESCROW AGENT:

**KAUFMAN & CANOLES, P.C.**

By: \_\_\_\_\_

**Exhibit H**

**ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC  
LONG TERM MANAGEMENT FUND**

**ESCROW AGREEMENT**

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and among ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC, a Virginia limited liability company ("Sponsor") whose address is 5209 Center Street, Williamsburg, VA 23188, and KAUFMAN & CANOLES, P.C. ("Escrow Agent") whose address is 4801 Courthouse Street, Suite 300, Williamsburg, VA 23188, and this Escrow Agreement contains the agreements among the parties specifically described herein, and governs distribution of escrow funds associated with the Mitigation Banking Instrument as described below:

**STATEMENT OF PURPOSE**

Sponsor has entered into the Roanoke River Wetlands and Stream Mitigation Banking Instrument ("MBI") with the Interagency Review Team ("IRT"), which consists of the U.S. Army Corps of Engineers, Norfolk District ("Corps"); the Environmental Protection Agency ("EPA"); the U.S. Fish and Wildlife Service ("FWS"); the Virginia Department of Environmental Quality ("DEQ"), the Virginia Department of Game and Inland Fisheries ("VDGIF"), the Virginia Department of Conservation and Recreation ("DCR"), and the Virginia Department of Forestry ("VDOF"), represented by its Chair, the Corps, dated as of \_\_\_\_\_, 2010, governing the design, construction, monitoring, maintenance and use of a wetlands and stream mitigation bank on a parcel of land consisting of approximately 419.82 acres (182.0 acres original + 237.82 acres Bank expansion) located in Franklin and Henry Counties, Virginia, as more particularly described in the Mitigation Banking Instrument (the "Property"). The Sponsor desires to have the Escrow Agent hold certain funds in escrow and distribute said funds resulting from the sale of Mitigation Credits as required and detailed under the Mitigation Banking Instrument and pursuant to the terms of this Escrow Agreement.

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. **Appointment.** The Sponsor hereby appoints the law firm of Kaufman & Canoles, P.C. as Escrow Agent hereunder, and by its execution thereof, Kaufman & Canoles, P.C. agrees to accept such appointment.
2. **Mitigation Sale Proceeds.** Sponsor shall cause 0.95% of funds from any mitigation sales relating to the Property to be disbursed, delivered and deposited in a long term management fund escrow with the Escrow Agent as required by Section IV.D. of the Mitigation Banking Instrument. The Escrow Agent agrees to immediately deposit said funds in an escrow account at a federally insured depository institution, and to hold and disburse

said funds, and any interest earned thereon (together the "Mitigation Sales Proceeds") as hereinafter provided.

3. Notification of Receipt of Mitigation Sales Proceeds. Upon receipt of any Mitigation Sales Proceeds, Escrow Agent shall provide written confirmation to the Sponsor of receipt of such funds. The Sponsor shall forward copies of this confirmation to the Corps and DEQ

4. Release of Funds. The Escrow Agent may only disburse funds in accordance with a written and signed request of the Sponsor or the Long-Term Steward (if applicable), and the IRT.

5. Notification of Disbursement of Funds from Escrow Account. The Sponsor, the IRT, acting through its Chair, and/or the Long-Term Steward defined in the Mitigation Banking Instrument (if one has been designated) shall only request that Escrow Agent disburse said funds in accordance with the criteria established in Sections IV.D of the Mitigation Banking Instrument as necessary. The Escrow Agent agrees that it shall only honor requests for disbursements that are made in writing or via electronic mail. A copy of each request for disbursement shall be simultaneously sent by the Sponsor, IRT, or Long-Term Steward to: the Escrow Agent.

Upon receiving written approval from the IRT Chair, including email approval, for any requested disbursement, the Escrow Agent shall release said funds requested by the Sponsor, the IRT, or the Long-Term Steward (if one has been designated) within five (5) days of receiving said approval.

6. Instructions. Escrow Agent is instructed and directed by the parties to comply with Section IV.D and E and Section VI. F, H, I, and J. of the Mitigation Banking Instrument and by its execution hereof agrees to comply with Section IV.D and E and Section VI. F, H, I, and J of the Mitigation Banking Instrument.

7. Duties of Escrow Agent/Exculpation. The Sponsor agrees that in performing any of its duties under this Agreement, that Escrow Agent shall not be liable to the Sponsor for any loss, costs or damage that it may incur as a result of its service as Escrow Agent hereunder, except for any loss, costs or damage arising out of its willful default or gross negligence. Accordingly, the Escrow Agent shall not incur any liability with respect to (a) any action taken or admitted to be taken in good faith with respect to any questions relating to its duties and responsibilities, or (b) to any action taken or admitted to be taken in reliance upon any document, including any written notice of instruction provided for in this Escrow Agreement, not only as to its due execution and validity and effectiveness of its provisions, but also as to the truth and accuracy of any information contained therein, which Escrow Agent shall in good faith believes to be genuine, believes to have been signed or presented by a proper person or persons and, in good faith believes to conform with the provisions of this Escrow Agreement. All requests for disbursement requires written approval by the IRT, so disbursements made without such approval are by definition willful or negligent and cannot provide exculpation to the Escrow Agent. Note that this Agreement does not affect

Sponsor's responsibility, obligation and liability under the MBI.

8. Indemnification. The Sponsor hereby agrees to indemnify and hold harmless the Escrow Agent and any and all of its partners, agents and/or employees acting hereunder, against any and all losses, claims, damages, liabilities and expenses, including, without limitation, reasonable attorneys' fees and costs, which may be imposed upon or incurred by Escrow Agent in connection with its service as Escrow Agent, unless such losses, claims, damages, liabilities and expenses are the result of Escrow Agent's willful default or gross negligence.

9. Disputes. In an event of dispute between the Sponsor and the IRT, the Escrow Agent shall comply with the IRT, and the Sponsor agrees to defer to the IRT. With regard to disputes not involving the IRT, where circumstances warrant, the Escrow Agent may pay or interplead into the custody of any court of competent jurisdiction all money or Property held by it under the terms of this Escrow Agreement, together with such legal pleadings as it deems appropriate and immediately thereupon it shall be discharged from all duties and responsibilities hereunder.

10. Amendment. This Agreement may not be altered or amended except by a writing signed by all parties hereto.

11. Termination. Escrow Agent reserves the right to terminate this Escrow Agreement upon sixty (60) days written notice to Sponsor. Escrow Agent shall tender all money or property held by it under the terms of the Escrow Agreement to a successor escrow agent designated by Sponsor. Should Sponsor fail to designate a successor escrow agent within ninety (90) days of notice of termination from Escrow Agent, Sponsor agrees that Escrow Agent may (i) designate a successor escrow agent and tender all money or property held by it under the terms of the Escrow Agreement to the said designated successor escrow agent, or (ii) interplead all money or property held by it as permitted by paragraph 8 above.

12. Miscellaneous.

a. Severability. In the event that any provisions or portions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity and enforceability of the remaining provisions or portions hereof shall not be affected thereby.

b. Headings. The headings, subheadings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

c. Assignability. This Agreement may not be assigned by any party without the express written consent of all parties hereto.

d. Successors/Assigns. This Agreement shall be binding upon the parties, their agents, successors, permitted assigns, executors, heirs, administrators, and personal representatives and any other person or entity claiming a right on or through their behalf.

e. Governing Law. This Agreement shall be subject to and governed by the laws of the Commonwealth of Virginia.

**Exhibit I**

**ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC  
CATASTROPHIC EVENT FUND**

**ESCROW AGREEMENT**

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and among ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC, a Virginia limited liability company ("Sponsor") whose address is 5209 Center Street, Williamsburg, VA 23188, and KAUFMAN & CANOLES, P.C. ("Escrow Agent") whose address is 4801 Courthouse Street, Suite 300, Williamsburg, VA 23188, and this Escrow Agreement contains the agreements among the parties specifically described herein, and governs distribution of escrow funds associated with the Mitigation Banking Instrument as described below:

**STATEMENT OF PURPOSE**

Sponsor has entered into the Roanoke River Wetlands and Stream Mitigation Banking Instrument ("MBI") with the Interagency Review Team ("IRT"), which consists of the U.S. Army Corps of Engineers, Norfolk District ("Corps"); the Environmental Protection Agency ("EPA"); the U.S. Fish and Wildlife Service ("FWS"); the Virginia Department of Environmental Quality ("DEQ"), the Virginia Department of Game and Inland Fisheries ("VDGIF"), the Virginia Department of Conservation and Recreation ("DCR"), and the Virginia Department of Forestry ("VDOF"), represented by its Chair, the Corps, dated as of \_\_\_\_\_, 2010, governing the design, construction, monitoring, maintenance and use of a wetlands and stream mitigation bank on a parcel of land consisting of approximately 419.82 acres (182.0 acres original + 237.82 acres Bank expansion) located in Franklin and Henry Counties, Virginia, as more particularly described in the Mitigation Banking Instrument (the "Property"). The Sponsor desires to have the Escrow Agent hold certain funds in escrow and distribute said funds resulting from the sale of Mitigation Credits as required and detailed under the Mitigation Banking Instrument and pursuant to the terms of this Escrow Agreement.

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. **Appointment.** The Sponsor hereby appoints the law firm of Kaufman & Canoles, P.C. as Escrow Agent hereunder, and by its execution thereof, Kaufman & Canoles, P.C. agrees to accept such appointment.
2. **Mitigation Sale Proceeds.** Sponsor shall cause 1.34% of funds from any mitigation sales relating to the Property to be disbursed, delivered and deposited in a catastrophic event fund escrow with the Escrow Agent as required by Section IV.D. of the Mitigation Banking Instrument. The Escrow Agent agrees to immediately deposit said funds in an escrow account at a federally insured depository institution, and to hold and disburse

said funds, and any interest earned thereon (together the "Mitigation Sales Proceeds") as hereinafter provided.

3. Notification of Receipt of Mitigation Sales Proceeds. Upon receipt of any Mitigation Sales Proceeds, Escrow Agent shall provide written confirmation to the Sponsor of receipt of such funds. The Sponsor shall forward copies of this confirmation to the Corps and DEQ

4. Release of Funds. The Escrow Agent may only disburse funds in accordance with a written and signed request of the Sponsor or the Long-Term Steward (if applicable), and the IRT.

5. Notification of Disbursement of Funds from Escrow Account. The Sponsor, the IRT, acting through its Chair, and/or the Long-Term Steward defined in the Mitigation Banking Instrument (if one has been designated) shall only request that Escrow Agent disburse said funds in accordance with the criteria established in Sections IV.D. of the Mitigation Banking Instrument as necessary. The Escrow Agent agrees that it shall only honor requests for disbursements that are made in writing or via electronic mail. A copy of each request for disbursement shall be simultaneously sent by the Sponsor, IRT, or Long-Term Steward to the Escrow Agent.

Upon receiving written approval from the IRT Chair, including email approval, for any requested disbursement, the Escrow Agent shall release said funds requested by the Sponsor, the IRT, or the Long-Term Steward (if one has been designated) within five (5) days of receiving said approval.

6. Instructions. Escrow Agent is instructed and directed by the parties to comply with Section IV.D and E and Section VI. F, H, I, and J. of the Mitigation Banking Instrument and by its execution hereof agrees to comply with Section IV.D and E and Section VI. F, H, I, and J of the Mitigation Banking Instrument.

7. Duties of Escrow Agent/Exculpation. The Sponsor agrees that in performing any of its duties under this Agreement, that Escrow Agent shall not be liable to the Sponsor for any loss, costs or damage that it may incur as a result of its service as Escrow Agent hereunder, except for any loss, costs or damage arising out of its willful default or gross negligence. Accordingly, the Escrow Agent shall not incur any liability with respect to (a) any action taken or admitted to be taken in good faith with respect to any questions relating to its duties and responsibilities, or (b) to any action taken or admitted to be taken in reliance upon any document, including any written notice of instruction provided for in this Escrow Agreement, not only as to its due execution and validity and effectiveness of its provisions, but also as to the truth and accuracy of any information contained therein, which Escrow Agent shall in good faith believe to be genuine, believe to have been signed or presented by a proper person or persons and, in good faith believe to conform with the provisions of this Escrow Agreement. All requests for disbursement requires written approval by the IRT, so disbursements made without such approval are by definition willful or negligent and cannot provide exculpation to the Escrow Agent. Note that this Agreement does not affect

Sponsor's responsibility, obligation and liability under the MBI.

8. Indemnification. The Sponsor hereby agrees to indemnify and hold harmless the Escrow Agent and any and all of its partners, agents and/or employees acting hereunder, against any and all losses, claims, damages, liabilities and expenses, including, without limitation, reasonable attorneys' fees and costs, which may be imposed upon or incurred by Escrow Agent in connection with its service as Escrow Agent, unless such losses, claims, damages, liabilities and expenses are the result of Escrow Agent's willful default or gross negligence.

9. Disputes. In an event of dispute between the Sponsor and the IRT, the Escrow Agent shall comply with the IRT, and the Sponsor agrees to defer to the IRT. With regard to disputes not involving the IRT, where circumstances warrant, the Escrow Agent may pay or interplead into the custody of any court of competent jurisdiction all money or Property held by it under the terms of this Escrow Agreement, together with such legal pleadings as it deems appropriate and immediately thereupon it shall be discharged from all duties and responsibilities hereunder.

10. Amendment. This Agreement may not be altered or amended except by a writing signed by all parties hereto.

11. Termination. Escrow Agent reserves the right to terminate this Escrow Agreement upon sixty (60) days written notice to Sponsor. Escrow Agent shall tender all money or property held by it under the terms of the Escrow Agreement to a successor escrow agent designated by Sponsor. Should Sponsor fail to designate a successor escrow agent within ninety (90) days of notice of termination from Escrow Agent, Sponsor agrees that Escrow Agent may (i) designate a successor escrow agent and tender all money or property held by it under the terms of the Escrow Agreement to the said designated successor escrow agent, or (ii) interplead all money or property held by it as permitted by paragraph 8 above.

12. Miscellaneous.

a. Severability. In the event that any provisions or portions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity and enforceability of the remaining provisions or portions hereof shall not be affected thereby.

b. Headings. The headings, subheadings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

c. Assignability. This Agreement may not be assigned by any party without the express written consent of all parties hereto.

d. Successors/Assigns. This Agreement shall be binding upon the parties, their agents, successors, permitted assigns, executors, heirs, administrators, and personal representatives and any other person or entity claiming a right on or through their behalf.

e. Governing Law. This Agreement shall be subject to and governed by the laws of the Commonwealth of Virginia.

f. Counterparts. This Agreement may be executed in separate counterparts, and taken together shall have the same effect as if all signatures were contained on the same page. Facsimile signatures shall be given the same effect as originals.

g. Defined Terms. Capitalized terms used in this Escrow Agreement and not otherwise defined shall have the meanings given them in the Mitigation Banking Instrument.

13. Revocation, Modification/Termination. In accordance with regulations at 33 CFR 332.3(n)(5), the Escrow Agent shall provide notice to the IRT through the Chair(s) at least 120 days in advance of any planned termination or revocation of financial assurances. Revocation or termination of financial assurances is subject to approval by the IRT.

IN WITNESS WHEREOF, the undersigned have caused this instrument to be duly executed and sealed as of the day and year first above written.

SPONSOR:

**ROANOKE RIVER WETLANDS AND STREAM MITIGATION BANK, LLC**  
a Virginia limited liability company

By: \_\_\_\_\_

ESCROW AGENT:

**KAUFMAN & CANOLES, P.C.**

By: \_\_\_\_\_

**Exhibit J**

Prepared by/after recording return to:  
Kaufman & Canoles, P.C.  
4801 Courthouse Street, Suite 300  
Williamsburg, VA 23188  
(757) 259-3800

Henry County Tax Map No.: Portion of 242655000  
Franklin County Tax Map Nos.: Portion(s) of 1190006700; 1190002900; 1190003000

**DECLARATION OF RESTRICTIONS**

**OF**

**ROANOKE RIVER WETLANDS AND STREAM MIGITATION BANK, LLC**

THIS DECLARATION OF RESTRICTIVE COVENANTS is made this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by **DANNY L. THOMPSON** and **MARTHA H. THOMPSON**, husband and wife (the "Owners"), to be indexed as Grantors, provides as follows:

**Recitals:**

WHEREAS, Danny L. Thompson and Martha H. Thompson are the owners of certain property more fully described on EXHIBIT A attached hereto ("Parcel 1"); it being a portion of the same property conveyed to Danny L. Thompson and Martha H. Thompson, husband and wife, by deed dated February 19, 2013 from Hopkins, L.L.C., said deed recorded in the Clerk's Office of the Circuit Court of Franklin County, Virginia ("Franklin County Clerk's Office") in Deed Book 1028, page 1756, and the Clerk's Office of the Circuit Court of Henry County, Virginia (the "Henry County Clerk's Office"), as Instrument Number 130000622;

WHEREAS, Danny L. Thompson and Martha H. Thompson are the owners of certain property more fully described on EXHIBIT B attached hereto ("Parcel 2"); it being a portion of the same property conveyed to Danny L. Thompson and Martha H. Thompson, husband and wife, by deed dated January 10, 2013 from James W. Elliott, Special Commissioner, said deed recorded in the Franklin County Clerk's Office in Deed Book 1026, page 2761;

WHEREAS, Danny L. Thompson and Martha H. Thompson are the owners of certain property more fully described on EXHIBIT C attached hereto ("Parcel 3" and together with Parcel 1 and Parcel 2, collectively, the "Property"); it being the same property conveyed to Danny L. Thompson and Martha H. Thompson, husband and wife, by deed dated April 12, 2013 from Benton Bray Blackard and Dathne Blackard Barbour, Co-Administrators C.T.A. of the Estate of Benton S. Blackard and Co-Trustees of the Benton S. Blackard Trust, said deed recorded in the Franklin County Clerk's Office as Instrument Number 130003046;

WHEREAS, Owners desire to comply with the conditions of the Mitigation Banking Instrument (the "MBI") between Roanoke River Wetlands and Stream Mitigation Bank, LLC and the Interagency Review Team ("IRT"), which consists of the U.S. Army Corps of Engineers (the "Corps") U.S. Environmental Protection Agency ("EPA") the U.S. Fish and Wildlife Service ("FWS"), the Virginia Department of Environmental Quality ("DEQ"), Virginia Department of Conservation and Recreation ("DCR"), the Virginia Department of Forestry ("VDOF"), and the Virginia Department of Game and Inland Fisheries ("DGIF"), dated May 2011, by imposing these restrictive covenants on portions of the Property that may consist of preserved wetlands and streams, restored wetlands and streams, enhanced wetlands and streams, created wetlands, uplands, riparian buffers, and areas to be converted into wetlands.

WHEREAS, Owners desire to impose restrictive covenants in perpetuity expressing Owners' intent to preserve 237.82 acres of the Property (the "Mitigation Area") as shown on the plat attached as EXHIBIT D, and as described as the Roanoke River Wetlands and Stream Mitigation Bank in perpetuity as detailed below. These covenants are imposed by the Owners freely and voluntarily.

WHEREAS, the Property may contain land, functions, values and services that serve as compensation and mitigation for impacts to state waters and Waters of the U. S. that were permitted by the Corps and the DEQ;

WHEREAS, on account of the fact that the Property may serve as compensation for such above- referenced impacts, the Corps and the DEQ are third-party beneficiaries under this Declaration of Restrictive Covenants; and

NOW THEREFORE THIS DECLARATION WITNESSETH: Owners do hereby declare, covenant and agree, for themselves and their successors and assigns, that said Mitigation Area shall hereafter be held, leased, transferred and sold subject to the following conditions and restrictions which shall run with the land and be binding in perpetuity and forever on all parties and persons claiming under them.

**Covenants and Restrictions:**

1. **Covenants.** The Mitigation Area shall be preserved in perpetuity in its natural state, by prohibiting the following activities:

1.1 Destruction or alteration of the area shown on EXHIBIT D, except:

a) Alteration necessary to construct the Mitigation Area and associated improvements, such as dams, outlet structures and spillways, nature trails, and interpretive stations, proposed to be built by Roanoke River Wetlands and Stream Mitigation Bank, LLC, or its successors and/or assigns, for the Roanoke River Wetlands and Stream Mitigation Bank as approved in the MBI;

b) Alterations necessary to ensure the success of the Roanoke River Wetlands and Stream Mitigation Bank including monitoring, reconstruction or maintenance of the constructed Mitigation Area as approved by the IRT;

c) With approval of the IRT, alterations to construct structures such as walkways, boardwalks, foot trails, wildlife observation or management structures, benches, observation decks, picnic tables, fence posts (spaced in a manner so that neither the posts nor the fence itself prevents the natural movement of water), fish ladders, and ecological, biological, hydrological or chemical monitoring, observation or management equipment including, without limitation, monitoring wells, water control weirs or interpretive stations, or other structures approved by the IRT, provided that

(i) Any such structures permit, and do not impede, the natural movement of water, and

(ii) Such facilities are constructed and maintained in accordance with all applicable federal and state laws;

d) Addition of signs constructed in public right of ways by or on behalf of the Virginia Department of Transportation or other governmental agencies;

e) Removal of vegetation (where not precluded by federal or state law) when approved by the IRT and conducted for

(i) Removal of noxious or invasive plants, or

(ii) Public safety purposes

f) Planting of native species of wetlands plants by hand for aesthetic landscaping or screening purposes and where not prohibited by the MBI; and

g) Alteration as reasonably necessary to comply with state or federal law or appropriate court order.

1.2 Construction, maintenance or placement of any structures or fills including but not limited to buildings, building pads, mobile homes, other than those which currently exist.

1.3 Ditching, draining, diking, damming, filling, excavating, grading, plowing, flooding/ponding, mining or drilling, placing of trash and yard debris or removing/adding topsoil, sand, or other materials (except as may be necessary on a case-by-case basis with prior written approval by the IRT), other than any authorized under the MBI.

1.4 Permitting livestock to graze, inhabit or otherwise enter the preservation area.

1.5 **Harvesting, cutting, logging, and pruning of trees and plants, or using fertilizers and spraying with biocides other than what is authorized by the MBI (except as may be necessary on a case-by-case basis with prior approval by the IRT).**

1.6 **Utilizing a non-reporting Nationwide Permit or State Program General Permit under Section 404 of the Clean Water Act or state general permits under VWPP regulations to impact any Water of the U.S., or any State Waters on the Property. Notification shall be required for the use of any Nationwide Permit, State Program General Permit, Regional Permit, or state general permit under VWPP regulations.**

1.7 **Further subdividing the area shown on Exhibit C.**

2. **Restrictions.** The Property (as defined above, and intended here to refer specifically to the lands surrounding the Mitigation Area) shall be restricted as follows:

2.1. **No livestock shall be permitted upon the Property, including without limitation the grazing, pasturage, storing, running or other activities requiring or involving the presence of livestock on the Property.**

2.2. **The Owners, their successors and or assigns may obtain relief from the provisions of this paragraph restricting the activities of livestock outside the Mitigation Area upon erection and maintenance of a fence preventing livestock from entering into the Mitigation Area.**

3. **Amendment.** This Declaration and the covenants contained herein shall not hereafter be altered in any respect without the express written approval and consent of the Owners or their successor in interest and the IRT. The Owners or their successor may apply to the IRT for vacation or modification of this declaration; however, after recording, these restrictive covenants may only be amended or vacated by a recorded document signed by the signatory members of the IRT and the Owners or their successor in interest.

4. **Notice.** The Corps and DEQ shall be provided with a 60-day advance written notice of any legal action concerning these restrictive covenants or of any action to extinguish, void or modify the restrictive covenants in whole or in part. These restrictive covenants are intended to survive foreclosure, bankruptcy, condemnation or judgments affecting this Property.

5. **Compliance Inspections and Enforcement.** The IRT, and its authorized agents and the designated Long Term Steward of the Mitigation Bank, shall have the right to enter and go on the Property to inspect the Mitigation Area and take actions necessary to verify compliance with these restrictive covenants. The restrictive covenants herein shall be enforceable by any proceeding at law or in equity or administrative proceeding by the IRT, including the Corps or DEQ or citizens. Failure by any agency (or owner) to enforce any covenant or restriction contained herein shall in no event be deemed a waiver of the rights to do so thereafter.

6. **Provision.** Should an easement, right, or lease on or to the Property not shown on the survey or listed in Exhibit A or Exhibit B, and prior in time and recording to these restrictive covenants, or unrecorded, be exercised in such a manner that it conflicts with or voids the prohibited uses of the Mitigation Area set out in these restrictive covenants, then the Bank Sponsor of the Bank shall be responsible for providing alternative conservation mitigation in such amounts and of such service and function as the Corps, DEQ, IRT or any enforcer of these restrictive covenants shall determine in accordance with the Clean Water Act and/or Sections 62.1-44.15:20-23 of the Code of Virginia.

7. **Eminent Domain**

7.1 If any Property is condemned or taken pursuant to governmental action or other exercise of the power of eminent domain (a "Taking"), or if Bank Sponsor or Owner of the property receives notice of a potential Taking, Bank Sponsor will notify IRT in writing.

7.2 Bank Sponsor has the obligation to pursue an award for the value of any Lost Mitigation (as defined in subsection (c)). If Bank Sponsor or Owner of the property receives an award or any type of compensation from or related to the Taking that represents the value of any Lost Mitigation, then Bank Sponsor will use that award, net of the cost and expense incurred by Bank Sponsor or Owner of the Property to pursue the award, to replace the Lost Mitigation, in accordance with instructions and approval of the IRT.

7.3 For purposes of this Section, "Lost Mitigation" means those Functions and Values (as hereafter defined) lost in the Taking for which credits have been sold by Bank Sponsor at the time of the Taking. "Functions and Values" means preservation, enhancement and restoration of streams, wetlands and other aquatic resources.

7.4 It is the intention of Bank Sponsor and IRT that (i) this section requires Bank Sponsor to replace lost Functions and Values only when Bank Sponsor has, as of the time of the Taking, sold the credits derived from the lost Functions and Values and (ii) Bank Sponsor's obligation under those circumstances is limited to the award Bank Sponsor or Owner of the property receives for the value of the lost Functions and Values, net of the cost and expense incurred by Bank Sponsor or Owner of the Property to pursue the award.

8. **Litigation in Court.** In any state court action, Corps reserves the right to be represented by the U.S. Department of Justice and/or to remove a legal action affecting jurisdictional waters of the U.S. to the United States Federal District court in the district where the land lies.

9. **Separability Provision.** The provisions hereof shall be deemed individual and severable and the invalidity or partial invalidity or unenforceability of any one provision or

any portion thereof shall not affect the validity or enforceability of any other provision thereof.

**10. Consent of Lender and Trustee.**

10.1 The Lyons State Bank is the noteholder of obligations which are secured by, among other things, a deed of trust dated March 12, 2013, from Danny L. Thompson and Martha H. Thompson to Dale Profitt, trustee, recorded in the Franklin County Clerk's Office in Deed Book 1029 at page 1925 and recorded in the Henry County Clerk's Office as Instrument Number 130001961, which said deed of trust grants a lien on Parcel 1 and Parcel 2.

10.2 The Lyons State Bank is the noteholder of obligations which are secured by, among other things, a deed of trust dated April 15, 2013, from Danny L. Thompson and Martha H. Thompson to Dale Profitt, trustee, recorded in the Franklin County Clerk's Office in Deed Book 1031, page 1476 as Instrument Number 130003047, which said deed of trust grants a lien on Parcel 3.

10.3 The trustees of the above-described deeds of trust joins in execution of this Declaration for purposes of agreeing to subordination of the liens of the aforesaid deeds of trust to the terms and conditions of this Declaration.

*Remainder of page intentionally blank.*

WITNESS the following signature the day and year first above written.

\_\_\_\_\_(SEAL)  
DANNY L. THOMPSON

STATE OF VIRGINIA,  
CITY/COUNTY OF \_\_\_\_\_, to-wit:

The foregoing document was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_,  
2014, by DANNY L. THOMPSON, who is personally known to me or produced a valid form  
of proof of identification.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

My registration number is \_\_\_\_\_

\_\_\_\_\_(SEAL)  
MARTHA H. THOMPSON

STATE OF VIRGINIA

CITY/COUNTY OF \_\_\_\_\_, to-wit:

The foregoing document was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2014, by MARTHA H. THOMPSON, who is personally known to me or produced a valid form of proof of identification.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

My registration number is \_\_\_\_\_

TRUSTEE:

By: \_\_\_\_\_ (SEAL)

Name: \_\_\_\_\_

STATE OF \_\_\_\_\_,  
CITY/COUNTY OF \_\_\_\_\_, to-wit:

The foregoing document was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2014, by \_\_\_\_\_ as trustee, who is personally known to me or produced a valid form of proof of identification.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

Registration Number: \_\_\_\_\_

**EXHIBIT A**

**Parcel 1**

The land referred to herein below is situated in the County of Franklin and the County of Henry, Commonwealth of Virginia, and is described as follows:

ALL that certain tract or parcel of real estate belonging, situate and being mostly in the Snow Creek Magisterial District of Franklin County, Virginia and partially in the Reed Creek Magisterial District of Henry County, Virginia, containing 197.0273 acres, more or less, as shown on that certain plat of survey by Larry G. Rakes, L.S., a copy of said survey being of record in the Office of the Clerk of the Circuit Court of Franklin County, Virginia, in Deed Book 768, page 960 and in Deed Book 1028, page 1759, being of record in the Office of the Clerk of the Circuit Court of Henry County, Virginia, a part of Instrument #130000622.

**EXHIBIT B**

**Parcel 2**

The land referenced to herein below is situated in the County of Franklin, Commonwealth of Virginia, and is described as follows:

ALL that certain tract or parcel of real estate thereunto belonging, situate and being in the Snow Creek Magisterial District of Franklin County, Virginia, lying near County Route 618, containing 83 acres, more or less, nevertheless this being a conveyance in gross by the boundary and not by the acre.

TOGETHER WITH a perpetual right of way easement for access over the 68 acre parcel of land presently owned by Danny L. Thompson and Martha H. Thompson, which was conveyed to the said Danny L. Thompson and Martha H. Thompson by Deed of record in the Clerk's Office of the Circuit Court of Franklin County, Virginia, in Deed Book 925, page 706, to and from the presently existing State Road.

**EXHIBIT C**

**Parcel 3**

ALL that certain tract or parcel of real estate belonging, situate and being mostly in the Snow Creek Magisterial District of Franklin County, Virginia, containing 97.702 acres, more or less, as shown on that certain plat of survey by J.A. Gustin, L.S., dated April 22, 1985, a copy of said survey recorded in the Clerk's Office of the Circuit Court of Franklin County, Virginia, in Deed Book 1031, page 1470.

TOGETHER WITH a perpetual right of way easement for access to the above described property over Parcel 2 of land presently owned by Danny L. Thompson and Martha H. Thompson, which was conveyed to the said Danny L. Thompson and Martha H. Thompson by Deed of record in the Clerk's Office of the Circuit Court of Franklin County, Virginia, in Deed Book 1026, page 2761, and over that 68 acre parcel of land presently owned by Danny L. Thompson and Martha H. Thompson by Deed of record in the Clerk's Office of the Circuit Court of Franklin County, Virginia, in Deed Book 925, page 706, to and from the presently existing State Road to provide access to the above described property.

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**EXHIBIT D**

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Plat Showing Mitigation Bank Easement Containing 237.82 Acres in Favor of  
Roanoke River Wetlands and Stream Mitigation Bank, LLC  
Located in Franklin and Henry Counties, Virginia

## **Exhibit L**

### **Crediting and Debiting Procedure for the Bank**

#### **I. Impact Debit Values**

The U.S. Army Corps of Engineers ("Corps") and the Virginia Department of Environmental Quality ("DEQ") shall determine the appropriate and specific number of Mitigation Credits necessary to be Debited against the Bank to achieve no net loss of Functions and values during the permit process based upon their use of methods determined to be appropriate by said agencies, of the impact areas and the status of this Bank

#### **II. Mitigation Credit Creation**

##### **A. Pre- Construction**

Mitigation Credits shall be created by development of a Mitigation area in substantial conformance with the Mitigation Site Plan described in Exhibit D (BDP) of the Banking Instrument. The number of Credits created by this Mitigation Bank shall initially be based upon the Bank Development Plan.

Stream credits are derived using the USM or current stream assessment and credit methodology. Credits may then be adjusted by the IRT if as-built conditions differ substantially from the areas projected in the Mitigation Site Plan projections as determined by the IRT acting through the IRT Chair(s). Adjustments may include changes in the number of available Credits, credit composition, or minimum credit ratios associated with use of the Bank. Each acre of land area within the Bank described in Exhibit B shall be designated by the Mitigation Site Plan as to which types of land forms, as classified by the Cowardin System, shall be restored or created by grading and/or water impoundment. The number of Credits created by this plan shall be based on community or cover type and the use of the Unified Stream Methodology.

The exact number of Credits created is determined by the Mitigation Site Plan and adjusted based upon final as-built conditions. The number of Credits is estimated to be: zero (0) wetland credits and 20,866 (original) + 6,767 (Bank expansion) stream credits.

The IRT agrees that if a conservation easement approved by the IRT is recorded over the property with a Long-Term Steward approved by the IRT named as easement holder, credit composition will be revised so that 5% less land area is required to generate a mitigation credit than would be required under a restrictive covenant. *The conservation organization must meet the following criteria:*

- *May hold easements which are perpetual in duration in accordance with the Virginia Conservation Easement Act (has had a principal office in the Commonwealth of Virginia for at least five years,*
- *Is a charitable corporation exempt from taxation pursuant to 26USCA 501 (c)(3), and a "qualified organization" and an "eligible donee" under Section 170(h)(3) of the internal Revenue Code and Treasury Regulation §1.170A-14(c)(1), whose purposes include those specified in the Virginia Conservation Easement Act, and has had a principal office in the Commonwealth of Virginia for at least five years,*

Any proposed changes in credit composition must be proposed in the MBI. A copy of the recorded document shall be provided to the Corps within thirty (30) days of recordation.

B. Post-Construction

During or after the fifth growing season, the Chair(s), acting in consultation with the IRT, may assess the Functions and values of this ecological system (or when requested to do so by the Bank Sponsor). The IRT may issue a written determination to the Bank Sponsor that due to the demonstration of successful performance, the number of Credits attributable to this Mitigation Bank may be modified to reflect the Functions and values provided.

III. Accounting Procedures

- A. The Bank Sponsor shall comply with the accounting procedures described in Section VI.D of the Banking Instrument and the quantitative assessment of Credits and Debits for permitted impacts as described herein.
- B. In no event shall the cumulative total area of impacts to wetlands permitted to use Credits from the Mitigation Bank exceed the total area of wetlands created by this Mitigation Bank.
- C. If the Mitigation Bank is constructed in Phases, the accounting of Credits shall duly reflect this phasing of work.

STREAM MITIGATION CREDIT COMPOSITION **				
Proposed mitigation activity	Original MBI	Bank Expansion	Original MBI	Bank Expansion
	Linear Feet/Acres		Proposed Credit	
Stream Restoration (LF)	5,576 LF	92 LF	5,576	92
Stream Enhancement with Instream Structures (LF)	989 LF	0 LF	297	0
Stream Enhancement (LF)	4,328 LF	0 LF	1,078	0
Riparian Areas – Preservation (LF or Ac)	4,393 LF / 1.7 Ac	22,894 LF/ 220.8 Ac	42	4,758
Riparian Areas – Planting/Re-Establishment (Ac)	153.9 Ac	0	8,546	0
Adjustment Factors (LF)			5,327	1,917
Other - add intermediate values here			N/A	N/A
5% Conservation Easement			N/A	N/A
Total for Entire Bank	38,272 LF / 376.4 Ac		27,633	
Percent of credits involving preservation only				24%

\*\* Linear feet and credits are subject to change based on the results of the as-built report, boundary surveys, delineations, and monitoring reports

**Exhibit Q  
Long-Term Management Plan**

**Long-term Management Plan  
For  
The Roanoke River Wetlands and Stream Mitigation Bank**

<b>I</b>	<b>Introduction.....</b>	<b>1</b>
<b>A</b>	<b>Purpose of Establishment.....</b>	<b>1</b>
<b>B</b>	<b>Purpose of this Long-term Management Plan .....</b>	<b>1</b>
<b>C</b>	<b>Long Term Steward and Responsibilities.....</b>	<b>1</b>
<b>D</b>	<b>Eminent Domain.....</b>	<b>2</b>
<b>II</b>	<b>Property Description .....</b>	<b>2</b>
<b>A</b>	<b>Setting and Location .....</b>	<b>2</b>
<b>B</b>	<b>History and Land Use .....</b>	<b>3</b>
<b>C</b>	<b>Cultural Resources .....</b>	<b>3</b>
<b>D</b>	<b>Hydrology and Topography.....</b>	<b>3</b>
<b>E</b>	<b>Soils.....</b>	<b>4</b>
<b>F</b>	<b>Existing Easements .....</b>	<b>4</b>
<b>G</b>	<b>Adjacent Land Uses .....</b>	<b>6</b>
<b>III</b>	<b>Habitat and Species Descriptions .....</b>	<b>6</b>
<b>A</b>	<b>Baseline Description of Biological Resources on Bank Site .....</b>	<b>6</b>
<b>B</b>	<b>Summary of Bank Development Plan.....</b>	<b>6</b>
<b>C</b>	<b>Endangered and Threatened Species .....</b>	<b>8</b>
<b>D</b>	<b>Rare Species and Species of Special Concern .....</b>	<b>8</b>
<b>IV</b>	<b>Management and Monitoring .....</b>	<b>8</b>
<b>A</b>	<b>Biological Resources .....</b>	<b>9</b>
	<b>Element A.1 Waters of the U.S., including wetlands .....</b>	<b>9</b>
	<b>Element A.2 Threatened/Endangered Plant Species Monitoring .....</b>	<b>10</b>
	<b>Element A.3 Threatened/Endangered Animal Species Monitoring.....</b>	<b>10</b>
	<b>Element A.4 Invasive Species.....</b>	<b>10</b>
	<b>Element A.5 Vegetation Management.....</b>	<b>11</b>
<b>B</b>	<b>Security, Safety, and Public Access.....</b>	<b>11</b>
	<b>Element B.1 – Trash and trespass .....</b>	<b>11</b>
	<b>Element B.2 – Fire Hazard Reduction .....</b>	<b>12</b>
<b>C</b>	<b>Infrastructure and Facilities .....</b>	<b>12</b>
	<b>Element C.1 Fences, Gates, Signage, Crossings, and Property Boundaries.....</b>	<b>12</b>
	<b>Element C.2 Berms, Structures, and Roads .....</b>	<b>12</b>
<b>D</b>	<b>Reporting and Administration.....</b>	<b>13</b>
	<b>Element D.1 – Annual Report.....</b>	<b>13</b>
<b>V</b>	<b>Transfer, Replacement, Amendments, and Notices.....</b>	<b>13</b>
<b>A</b>	<b>Transfer .....</b>	<b>13</b>
<b>B</b>	<b>Replacement.....</b>	<b>13</b>
<b>C</b>	<b>Amendments .....</b>	<b>14</b>

**D** Notices ..... 14

**VI Funding and Task Prioritization** ..... 15

**A** Funding ..... 15

**B** Task Prioritization..... 16

**C** Enforcement..... 16

**Appendix A: Invasive Species Fact Sheets**

**Appendix B: The Property Analysis Record (PAR)**

## **Long-Term Management Plan**

### **I Introduction**

#### **A Purpose of Establishment**

The Roanoke River Wetlands and Stream Mitigation Bank ("Bank") was established by the Mitigation Bank Instrument ("MBI") to compensate for unavoidable impacts to, and to conserve and to protect aquatic resources and associated buffers. The Bank (Site) property includes 9.88 acres of aquatic resources including 3.7 (original) + 1.58 (Bank Expansion) acres of non-tidal wetlands and 0.64 (original) + 0 (Bank Expansion) acres of open waters, 5,576 (original) + 92 (Bank Expansion) linear feet of restored stream channel, 5,317 (original) + 0 (Bank Expansion) linear feet of enhanced stream channel, 1.7 (original) + 220.8 (Bank Expansion) acres of preserved riparian buffer and 153.9 (original) + 0 (Bank Expansion) acres of restored or enhanced riparian buffer. The IRT Agencies include the Norfolk District of the U.S. Army Corps of Engineers, Region 3 of the U.S. Environmental Protection Agency, the Virginia Field Office of the U.S. Fish and Wildlife Service, the Virginia Department of Environmental Quality, the Virginia Department of Game and Inland Fisheries, the Virginia Department of Conservation and Recreation, and the Virginia Department of Forestry. Terms used in this management plan have the same meaning as defined in the MBI.

#### **B Purpose of this Long-term Management Plan**

The purpose of this long-term management plan is to ensure the Bank or Bank Site is managed, monitored, and maintained in perpetuity. This management plan establishes objectives, priorities and tasks to monitor, manage, maintain and report on the aquatic resources, associated buffers, covered species and covered habitat on the Bank. This management plan is a binding and enforceable instrument, implemented in accordance with the MBI and the real estate protection instrument (conservation easement or declaration of restrictions) covering the Bank property.

#### **C Long Term Steward and Responsibilities**

The Long-Term Steward is Roanoke River Wetlands and Stream Mitigation Bank, LLC. The Long-Term Steward, and subsequent Long-Term Stewards upon transfer, shall implement this long-term management plan, managing and monitoring the bank property in perpetuity to preserve its habitat and conservation values in accordance with the Bank's MBI, conservation easement and/or declaration of restrictions, and the long-term management plan. Long-term management tasks shall be funded through the Long-Term Management Fund. The Long-Term Steward must maintain a copy of the MBI and all addendums associated with the Bank (Site) including all deed restrictions and easements. The Long-Term Steward shall be responsible for providing an annual report to the IRT detailing the time period covered, an itemized account of the management tasks and total amount expended. Any subsequent grading, or alteration of the site's hydrology and/or topography

by the Long-Term Steward or its representatives must be approved by the IRT and the necessary permits, such as a Section 404 permit and/or Virginia Water Protection Permit, must be obtained if required.

#### **D Eminent Domain**

- (a) If any Property is condemned or taken pursuant to governmental action or other exercise of the power of eminent domain (a "Taking"), or if the Long Term Steward or Owner of the property receives notice of a potential Taking, Long Term Steward will notify IRT in writing.
- (b) Long Term Steward has the obligation to pursue an award for the value of any Lost Mitigation (as defined in subsection (c)). If Long Term Steward or Owner of the property receives an award or any type of compensation from or related to the Taking that represents the value of any Lost Mitigation, then Long Term Steward will use that award, net of the cost and expense incurred by Long Term Steward or Owner of the property to pursue the award, to replace the Lost Mitigation, in accordance with instructions and approval of the IRT.
- (c) For purposes of this Section, "Lost Mitigation" means those Functions and Values (as hereafter defined) lost in the Taking for which credits have been sold by Bank Sponsor at the time of the Taking. "Functions and Values" means preservation, enhancement and restoration of streams, wetlands and other aquatic resources.
- (d) It is the intention of Long Term Steward and IRT that (i) this section requires Long Term Steward to replace lost Functions and Values only when Bank Sponsor has, as of the time of the Taking, sold the credits derived from the lost Functions and Values and (ii) Long Term Steward's obligation under those circumstances is limited to the award Long Term Steward or Owner of the property receives for the value of the lost Functions and Values, net of the cost and expense incurred by Long Term Steward or Owner of the property to pursue the award.

## **II Property Description**

#### **A Setting and Location**

The Bank (*Site*) is located at 170 Pawnee Lane, Henry County, in the Commonwealth of Virginia. The original Bank is designated as Parcel No. 075870005 in Henry County and Tax Map No. 1190006401, 1190006400, and 1190006500 in Franklin County. The Bank expansion is designated as Tax Map No. 1190002900, 1190003000, and 1190006700 in Franklin County. The Property is shown on the general vicinity map (Exhibit A in MBI) and the bank property map (Exhibit B & C in MBI). The Bank consists of 182.0 acres within the approximate 358.87 acre original property + 237.82 acres within the approximate 392.95 acre Bank expansion property. The general vicinity map shows the Bank location in relation to cities, towns, or major roads, and other distinguishable landmarks. The Bank property map shows the Bank property boundaries on a topographic map.

## **B History and Land Use**

The land in the general area of the Bank site currently consists of open farm pasture with grassy knolls, steep slopes, and wooded areas centered on the existing stream channels along with mature hardwood forests, late-succession regenerative growth, and upland pine stands. Aerial photographs dating to 1948 show the southern and western portions of the site as open, indicating livestock grazing has been taking place on the site for over 60 years. Within the last 20 to 25 years, the northeast area of the site has been cleared of trees providing more land for grazing. The Bank Expansion Property in the eastern portion of the site has primarily remained forested with upland areas used for timber. The last timber harvest was approximately 8-10 years ago and this area is currently undergoing regenerative growth.

The context of the site is rural in character with scattered rural residential homes and large tracts of woodland. The area is currently zoned Agricultural Forestry/Rural Residential and the Comprehensive Plans for Henry and Franklin Counties do not indicate any future development or change in zoning within the immediate area.

## **C Cultural Resources**

The review of The Virginia Department of Historic Resources (DHR) Data Sharing System (DSS) revealed three archaeological resources within a 2-mile search radius of the Bank site originally. One additional archaeological resource was identified within a 2-mile search radius of the Bank Expansion Property. The four resources are located near the Bank, outside the property limits. There are no known archaeological or architectural resources within the proposed Bank site.

At the request of the DHR, an Identification (Phase 1) archaeological survey was conducted in all areas that may be affected by construction related activities on the original Bank. The results are included in Exhibit R of the approved MBI. The area identified for stream work on the Bank Expansion Property is located in a disturbed / low probability area and therefore did not warrant a Phase 1 survey.

## **D Hydrology and Topography**

Most stream channels are first order, originating on the Property while the largest streams (S1 on the original Bank and R3 on the Bank Expansion Property) are third order streams. The few wetlands located on site are primarily driven by surface flows and are located in low lying areas of the site. Elevations on site range from approximately 1,480 feet in the uplands of the Bank Expansion Property ~~of the site~~ to approximately 1,080 feet along the main tributary as it exits the southern portion of the original Bank site. The site is characterized by steep to moderate slopes with the majority of the streams originating on site. Upper reaches of the streams are fed primarily by surface runoff, with a few groundwater seeps occasionally present moving down-stream.

## E Soils

The Bank is located within the Piedmont Physiographic Region. The soils of this region are derived from residuum weathered from mica schist, mica gneiss, metagrawacke, and high grade metamorphic parent material. The soils along the flood plain of the streams that transect the property are derived from alluvium deposited from the erosion of the soils weathered from these parent materials. According to the Natural Resources Conservation Service (NRCS) *Soil Survey for Franklin County, Virginia* and the *Soil Survey for Henry County, Virginia*, the site is situated on eight soil series: Clifford fine sandy loam, Codorus loam, Comus-Maggodee-Elsinboro complex, Colescreek-Delanco complex, Hickory Knob-Rhodhiss-Stott Knob complex, Minnieville loam, Woolvine-Fairview-Westfield complex and Woolvine-Clifford complex. None of the above soil series are classified by the NRCS as hydric.

## F Existing Easements

Easements within the original Property limits include several overhead electric distribution lines, an Appalachian Power Company (APCO) transmission line, and a buried cable utility line. Additional easements on the Bank Expansion Property include the same APCO transmission line, a Lee Telephone Company easement, and a Plantation Pipe Line Company gas line. At the locations of the three culverts, VDOT maintains a drainage easement which extends approximately 25-feet upstream or downstream from the edge of the culvert. In addition, the original property has a Virginia Outdoors Foundation (VOF) easement which limits future development. This easement is being amended to include the Bank Expansion Property. Besides allowing agricultural and forestry practices, the easement also allows 1) wetland and stream bank restoration, or erosion control, pursuant to a governmental permit, 2) fencing along or within the buffer area, 3) construction and maintenance of stream crossings that do not obstruct water flow, and 4) creation and maintenance of foot or horse trails with unimproved surfaces.

The attached Bank Development Plan depicts the locations of the above easements.

Since stream credits are being obtained from several watersheds extending beyond the Bank limits but within the property due to the protections afforded by the VOF easement, a summary of the restrictions and allowances in the VOF easement that could occur within portions of these watersheds is listed below. Summary of VOF Easement Restrictions/Allowances

- This deed conforms to both Henry County and Franklin County land use policies as outlined in their respective Comprehensive Plans
- Property not to be divided into more than three parcels

### Buildings:

- Three single family dwellings may be sited on the property
  - o One dwelling may be up to 5,500 square feet of above grade living area

- Other two dwellings not to individually exceed 4,500 square feet above ground enclosed living area
  - One dwelling may be sited in Building Area A (See VOF Easement, Exhibit A). Other dwellings shall be sited in Building Area B (See VOF Easement, Exhibit A).
- Three secondary dwellings, or dwelling units (barns, garage apartment) of which one exists
  - These dwellings not to individually exceed 2,000 square feet above ground enclosed living area
  - One dwelling may be sited in Building Area A. Other dwellings shall be sited in Building Area B (See VOF Easement, Exhibit A).
- Non-residential structures and outbuildings associated with above dwellings.
  - Aggregate footprint of all such buildings associated with each residential dwelling not to exceed 2,500 square feet in ground area
- Farm buildings or structures
  - Cannot exceed 4,500 square feet in ground area
  - Deed recognizes a farm building of approximately 11,000 square feet that exists on site
- Collective footprint of all buildings and structures, excluding roads, shall not exceed 1% of the total area of the property (1% = 3.57 acres)

**Roads & Utilities:**

- Private roads and utilities to serve permitted buildings may be constructed
- Roads with permeable surfaces for other permitted uses such as farming or forestry may be constructed and maintained
- Underground utilities to serve adjacent properties may be constructed and maintained at the sole and absolute discretion of VOF

**Management of Forest:**

- Future timber harvest activities shall be guided by a Forest Stewardship Management Plan approved by VOF
- Removal of invasive species does not require a Forest Stewardship Management Plan

**Grading, Blasting, Mining:**

- Grading or earth removal may be done in association with:
  - wetlands or stream bank restoration pursuant to a government permit
  - Erosion and sediment control pursuant to a government-required E&S plan
- Mining, dredging, and drilling for oil/gas are prohibited

**Riparian Buffer:**

- To protect water quality, no plowing, cultivation or earth-disturbing activity, or new buildings within 100-foot buffer strip along perennial tributary to Reed Creek
  - Exception to this if doing wetland or stream bank restoration or fencing
- Amendment may be made to this Easement if it enhances the conservation values or adds to the restricted property.

## **G Adjacent Land Uses**

Generally, the area surrounding the Bank is rural in character. Rural residential homes and small farms are found adjacent to the Bank. Large tracts of woodland also surround the Bank, of which some are used for timber/logging.

As of May 2010, all properties bordering the eastern portion of the Bank are intact forest lands. The southeastern and northwestern portions are bounded by County Road 657 (Old Quarry Road) and State Road 608, respectively, the other side of which is a mix of forest, open fields, and a few single family residences. The property adjacent to the northern portion of the Bank was timbered in the Spring of 2009.

## **III Habitat and Species Descriptions**

### **A Baseline Description of Biological Resources on Bank Site**

Small forested corridors on the original site include upland vegetation such as tulip poplar (*Liriodendron tulipifera*), green ash (*Fraxinus pennsylvatica*), black walnut (*Juglans nigra*), sweet gum (*Liquidambar styraciflua*), black cherry (*Prunus serotina*), red maple (*Acer rubrum*), common persimmon (*Diospyros virginiana*), Virginia pine (*Pinus virginiana*), sycamore (*Platanus occidentalis*), and coralberry (*Symphoricarpos orbiculatus*). The forest on the Bank Expansion Property includes the same species, and also northern red oak (*Quercus rubra*), American beech (*Fagus grandifolia*), and northern spicebush (*Lindera benzoin*). Invasive species which were noted within the forested corridors include multiflora rose (*Rosa multiflora*), Japanese honeysuckle (*Lonicera japonica*), Barberry (*Berberis spp.*), and Tree-of-heaven (*Ailanthus altissima*). The emergent wetlands contain primarily soft rush (*Juncus effuses*) and fescue.

The majority of the Bank contains herbaceous pasture grasses suitable for cattle. A thorough biological assessment of the stream and wetland resources has not been performed, however degradation from livestock is prominent. Erosion and sedimentation and a general lack of biological activity are evident in both streams and wetlands.

### **B Summary of Bank Development Plan**

Development of the Bank will involve stream mitigation activities via stream and riparian area restoration, enhancement, and preservation activities as depicted in the Bank Development Plan (Exhibit D in MBI). Specific goals and objectives for each portion of the Bank shall be specifically provided in the Mitigation Site Plan for each phase of the Bank.

#### **1. Riparian Area Activities**

Approximately 155.7 (original) +220.8 (Bank Expansion) acres of the Bank will be included as riparian area activities. Heavy planting of the riparian buffer is the predominant activity, comprising 145.9 acres (original). Light planting encompasses 8.1

acres (original) and riparian buffer preservation includes 1.7 (original) +220.8 (Bank Expansion) acres. Several areas throughout the site, including some of the heavy planting and light planting areas, will also include invasive removal and/or control.

2. *Stream Preservation*

The Bank will preserve approximately 4,393 (original) + 22,894 (Bank Expansion) linear feet (LF) of unnamed tributaries on site. In general, the streams proposed for preservation are both low gradient and high gradient, have stable banks and demonstrate a variety of instream habitats.

3. *Stream Enhancement (with and without structures)*

Stream enhancement activities are proposed on approximately 5,317 (original) + 0 (Bank Expansion) LF throughout the site. Stream enhancement activities can fall into two separate categories: with structures and without structures. Stream enhancement with instream structures may include constructed riffles, rock cross-vanes and/or j-hooks. The instream structures are typically used to divert erosive flows from unstable stream banks and may also be used to provide grade control in areas that are unfeasible for restoration. Stream enhancement without instream structures include biological and mechanical bank work, such as:

- Laying back the banks;
- Installation of bankfull benches; and
- Streambank plantings.

4. *Stream Restoration:*

Stream restoration is proposed on approximately 5,576 (original) + 92 (Bank Expansion) LF of unnamed tributaries throughout the site. The proposed stream restoration area is located primarily in the active livestock pasture; but is also required near Route 608, where the culvert outfall has caused extensive erosion; at the pond, where the existing dam will be removed and the channel will be reconstructed through this area; and a culvert removal on the Bank Expansion Property.

Priority 1, 2, and 3 stream restoration practices are proposed on the Site. The primary objective of Priority 1 stream restoration is to re-establish dimension, pattern, and profile on the previous floodplain using relic channel or construction of new bankfull discharge channel. The primary objective of Priority 2 stream restoration is to construct a channel in the bed of the existing channel, and convert the existing bed to new floodplain. The primary objective of Priority 3 restoration is to create a stable channel that contains a flood prone area, but may be too confined to create an active floodplain. Stream restoration shall be accomplished by a combination of practices, including, but not limited to:

- Restoration of a natural meander pattern;
- Installation of instream structures to further stabilize the stream channel and provide grade control;
- Installation of habitat structures, such as root wads;
- Herbicide treatments of non-native species, if required;
- Replanting of indigenous vegetation; and

- Fencing along adjacent agricultural uses.

#### **C Endangered and Threatened Species**

A search of the Virginia Department of Game and Inland Fisheries (VDGIF) online database was conducted on June 8, 2009 (original) and March 6, 2013 (Bank expansion) using a 2-mile radius around the proposed Bank. The search revealed no known threatened or endangered species within the search area. No threatened and endangered waters, cold water streams, anadromous fish reaches or other items of significance were identified on the proposed Bank.

The FWIS database search also lists Wildlife Action Plan (WAP) Tier I, II, and III species predicted habitat that is located within the two-mile radius search. Spotted-margin Madtom (*Noturus insignis*), Roanoke bass (*Ambloplites cavifrons*), and Roanoke logperch (*Percina rex*) were listed for their known association with Reed Creek. Spotted-margin Madtom and Roanoke bass are Tier II species, species with a very high conservation need. Roanoke logperch is a Tier I species, characterized by critical conservation need, and also a federal and state endangered species. Predicted habitat for all these species is located ¼-mile to 1-mile from the Site. Specifically, the Roanoke logperch is found throughout the Smith River. Most of the larger tributaries to the Smith River, including the lower reaches of Reed Creek, are considered potential habitat for this species.

However, the Roanoke logperch (*Percina rex*), a federally endangered species, is found throughout the Smith River. It is known above and below Philpott Dam. Below Philpott Dam it is found from Town Point Creek down to the Virginia / North Carolina border. Most of the larger tributaries to the Smith River are considered potential habitat for this species, including the lower reaches of Reed Creek.

The U.S. FWIS IPaC system generated a list of federally endangered species that may be affected by the proposed project. The species listed include the James spinymussel (*Pleurobema collina*), Mitchell's Satyr Butterfly (*Neonympha mitchellii mitchellii*), Roanoke logperch (*Percina rex*), and Smooth coneflower (*Echinacea laevigata*). As part of the IPaC review, a search of the Center for Conservation Biology (CCB) Bald Eagle Nest Locator was also conducted. No identified nests or associated management zones were located within the Site, according to the CCB Bald Eagle Nest Locator.

#### **D Rare Species and Species of Special Concern**

There are no known rare species or species of special concern that occur on the Bank site.

### **IV Management and Monitoring**

The overall goal of long-term management is to foster the long term viability of the Bank site's aquatic resources, associated buffers, and any listed species/habitat. Routine monitoring and minor maintenance tasks are intended to assure the viability of the Bank site in perpetuity.

## **A Biological Resources**

The approach to the long-term management of the Bank site's biological resources is to conduct annual site examinations and monitoring of selected characteristics to determine stability and ongoing trends of the preserved, restored, enhanced, and created aquatic resources and associated buffers, including wetlands and streams. Annual monitoring will assess the Bank's condition, degree of erosion, establishment of invasive or non-native species, water quality, fire hazard, and/or other aspects that may warrant management actions. While it is not anticipated that major management actions will be needed, an objective of this long-term management plan is to conduct monitoring to identify any issues that arise, and using adaptive management to determine what actions might be appropriate. Those chosen to accomplish monitoring responsibilities will have the knowledge, training, and experience to accomplish monitoring responsibilities.

Adaptive management means an approach to natural resource management which incorporates changes to management practices, including corrective actions as determined to be appropriate by the IRT in discussion with the Long-Term Steward. Adaptive management includes those activities necessary to address the affects of climate change, fire, flood, or other natural events. Before considering any adaptive management changes to the long-term management plan, the IRT will consider whether such actions will help ensure the continued viability of Bank's biological resources.

The Long-Term Steward for the Bank site shall implement the following:

### **Element A.1 Aquatic Resources, including Wetlands, and Associated Buffers**

**Objective:** Monitor, conserve and maintain the Bank site's aquatic resources and associated buffers. Limit any impacts to aquatic resources and associated buffers from vehicular travel or other adverse impacts.

**Task:** At least one annual walk-through survey will be conducted to qualitatively monitor the general condition of these habitats. General topographic conditions, hydrology, general vegetation cover and composition, invasive species, erosion, will be noted, evaluated and mapped during a site examination. Notes to be made will include observations of species encountered, water quality, general extent of wetlands and streams, and any occurrences of erosion, structure failure, or invasive or non native species establishment and/or expansion.

**Task:** Establish reference sites for photographs and prepare a site map showing the reference sites for the Bank file. Alternatively, utilize photographic reference sites, if any, developed during interim bank management period. Reference photographs will be taken of the overall Bank site at least every five years from the beginning of the long-term management,

with selected reference photos taken on the ground more frequently, one time per year.

Special attention should be paid to any area adjacent to or draining from non-bank lands. Streams and wetlands should be observed near bank boundaries to observe if increased sediment deposition has occurred. The report should provide a discussion of any recent changes in the watershed (i.e., subdivision being developed upstream of stream bank).

**Element A.2 Threatened/Endangered Plant Species Monitoring (if applicable)**

This section is not applicable to this project.

**Element A.3 Threatened/Endangered Animal Species Monitoring (if applicable)**

This section is not applicable to this project.

**Element A.4 Invasive Species**

Invasive species threaten the diversity or abundance of native species through competition for resources, predation, parasitism, interbreeding with native populations, transmitting diseases, or causing physical or chemical changes to the invaded habitat.

Objective: Monitor and maintain control over invasive species that diminish site quality for which the bank was established. The Long-Term Steward shall consult the *Virginia Department of Conservation and Recreation's Invasive Alien Plant list* at [http://www.dcr.virginia.gov/natural\\_heritage/documents/invlist.pdf](http://www.dcr.virginia.gov/natural_heritage/documents/invlist.pdf) for guidance on what species may threaten the site and on management of those species.

Task: Mapping of invasive species cover or presence shall occur during the first five years of bank management, to establish a baseline. Mapping shall be accomplished through use of available technologies, such as GIS and aerial photography.

Task: Each year's annual walk-through survey (or a supplemental survey) will include a qualitative assessment (e.g. visual estimate of cover) of invasive species. Additional actions to control invasive species will be evaluated and prioritized in coordination with the IRT.

Task: Twice per year, herbicide application and/or bush hogging may be completed in the areas outside the riparian buffer but within the Bank limits.

Attached to this plan are fact sheets (including identification aid) for all highly invasive/non-native species known to be present on the site, including

multiflora rose (*Rosa multiflora*), Japanese honeysuckle (*Lonicera japonica*), and Tree-of-heaven (*Ailanthus altissima*) (see Appendix A MBI).

#### **Element A.5 Vegetation Management**

Objective: Analyze effects of any authorized silvicultural manipulations or vegetative maintenance on the wetland, streams, and buffers on the bank site. If determined appropriate, develop and implement specific silvicultural manipulations (e.g. selective thinning) or vegetative maintenance in coordination with the IRT.

Objective: Adaptively manage vegetation based on site conditions and data acquired through monitoring to maintain biological values. Analyze effects of any activities adjacent to the Bank on the vegetation management or composition within the Bank.

Task: Review and explore potential vegetation management regimes as proposals and/or opportunities and funding arise. If determined to potentially maintain site quality, develop specific silvicultural/vegetation practices, amend this long-term management plan with the IRT's approval to reflect those practices, and implement silvicultural/vegetation actions as funding allows.

Task: Implement vegetation management techniques, if determined beneficial and as funding allows, allowing and encouraging development of vegetation as identified in the MBI. Implementation of vegetation management techniques must be approved by the IRT.

#### **B Security, Safety, and Public Access**

The Bank will be fenced or appropriately marked and may be accessed by the public only with the permission of the landowner or long term steward. Research and/or other educational programs or efforts, hunting, fishing, and passive recreational activities are allowed on the Bank site, but are not specifically funded or a part of this long-term management plan.

If mosquito abatement issues arise, they will be addressed through the development of a plan by the Long-Term Steward and any local mosquito control district or local health department in coordination with and approved by the IRT.

Potential wildfire fuels will be reduced as needed where approved by the IRT.

#### **Element B.1 – Trash and trespass**

Objective: Monitor sources of trash and trespass.

Objective: Collect and remove trash, repair vandalized structures, and rectify trespass impacts.

Task: During each site visit, record occurrences of trash and/or trespass. Record type, location, and management ~~mitigation~~ recommendations to avoid, minimize, or rectify a trash and/or trespass impact.

Task: At least once yearly collect and remove as much trash as possible and repair and rectify vandalism and trespass impacts.

### **Element B.2 – Fire Hazard Reduction**

Objective: Maintain the site as required for fire control while limiting impacts to biological values.

Task: Reduce vegetation in any areas recommended by authorities, and as approved by the IRT, for fire control.

## **C Infrastructure and Facilities**

### **Element C.1 Fences, Gates, Signage, Crossings, and Property Boundaries**

Objective: Monitor condition of fences, gates, signage, crossings, and property boundaries.

Objective: Maintain fences, gates, signage, crossings and property boundaries to prevent casual trespass, allow necessary access, and [*if applicable*: facilitate management.]

Task: During each site visit, record condition of fences, gates, signs, crossings, and property boundaries. Record location, type, and recommendations to implement repair or replacement to fence, gate, signage, crossings or property boundary markers, if applicable.

Task: Maintain fences, gates, signs, crossings and property boundary markers as necessary by replacing posts, wire, gates, and signs. Replace fences and/or gates, as necessary, and as funding allows. Note any trespass by livestock.

### **Element C.2 Berms, Structures, and Roads**

Objective: Monitor condition of berms, structures, and roads.

Objective: Maintain berms, structures, and roads to facilitate management and maintain conditions of wetlands and streams

Task: During each site visit, record condition of berms, structures, and roads. Record location, type, and recommendations to implement repair or replacement to berms, structures, and roads, if applicable.

Task: Maintain berms, structures, and roads as necessary. Replace berms, structures, and roads as necessary, and as funding allows.

**D Reporting and Administration**

**Element D.1 – Annual Report**

Objective: Provide annual report on all management tasks conducted and general site conditions to IRT and any other appropriate parties. Each report shall include a cover page with the following information: the bank name, (umbrella bank name if applicable), site name (if applicable), bank phase (if applicable), Long-Term Steward (name, address, phone number, and email address), monitoring year, and any requested action (e.g. funding release, maintenance recommendations requiring IRT approval).

Task: Prepare annual report and any other additional documentation. Include a summary. Complete and circulate to the IRT and other parties by December 31 of each year. Reports should be distributed electronically.

Task: Make recommendations with regard to (1) any enhancement measures deemed to be warranted, (2) any problems that need near-, short-, and long-term attention (e.g., weed removal, fence repair, erosion control), and (3) any changes in the monitoring or management program that appear to be warranted based on monitoring results to date. Provide documentation of the cost of any recommended maintenance and repairs.

**V Transfer, Replacement, Amendments, and Notices**

**A Transfer**

Any subsequent transfer of responsibilities under this long-term management plan to a different Long-Term Steward shall be requested by the Long-Term Steward in writing to the IRT, shall require written approval by the IRT, and shall be incorporated into this long-term management plan by amendment.

The long-term steward shall be required to ensure that any subsequent property owners (if not identified as the long-term steward) are notified of the deed restriction, conservation easement, purpose and location of the bank lands, and requirement for long-term stewardship.

**B Replacement**

If the Long-Term Steward fails to implement the tasks described in this long-term management plan and is notified of such failure in writing by any of the IRT, the Long-Term Steward shall have 90 days to cure such failure. If failure is not cured within ninety (90)

days, the Long-Term Steward may request a meeting with the IRT to resolve the failure. Such meeting shall occur within thirty (30) days or a longer period if approved by the IRT. Based on the outcome of the meeting, or if no meeting is requested, the IRT may designate a replacement Long-Term Steward in writing by amendment of this long-term management plan. If the Long-Term Steward fails to designate a replacement Long-Term Steward, then such public or private land or resource management organization acceptable to and as directed by the IRT may enter onto the Bank property in order to fulfill the purposes of this long-term management plan.

#### **C      Amendments**

The Long-Term Steward, property owner, and the IRT may meet and confer from time to time, upon the request of any one of them, to revise the long-term management plan to better meet management objectives and preserve the conservation values of the Bank property. Any proposed changes to the long-term management plan shall be discussed with the IRT and the Long-Term Steward. Any proposed changes will be designed with input from all parties. Amendments to the long-term management plan shall be approved by the IRT in writing shall be required management components and shall be implemented by the Long-Term Steward.

If the VDGIF or USFWS determine, in writing, that continued implementation of the long-term management plan would jeopardize the continued existence of a state or federally listed species, any written amendment to this long-term management plan, determined by either the VDGIF or USFWS as necessary, shall be a required management component and shall be implemented by the Long-Term Steward.

#### **D      Notices**

Any notices regarding this long-term management plan shall be directed as follows:

Long-Term Steward (name, address, telephone and FAX)

Roanoke River Wetlands and Stream Mitigation Bank, LLC  
5209 Center Street  
Williamsburg, VA 23188

Property Owner (name, address, telephone and FAX)

Danny Thompson  
8591 Floyd Hwy  
Copper Hill, VA 24079

IRT Chair:

Vinny Pero  
U.S. Army Corps of Engineers

Norfolk District – Charlottesville Field Office  
920 Gardens Blvd.  
Suite 103-B  
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**IRT Co-Chair:**

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900 Natural Resources Drive, Suite 800  
Charlottesville, Virginia 22903  
(434) 977-5193

**VI Funding and Task Prioritization**

**A Funding**

The Property Analysis Record (PAR) report (Appendix B) summarizes the anticipated costs of long-term management for the Bank. These costs include estimates of time and funding needed to conduct the basic monitoring site visits and reporting, trash removal, fence repair,

etc. and a prorated calculation of funding needed to fully repair and/or replace fences and other structures every 10-50 years. The total annual funding anticipated is approximately \$4,731 (\$3,448 original + \$1,283 Bank Expansion), therefore, with the current annual estimated capitalization rate of 4.5% the total endowment amount (The Long-Term Management Fund) required will be \$105,124 (\$76,622 original + \$28,502 Bank Expansion).

Kaufman & Canoles, P.C. shall hold the endowment principal and interest monies (The Long-Term Management Fund) as required in the MBI, which consists of monies that are paid into it in trust, and is appropriated to fulfill the purposes for which payments into it are made. These interest monies will fund the long-term management, enhancement, and monitoring activities on Bank lands in a manner consistent with this long-term management plan.

#### **B Task Prioritization**

Due to unforeseen circumstances, prioritization of tasks, including tasks resulting from new requirements, may be necessary if insufficient funding is available to accomplish all tasks. The Long-Term Steward and the IRT shall discuss task priorities and funding availability to determine which tasks will be implemented. In general, tasks are prioritized in this order: 1) required by a local, state, or federal agency; 2) tasks necessary to maintain or remediate the Bank Site (including unauthorized impacts); and 3) tasks that monitor resources, particularly if past monitoring has not shown downward trends. Equipment and materials necessary to implement priority tasks will also be considered priorities. Final determination of task priorities in any given year of insufficient funding will be determined in consultation with the IRT and as authorized by the IRT in writing.

#### **C Enforcement**

The IRT and its authorized agents shall have the right to inspect the Property and take actions necessary to verify compliance with this Long-Term Management Plan. The Long-Term Management Plan herein shall be enforceable by any proceeding at law or in equity or administrative proceeding by the IRT, including the Corps or DEQ. Failure by any agency (or owner) to enforce the Long-Term Management Plan contained herein shall in no event be deemed a waiver of the right to do so thereafter.

IN WITNESS WHEREOF the Sponsor and the various IRT agencies have executed this Long Term Management Plan on the date herein below last written.

  
Long-Term Steward

8-19-17  
Date

IN WITNESS WHEREOF, the parties hereto have executed this Long Term Management Plan on the date herein below last written.

INTERAGENCY REVIEW TEAM

By the IRT Chair 

U.S Army Corps of Engineers, Norfolk District

By: William T Waller

Its: Chief, Regulation Branch

8/3/2017  
Date

IN WITNESS WHEREOF, the parties hereto have executed this Long Term Management Plan on the date herein below last written.

INTERAGENCY REVIEW TEAM

By the IRT Chair:



Virginia Department of Environmental Quality






08/16/2017  
Date

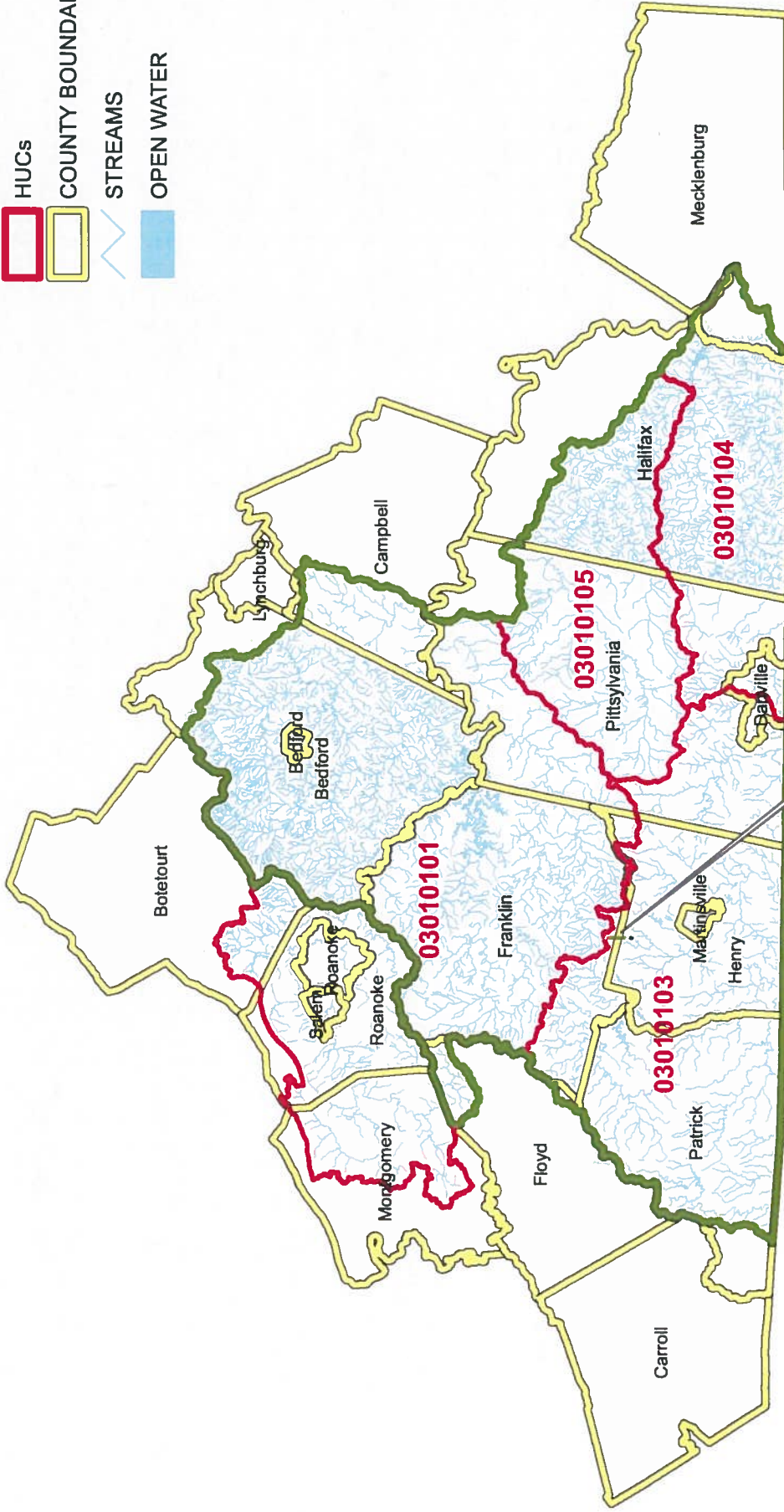
By: DAVID L. DAVIS

Its: Dir., Ofc. of WETLANDS & STREAM PROTECTION

**Appendix A**  
**Invasive Species Fact Sheets**  
**(see approved MBI dated May 2011)**

# LEGEND

-  SERVICE AREA
-  HUCs
-  COUNTY BOUNDARIES
-  STREAMS
-  OPEN WATER



PROJECT LOCATION

SOURCE: VDOT COUNTY MAP SERIES, 2001  
WBD HUC 2013, USGS

SCALE: 1 INCH = 18 MILES



**WILLIAMSBURG  
ENVIRONMENTAL  
GROUP, INC.**

EXHIBIT K

**SERVICE AREA MAP  
ROANOKE RIVER WETLANDS  
AND STREAM MITIGATION BANK**

FRANKLIN AND HENRY COUNTIES, VA | JANUARY 2014

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R1	894	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot 0
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain <b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit>							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b> Rt Bank > 0.00 Credit Lt Bank > 0.00 SUM of banks		0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goat" riparian buffer for each side (SAR length times 100') >>>>						89,400 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.05				
Right Bank	Area #							
	Sq. Footage	79715				0		
	% Area	89%	0%	0%	0%	0%	89%	
	Credit>	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	77363						
	% Area	87%	0%	0%	0%	0%	87%	
	Credit>	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b> Rt Bank > 0.12 Credit Lt Bank > 0.12 0.12		107
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.05				
Right Bank	Area #							
	Sq. Footage	118048						
	% Area	132%	0%	0%	0%	0%	132%	
	Credit>	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	68425						
	% Area	77%	0%	0%	0%	0%	77%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b> Rt Bank > 0.09 Credit Lt Bank > 0.05 0.07		63
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply <b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
	Credit>			894				
				0.25				
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						<b>CREDITS</b> Σ (Length X Credit) for all areas		224
<b>Total Compensation Credit Provided by Project</b>								394

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R2	427	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Li Bank >	0.00	SUM of banks
								0
Σ (Length X Credit) for all areas (banks done separately)								
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "GoS" riparian buffer for each side (SAR length times 100') >>>>						42,700 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	32985				0		
	% Area	77%	0%	0%	0%	0%	77%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage	44387						
	% Area	104%	0%	0%	0%	0%	104%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.11	Credit
						Li Bank >	0.15	0.13
								56
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	82290						
	% Area	193%	0%	0%	0%	0%	193%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage	115066						
	% Area	269%	0%	0%	0%	0%	269%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.13	Credit
						Li Bank >	0.19	0.16
								68
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected				427				
Credit >				0.3				
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						CREDITS		
						Σ Length X Credit for all areas	128	
<b>Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.</b>								
<b>Total Compensation Credit Provided by Project</b>								
252								

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/13/13; revised 4/30/14	R3	9068	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		0
						Credits = Stream Length X 1.0		1
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0
Structures: 0 Length: 30						Credits = Stream Length X 0.3		0.3
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
Mitigation Categories								
	Credit Per Length	Mechanical Bank Work Pick One Per Length			Biological Bank Work May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length	0		0	0			
	Credit>	0.15		0.09				
Left Bank	Length	0		0	0			
	Credit >	0.15		0.09				
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Geal" riparian buffer for each side (BAR length times 100') >>>>								806,800 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	527638	9174		0			
	% Area	58%	1%	0%	0%	0%	0%	59%
	Credit>	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage	726704	11504					
	% Area	80%	1%	0%	0%	0%	0%	81%
	Credit>	0.14	0.07	0.29	0.38	0.4		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	932183						
	% Area	103%	0%	0%	0%	0%	0%	103%
	Credit>	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage	1233830						
	% Area	136%	0%	0%	0%	0%	0%	136%
	Credit >	0.07	0.07	0.15	0.19	0.2		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
Adjustment Factor Categories								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit>								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
Σ (Length X Credit) for all areas								0
<b>Total Compensation Credit Provided by Project</b>								1723

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R3a	249	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		0
						Credits = Stream Length X 1.0		1
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0
Structures: 0 Length: 30						Credits = Stream Length X 0.3		0.3
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain <b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length	0		0	0			
	Credit >	0.15		0.09				
Left Bank	Length	0		0	0			
	Credit >	0.15		0.09				
								CREDITS
								Rt Bank > 0.00 Credit
								Lt Bank > 0.00 SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0			
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>								24,900 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	21461	0	0	0	0	0	86%
	% Area	86%	0%	0%	0%	0%	0%	86%
	Credit >	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage	19481						
	% Area	78%	0%	0%	0%	0%	0%	78%
	Credit >	0.14	0.07	0.29	0.38	0.4		
								CREDITS
								Rt Bank > 0.12 Credit
								Lt Bank > 0.11
								0.12
								30
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	74744						
	% Area	300%	0%	0%	0%	0%	0%	300%
	Credit >	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage	10203						
	% Area	41%	0%	0%	0%	0%	0%	41%
	Credit >	0.07	0.07	0.15	0.19	0.2		
								CREDITS
								Rt Bank > 0.21 Credit
								Lt Bank > 0.03
								0.12
								30
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			249					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Credits >
								75
								Σ (Length X Credit) for all areas
Total Compensation Credit Provided by Project								135

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R5	928	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								0
Total length of Full Restoration						1		
Credits = Stream Length X 1.0								
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								0
Length Affected by Instream Structures						0.3		
Credits = Stream Length X 0.3								
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
Credit Per Length		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0	Rt Bank >	0.00
	Credit >						Li Bank >	0.00
						SUM of banks		0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goa" riparian buffer for each side (SAR length times 100') >>>>						92,800 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	96493				0		
	% Area	104%	0%	0%	0%	0%	104%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	93791						
	% Area	101%	0%	0%	0%	0%	101%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.15	Credit
						Li Bank >	0.14	0.15
						Σ (% Area X Credit) for all areas (banks done separately)		139
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	165364						
	% Area	178%	0%	0%	0%	0%	178%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	144979						
	% Area	156%	0%	0%	0%	0%	156%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.12	Credit
						Li Bank >	0.11	0.12
						Σ (% Area X Credit) for all areas (banks done separately)		111
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
	Credit >							
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						Σ (Length X Credit) for all areas		0
<b>Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.</b>								
<b>Total Compensation Credit Provided by Project</b>								250

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R5a	25	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot 0
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain <b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				May Be Cumulative Per Length				
Pick One Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 SUM of banks		0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Good" riparian buffer for each side (BAR length times 100') >>>>						2,500 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0				0		
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 SUM of banks		0
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 SUM of banks		0
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.		
						Credits >		0
						Σ (Length X Credit) for all areas		
<b>Total Compensation Credit Provided by Project</b>								0

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R6	156	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								0
Total length of Full Restoration						1		
Credits = Stream Length X 1.0								
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								0
Length Affected by Instream Structures						0.3		
Credits = Stream Length X 0.3								
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
Credit Per Length		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
						0		
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goat" riparian buffer for each side (BAR length times 100') >>>						15,600 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	20591				0		
	% Area	132%	0%	0%	0%	0%	132%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	24335						
	% Area	156%	0%	0%	0%	0%	156%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						Rt Bank >	0.18	Credit
						Lt Bank >	0.22	0.20
						31		
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	17072						
	% Area	109%	0%	0%	0%	0%	109%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	30587						
	% Area	196%	0%	0%	0%	0%	196%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						Rt Bank >	0.08	Credit
						Lt Bank >	0.14	0.11
						17		
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected				156				
Credit >				0.3				
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						Credits >		47
						Σ (Length X Credit) for all areas		
<b>Total Compensation Credit Provided by Project</b>								95

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R7	1054	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:					Total length of Full Restoration		1	0
					Credits = Stream Length X 1.0			
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):					Length Affected by Instream Structures		0.3	0
					Credits = Stream Length X 0.3			
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				
May Be Cumulative Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0	Rt Bank >	0.00
	Credit >						Li Bank >	0.00
						SUM of banks		0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>						105,400 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	102499				0		
	% Area	97%	0%	0%	0%	0%	97%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	93331						
	% Area	89%	0%	0%	0%	0%	89%	
	Credit >	0.14	0.07	0.29	0.38	0.4	Rt Bank >	0.14
							Li Bank >	0.12
						SUM of banks		0.13
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	178677						
	% Area	170%	0%	0%	0%	0%	170%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	126973						
	% Area	120%	0%	0%	0%	0%	120%	
	Credit >	0.07	0.07	0.15	0.19	0.2	Rt Bank >	0.12
							Li Bank >	0.08
						SUM of banks		0.10
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected				1054				
Credit >				0.3				
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Σ (Length X Credit) for all areas
								Credits >
								316
<b>Total Compensation Credit Provided by Project</b>								558

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R7a	40	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot 0
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit>							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 SUM of banks 0		
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Gea" riparian buffer for each side (SAR length times 100') >>>>						4,000 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0				0		
	% Area	0%	0%	0%	0%	0%	0%	
	Credit>	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit>	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 0.00 0		
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit>	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 0.00 0		
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			40					
Credit>			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						<b>CREDITS</b> Credits > 12		
						Σ (Length X Credit) for all areas		
<b>Total Compensation Credit Provided by Project</b>								12

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R8	468	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot 0
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b> Rt Bank > 0.00 Lt Bank > 0.00 SUM of banks		0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goat" riparian buffer for each side (SAR length times 100') >>>>						46,800 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	45585				0		
	% Area	97%	0%	0%	0%	0%	97%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
	HQ Pres   LQ Pres   Light Plant   Heavy Plant   Invasive control							
Left Bank	Area #							
	Sq. Footage	53689						
	% Area	115%	0%	0%	0%	0%	115%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b> Rt Bank > 0.14 Lt Bank > 0.16 SUM of banks		70
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	55685						
	% Area	119%	0%	0%	0%	0%	119%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
	Pres   Light Plant   Heavy Plant   Invasive control							
Left Bank	Area #							
	Sq. Footage	103205						
	% Area	221%	0%	0%	0%	0%	221%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b> Rt Bank > 0.08 Lt Bank > 0.15 SUM of banks		56
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected				468				
Credit >				0.3				
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						<b>CREDITS</b> Σ (Length X Credit) for all areas		140
<b>Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.</b>								
<b>Total Compensation Credit Provided by Project</b>								266

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R9	176	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:					Total length of Full Restoration		1	
					Credits = Stream Length X 1.0			
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):					Length Affected by Instream Structures		0.3	
					Credits = Stream Length X 0.3			
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Good" Riparian buffer for each side (BAR length times 100') >>>>						17,600 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	23723				0		
	% Area	135%	0%	0%	0%	0%	135%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	20821						
	% Area	118%	0%	0%	0%	0%	118%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.19	Credit
						Lt Bank >	0.17	0.18
								32
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	7552						
	% Area	43%	0%	0%	0%	0%	43%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.03	0.02
								4
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Σ (Length X Credit) for all areas
								Credits >
								0
								Σ (Length X Credit) for all areas
								Total Compensation Credit Provided by Project
								36

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R10	2543	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:					Total length of Full Restoration		1	
					Credits = Stream Length X 1.0			
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):					Length Affected by Instream Structures		0.3	
					Credits = Stream Length X 0.3			
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				
May Be Cumulative Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								$\Sigma(\text{Length} \times \text{Credit})$ for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goa" riparian buffer for each side (SAR length times 100') >>>>						254,300 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	228330				0		
	% Area	90%	0%	0%	0%	0%	90%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	228690						
	% Area	90%	0%	0%	0%	0%	90%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.13	Credit
						Lt Bank >	0.13	Credit
								331
								$\Sigma(\% \text{ Area} \times \text{Credit})$ for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	320704						
	% Area	126%	0%	0%	0%	0%	126%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	396868						
	% Area	156%	0%	0%	0%	0%	156%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.09	Credit
						Lt Bank >	0.11	Credit
								254
								$\Sigma(\% \text{ Area} \times \text{Credit})$ for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								$\Sigma(\text{Length} \times \text{Credit})$ for all areas
Total Compensation Credit Provided by Project								585

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Credits > 0

$\Sigma(\text{Length} \times \text{Credit})$  for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R10a	212	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								0
Total length of Full Restoration						1		
Credits = Stream Length X 1.0								
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								0
Length Affected by Instream Structures						0.3		
Credits = Stream Length X 0.3								
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				
May Be Cumulative Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
Σ (Length X Credit) for all areas (banks done separately)								
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Good" riparian buffer for each side (BAR length times 100') >>>>								21,200 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0				0		
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
Σ (Length X Credit) for all areas								
Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.								
								Credits >
								0
Total Compensation Credit Provided by Project								0

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R10b	60	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		<b>Mechanical Bank Work</b>			<b>Biological Bank Work</b>			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b>		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>								6,000 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0				0		
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b>		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								Ave of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b>		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								Ave of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			60					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								Σ (Length X Credit) for all areas
Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.								
								Credits >
								18
<b>Total Compensation Credit Provided by Project</b>								18

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R11	247	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								Total length of Full Restoration
								1
								Credits = Stream Length X 1.0
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								Length Affected by Instream Structures
								0.3
								Credits = Stream Length X 0.3
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Reliefs, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				May Be Cumulative Per Length
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
						0		
Σ (Length X Credit) for all areas (banks done separately)								
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Good" riparian buffer for each side (BAR length times 100') >>>>								
24,700 square feet								
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03 Ensure the sums of % Riparian Blocks equal 100								
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage	24815				0		
	% Area	100%	0%	0%	0%	0%	100%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	21810						
	% Area	88%	0%	0%	0%	0%	88%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.14	Credit
						Lt Bank >	0.12	0.13
						32		
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03 Ensure the sums of % Riparian Blocks equal 100								
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage	10054						
	% Area	41%	0%	0%	0%	0%	41%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	29470						
	% Area	118%	0%	0%	0%	0%	118%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.03	Credit
						Lt Bank >	0.08	0.08
						15		
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
Σ (Length X Credit) for all areas								
Total Compensation Credit Provided by Project								47

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Credits > 0

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R12	827	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
		Mechanical Bank Work			Biological Bank Work			
		Pick One Per Length			May Be Cumulative Per Length			
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>								82,700 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	75800				0		
	% Area	92%	0%	0%	0%	0%	0%	92%
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	61041						
	% Area	74%	0%	0%	0%	0%	0%	74%
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.13	Credit
						Lt Bank >	0.10	0.12
								99
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	155268						
	% Area	188%	0%	0%	0%	0%	0%	188%
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	93090						
	% Area	113%	0%	0%	0%	0%	0%	113%
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.13	Credit
						Lt Bank >	0.08	0.11
								91
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			827					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Σ (Length X Credit) for all areas
<b>Total Compensation Credit Provided by Project</b>								438

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/13/13; revised 4/30/14	R13	581	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				May Be Cumulative Per Length
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length				0			
	Credit >							
Left Bank	Length				0			
	Credit >							
CREDITS								
Rt Bank > 0.00								Credit
Lt Bank > 0.00								SUM of banks
								0
								$\Sigma(\text{Length} \times \text{Credit})$ for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>								58,100 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	48167						0
	% Area	83%	0%	0%	0%	0%	0%	83%
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	55499						
	% Area	96%	0%	0%	0%	0%	0%	96%
	Credit >	0.14	0.07	0.29	0.38	0.4		
CREDITS								
Rt Bank > 0.12								Credit
Lt Bank > 0.13								0.13
								76
								$\Sigma(\% \text{ Area} \times \text{Credit})$ for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	83086						
	% Area	143%	0%	0%	0%	0%	0%	143%
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	131723						
	% Area	227%	0%	0%	0%	0%	0%	227%
	Credit >	0.07	0.07	0.15	0.19	0.2		
CREDITS								
Rt Bank > 0.10								Credit
Lt Bank > 0.16								0.13
								76
								$\Sigma(\% \text{ Area} \times \text{Credit})$ for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			581					
Credit >			0.25					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								$\Sigma(\text{Length} \times \text{Credit})$ for all areas
<b>Total Compensation Credit Provided by Project</b>								297

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

$\Sigma(\text{Length} \times \text{Credit})$  for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/13/13; revised 3/31/14	R14	1674	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								92
Total length of Full Restoration								1
Credits = Stream Length X 1.0								
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								0.3
Length Affected by Instream Structures								0
Structures: Length:								Credits = Stream Length X 0.3
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
<b>Mechanical Bank Work</b>				<b>Biological Bank Work</b>				
Credit Per Length				Pick One Per Length				May Be Cumulative Per Length
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	
						Li Bank >	0.00	
						SUM of banks	0	
Σ (Length X Credit) for all areas (banks done separately)								
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>							167,400 square feet	
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #	124903	34057			0		
	Sq. Footage	74%	20%	0%	0%	0%	94%	
	% Area	0.14	0.07	0.29	0.38	0.4		
	Credit >							
Left Bank	Area #	111563	45850					
	Sq. Footage	67%	27%	0%	0%	0%	94%	
	% Area	0.14	0.07	0.29	0.38	0.4		
	Credit >							
						CREDITS		
						Rt Bank >	0.12	
						Li Bank >	0.11	
						Credit	201	
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03	Ensure the sums of % Riparian Blocks equal 100			
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #	249794	8295					
	Sq. Footage	149%	5%	0%	0%	0%	154%	
	% Area	0.07	0.07	0.15	0.19	0.2		
	Credit >							
Left Bank	Area #	227969						
	Sq. Footage	136%	0%	0%	0%	0%	136%	
	% Area	0.07	0.07	0.15	0.19	0.2		
	Credit >							
						CREDITS		
						Rt Bank >	0.11	
						Li Bank >	0.10	
						Credit	164	
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			1674					
Credit >			0.25					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
Σ (Length X Credit) for all areas								
<b>Total Compensation Credit Provided by Project</b>								
896								

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/13/13; revised 4/30/14	R15	2269	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:					Total length of Full Restoration		1	0
					Credits = Stream Length X 1.0			
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):					Length Affected by Instream Structures		0	0.3
Structures: Length:					Credits = Stream Length X 0.3			0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				
Habitat Structures				May Be Cumulative Per Length				
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						<b>CREDITS</b>		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								1 (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Gea" riparian buffer for each side (SAR length times 100') >>>>						226,900	square feet	
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #	163044	28915			0		
	Sq. Footage							
	% Area	72%	13%	0%	0%	0%	0%	85%
	Credit >	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #	171017	39492					
	Sq. Footage							
	% Area	75%	17%	0%	0%	0%	0%	93%
	Credit >	0.14	0.07	0.29	0.38	0.4		
						<b>CREDITS</b>		
						Rt Bank >	0.11	Credit
						Lt Bank >	0.12	0.12
								272
						1 (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #	313147						
	Sq. Footage							
	% Area	138%	0%	0%	0%	0%	0%	138%
	Credit >	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #	322347						
	Sq. Footage							
	% Area	142%	0%	0%	0%	0%	0%	142%
	Credit >	0.07	0.07	0.15	0.19	0.2		
						<b>CREDITS</b>		
						Rt Bank >	0.10	Credit
						Lt Bank >	0.10	0.10
								227
						1 (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								0
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								1 (Length X Credit) for all areas
<b>Total Compensation Credit Provided by Project</b>								499

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

1 (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R15a	73	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Slep-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0
Structures: 0 Length: 15						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
<b>Mechanical Bank Work</b>				<b>Biological Bank Work</b>				
Credit Per Length				Pick One Per Length				May Be Cumulative Per Length
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length			0	0			
	Credit >	0.15		0.09				
Left Bank	Length			0	0			
	Credit >	0.15		0.09				
<b>CREDITS</b>								
Rt Bank > 0.00								Credit
Lt Bank > 0.00								SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goal" riparian buffer for each side (BAR length times 100') >>>>								7,300 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03								Ensure the sums of % Riparian Blocks equal 100
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage			0				
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
<b>CREDITS</b>								
Rt Bank > 0.00								Credit
Lt Bank > 0.00								0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								Ave of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03								Ensure the sums of % Riparian Blocks equal 100
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
<b>CREDITS</b>								
Rt Bank > 0.00								Credit
Lt Bank > 0.00								0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								Ave of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			73					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Σ (Length X Credit) for all areas
								22
<b>Total Compensation Credit Provided by Project</b>								22

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R15b	167	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:					Total length of Full Restoration		1	0
					Credits = Stream Length X 1.0			
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):					Length Affected by Instream Structures		0	0.3
Structures: 0 Length: 15					Credits = Stream Length X 0.3			0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Riffles, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				May Be Cumulative Per Length				
Pick One Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length			0	0			
	Credit >	0.15		0.09				
Left Bank	Length			0	0			
	Credit >	0.15		0.09				
					<b>CREDITS</b>			
					Rt Bank >	0.00	Credit	
					Lt Bank >	0.00	SUM of banks	0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goat" riparian buffer for each side (BAR length times 100') >>>>								16,700 square feet
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage			0				
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
					<b>CREDITS</b>			
					Rt Bank >	0.00	Credit	
					Lt Bank >	0.00	0.00	0
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
					<b>CREDITS</b>			
					Rt Bank >	0.00	Credit	
					Lt Bank >	0.00	0.00	0
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			167					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
								Σ (Length X Credit) for all areas
<b>Total Compensation Credit Provided by Project</b>								50

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R15c	193	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot 0
Discuss Length Affected by Instream Structures (justify length):						Length Affected by Instream Structures		0.3
Structures: 0 Length: 15						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
Mitigation Categories								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				May Be Cumulative Per Length				
Pick One Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length			0	0			
	Credit >	0.15		0.09				
Left Bank	Length			0	0			
	Credit >	0.15		0.09				
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
								Σ (Length X Credit) for all areas (banks done separately)
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>>						19,300 square feet		
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage			0				
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Outside First 100' - Mitigation Categories</b>								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage							
	% Area	0%	0%	0%	0%	0%	0%	0%
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	0.00
								0
								Σ (% Area X Credit) for all areas (banks done separately)
								AVE of credit for banks X length of project
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
Adjustment Factor Categories								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			193					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
						CREDITS		
								58
								Σ (Length X Credit) for all areas
Total Compensation Credit Provided by Project								58

Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.

Σ (Length X Credit) for all areas

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/13/13; revised 3/31/14	R16	604	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width. List Reaches that will receive full Restoration:								Credit per foot 0
						Total length of Full Restoration		1
						Credits = Stream Length X 1.0		
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vaness, Weirs, Step-Pools), Constructed Riffles								Credit per foot Discuss Length Affected by Instream Structures (justify length):
						Length Affected by Instream Structures		0.3
						Credits = Stream Length X 0.3		0
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
Mitigation Categories								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				May Be Cumulative Per Length
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
						CREDITS		
						Rt Bank >	0.00	Credit
						Lt Bank >	0.00	SUM of banks
								0
						Σ (Length X Credit) for all areas (banks done separately)		
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07	0	0		
Calculation of "Goal" riparian buffer for each side (SAR length times 100') >>>						60,400 square feet		
WITHIN FIRST 100' - Mitigation Categories								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	46083				0		
	% Area	76%	0%	0%	0%	0%	0%	76%
	Credit >	0.14	0.07	0.29	0.38	0.4		
		HQ Pres	LQ Pres	Light Plant	Heavy Plant	Invasive control		
Left Bank	Area #							
	Sq. Footage	59274						
	% Area	98%	0%	0%	0%	0%	0%	98%
	Credit >	0.14	0.07	0.29	0.38	0.4		
						CREDITS		
						Rt Bank >	0.11	Credit
						Lt Bank >	0.14	0.13
								79
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
Outside First 100' - Mitigation Categories								
One vegetative community maintained				Subtract 0.03		Ensure the sums of % Riparian Blocks equal 100		
Two vegetative communities maintained				Subtract 0.06				
Right Bank	Area #							
	Sq. Footage	23086						
	% Area	38%	0%	0%	0%	0%	0%	38%
	Credit >	0.07	0.07	0.15	0.19	0.2		
		Pres	Light Plant	Heavy Plant	Invasive control			
Left Bank	Area #							
	Sq. Footage	97193						
	% Area	161%	0%	0%	0%	0%	0%	161%
	Credit >	0.07	0.07	0.15	0.19	0.2		
						CREDITS		
						Rt Bank >	0.03	Credit
						Lt Bank >	0.11	0.07
								42
						Σ (% Area X Credit) for all areas (banks done separately)		
						AVE of credit for banks X length of project		
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
Adjustment Factor Categories								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected								
Credit >								
						Credits >		0
						Σ (Length X Credit) for all areas		
						Total Compensation Credit Provided by Project		
						121		

# Compensation Crediting Form (Form 3)

Unified Stream Methodology for use in Virginia

Project #	Project Name	Locality	Cowardin Class.	HUC	Date	Reach #	Reach Length	RCI
4189	RRMB - Addendum	Franklin		03010103	1/31/13	R16a	51	
Name(s) of Evaluator(s)		Stream Name and Information						
SW,GH		Tributary to Reed Creek						
								Project Credits
<b>Restoration:</b> Includes Priority 1, 2, and 3 restoration activities. Does not include buffer width.								Credit per foot
List Reaches that will receive full Restoration:								0
Total length of Full Restoration						1		
Credits = Stream Length X 1.0								
<b>Enhancement With Instream Structures:</b> Addressing Streambank Stability, Grade Control (Vanes, Weirs, Step-Pools), Constructed Riffles								Credit per foot
Discuss Length Affected by Instream Structures (justify length):								0
Length Affected by Instream Structures						0.3		
Credits = Stream Length X 0.3								
<b>Enhancement:</b> Addressing Streambank Stability, Entrenchment Ratios, Access to Floodplain								
<b>Mitigation Categories</b>								
Mechanical Bank Work				Biological Bank Work				
Credit Per Length				Pick One Per Length				
May Be Cumulative Per Length								
Activities	Habitat Structures	Create Bankfull Bench	Lay Back Banks	Bio-Remediation Techniques	Stream Bank Plantings			
Credit per foot per bank	0.1	0.15	0.1	0.1	0.09			
Right Bank	Length					0		
	Credit >							
Left Bank	Length					0		
	Credit >							
CREDITS								
Rt Bank >						0.00	Credit	
Lt Bank >						0.00	SUM of banks	0
Σ (Length X Credit) for all areas (banks done separately)								
<b>Riparian Areas:</b> Assess the proposed 100 foot buffer on both banks based on the activity proposed. Enter the percentage of area and the credit below. (Widths of buffer above 100' will be determined below)								
Activities	Buffer Re-establishment (removal of invasives)	Buffer Planting - Heavy	Buffer Planting - Light	Preservation High Quality, Restoration, Enhancement	Preservation Low Quality	Buffer area not within preservation width		
Credit for 0'-100'	0.4	0.38	0.29	0.14	0.07	0		
Credit for beyond 100'	0.2	0.19	0.15	0.07		0		
Calculation of "Goa" riparian buffer for each side (SAR length times 100') >>> 5,100 square feet								
<b>WITHIN FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03 Ensure the sums of % Riparian Blocks equal 100								
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.14	0.07	0.29	0.38	0.4		
CREDITS								
Rt Bank > 0.00 Credit								
Lt Bank > 0.00 0.00 0								
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>OUTSIDE FIRST 100' - Mitigation Categories</b>								
One vegetative community maintained Subtract 0.03 Ensure the sums of % Riparian Blocks equal 100								
Two vegetative communities maintained Subtract 0.06								
Right Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
Left Bank	Area #							
	Sq. Footage	0						
	% Area	0%	0%	0%	0%	0%	0%	
	Credit >	0.07	0.07	0.15	0.19	0.2		
CREDITS								
Rt Bank > 0.00 Credit								
Lt Bank > 0.00 0.00 0								
Σ (% Area X Credit) for all areas (banks done separately)								
AVE of credit for banks X length of project								
<b>Adjustment Factors:</b> These factors are applied as a multiplier to length of a reach for which they apply								
<b>Adjustment Factor Categories</b>								
Activity	Rare, Threatened, or Endangered Species or Communities	Livestock Exclusion	Watershed Preservation					
Credit	0.1 - 0.3	0.1 - 0.3	0.1 - 0.3					
Stream Length Affected			51					
Credit >			0.3					
Credits are cumulative and can apply to more than one reach. Each reach can have more than one Adjustment Factors								
Σ (Length X Credit) for all areas								15
Record AF length /credit beneath the AF activity. Provide a narrative explanation of the applicable site conditions that warrant an adjustment and justify the AF credit chosen.								
Credits >								15
Total Compensation Credit Provided by Project								15

# Compensation Summary Form (Form 4)

## Unified Stream Methodology for use in Virginia

Project #	Applicant	Date
4189	Roanoke River Wetlands & Stream MB - Amendment	3/31/2014
Evaluators	HUC	Locality
SW, GH	3010103	Franklin

Stream Name	Reach ID	Comp. Length (L) (feet)	Total Compensation Credit (Total CC) (From Form 3)
Tributary to Reed Creek	R1	894	394
Tributary to Reed Creek	R2	427	252
Tributary to Reed Creek	R3	9,068	1,723
Tributary to Reed Creek	R3a	249	135
Tributary to Reed Creek	R5	928	250
Tributary to Reed Creek	R5a	25	0
Tributary to Reed Creek	R6	156	95
Tributary to Reed Creek	R7	1,054	558
Tributary to Reed Creek	R7a	40	12
Tributary to Reed Creek	R8	468	266
Tributary to Reed Creek	R9	176	36
Tributary to Reed Creek	R10	2,543	585
Tributary to Reed Creek	R10a	212	0
Tributary to Reed Creek	R10b	60	18
Tributary to Reed Creek	R11	247	47
Tributary to Reed Creek	R12	827	438
Tributary to Reed Creek	R13	581	297
Tributary to Reed Creek	R14	1,674	896
Tributary to Reed Creek	R15	2,269	499
Tributary to Reed Creek	R15a	73	22
Tributary to Reed Creek	R15b	167	50
Tributary to Reed Creek	R15c	193	58
Tributary to Reed Creek	R16	604	121
Tributary to Reed Creek	R16a	51	15
<b>Totals</b>		<b>22,986</b>	<b>6,767</b>

Note: Round all feet & CC's to the nearest whole number.