Mitigation Banking Instrument

OFFICIAL BANK NAME LOCATION CITY, COUNTY, STATE

NAME OF BANK SPONSOR

SUBMITTED TO: Charleston District Interagency Review Team *Representing:* U.S. Army Corps of Engineers, Charleston District U.S. Environmental Protection Agency, Region 4 U.S. Fish and Wildlife Service, Charleston Ecological Services National Oceanic and Atmospheric Administration, National Marine Fisheries Service US Department of Agriculture, Natural Resource Conservation Service S.C. Department of Natural Resources S.C. Department of Health and Environmental Control

PREPARED BY

SUBMISSION DATE

This Mitigation Banking Instrument which describes the establishment, use, operation, and maintenance of ______Bank (hereinafter, the "Bank") is an agreement (the "Agreement") made and entered into on the _____ day of _____, 200_, by the _____, hereinafter, "Sponsor", and the U.S. Army Corps of Engineers (Corps), and each of the following agencies, upon its execution of this MBI, the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), the Natural Resource Conservation Service (NRCS), the South Carolina Department of Natural Resources (DNR), and the South Carolina Department of Health and Environmental Control (DHEC). The Corps, together with the State and Federal agencies that execute this MBI, are hereinafter collectively referred to as the Interagency Review Team (IRT).

I. PROJECT DESCRIPTION

- A. <u>Type and Purpose</u>: Whereas, the purpose of this Banking Instrument is to establish guidelines and responsibilities for the establishment, use, operation, and maintenance of ______ Bank. The Bank will provide compensatory mitigation for unavoidable adverse impacts to Waters of the United States, including wetlands, that result from activities authorized under Sections 401 and 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act, provided such activities have met all applicable requirements and are authorized by the appropriate authority.
- B. <u>Size and Location of Proposed Bank Site and Associated Watershed</u>: *Provide the total acreage of the proposed bank and detailed location including latitude/longitude, watershed, address or nearest intersection, city, county, and 8-digit, 10-digit, and 12-digit Hydrologic Unit Codes (HUC).*
- C. <u>Bank Size and Classes of Wetlands or Other Aquatic Resources</u>: *Provide a brief* description of on-site resources including the length, order, and classification of the stream reaches, width and area of the buffers, classification and acreage of wetlands, and total acreage of the bank.
- D. <u>Ownership</u>:

1. <u>Identity of Owner</u>: Provide name of Owner or legal entity that owns bank site property and a statement of their responsibilities. If the owner is a corporation, list the names of the president and vice president of the corporation.

2. <u>Identity of Sponsor</u>: List the name of the Sponsor of the bank and a statement of their responsibilities.

3. <u>Identity of Long-Term Steward</u>: *List the name of the Steward and a statement of their responsibilities.*

II. ESTABLISHMENT OF THE BANK

A. Mitigation Plan:

1. <u>Goals and Objectives</u>: This section should include a statement regarding your intent to preserve, enhance, restore and/or create wetlands and/or tributaries of (include name

of nearest blue-line stream) while providing compensatory mitigation alternatives for impairments of wetlands and streams associated with authorized (permitted) impacts within the approved bank service area. Provide a description of each aquatic resource type and amount that will be provided, the method of compensation (i.e., restoration, establishment, enhancement, and/or preservation), and the manner in which the resource functions of the compensatory mitigation project will address the ecological needs of the watershed, ecoregion, physiographic province, or other geographic area of interest.

2. <u>Site Selection</u>: Provide a description of the factors considered during the site selection process. This should include consideration of watershed needs, onsite alternatives, where applicable, and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation project site. In determining the ecological suitability of the compensatory mitigation project site, consideration must be given to the factors listed below:

(a) Hydrological conditions, soil characteristics, and other physical and chemical characteristics;

(b) Watershed-scale features, such as aquatic habitat diversity, habitat connectivity, and other landscape scale functions;

(c) The size and location of the compensatory mitigation site relative to hydrologic sources (including the availability of water rights) and other ecological features;
 (d) Compatibility with adjacent land uses and watershed management plans;

(e) Reasonably foreseeable effects the compensatory mitigation project will have on ecologically important aquatic or terrestrial resources (e.g., shallow sub-tidal habitat, mature forests), cultural sites, or habitat for federal or state listed, threatened and endangered species; and

(f) Other relevant factors including, but not limited to, development trends, anticipated land use changes, habitat status and trends, the relative locations of the impact and mitigation sites in the stream network, local or regional goals for the restoration or protection of particular habitat types or functions (e.g., reestablishment of habitat corridors or habitat for species of concern), water quality goals, floodplain management goals, and the relative potential for chemical contamination of the aquatic resources.

3. <u>Site Protection</u>: Long-term protection of privately owned compensatory mitigation sites may be provided through real estate instruments such as a conservation easement or the transfer of title to a federal, tribal, state, or local resource agency, or a non-profit conservation organization. For government property, federal facility management plans, integrated natural resources management plans, or other available mechanisms must prohibit incompatible land uses and establish a third party right of enforcement to ensure sufficient protection to the compensatory mitigation site. The method of site protection and the identity of the conservation easement holder, the party that will hold title to the property, or the government agency responsible for managing the property must be included in this section.

The legal description of the property, a copy of the real estate instrument or management plan, and a Property Assessment Warranty must be referenced and included in an appendix of this document. A model conservation easement (CE) and a sample Property Assessment Warranty (PAW) is available at the following website (<u>http://www.sac.usace.army.mil</u>) for your convenience. Any changes to the model CE must be identified clearly using track changes or a similar method to facilitate review of these legal documents. Failure to identify changes to a CE may result in the document being returned to the bank sponsor without review.

The Property Assessment and Warranty (PAW) consists of a summary of each recorded or unrecorded lien or encumbrance on, or interest in, the property that may affect the ability of the property owner protect the mitigation bank site. The PAW must clearly state that each lien, encumbrance or other exception to title has been subordinated to the site protection instrument.

4. Baseline Conditions:

(a) <u>Project Site:</u> In order to describe the existing condition of the project site, the bank sponsor will need to research and describe historic conditions, any past modifications to the mitigation site, and any ongoing changes in response to natural disturbances or management practices. The following resources are examples of information that may be used to describe the mitigation site: maps showing the location and boundaries of the bank property, information on current soil conditions, historical and existing hydrologic conditions, historic and existing plant communities, historical and cultural information about the site including past, present and future uses of the property including impacts to resources, jurisdictional determination (provide copy of confirmation and reference appendix for associated data/maps), water quality (for impaired streams, please reference most recent 303D listing information and cause of impairment at

http://www.scdhec.gov/environment/water/tmdl/index.htm), and a description of each aquatic resource type (Hydrogeomorphic Approach, Cowardin classification, Rosgen stream type, etc. as appropriate) and upland habitat type for the bank site. The baseline information must be sufficient to support the development of the mitigation work plan. For example, longitudinal and cross-sectional data including entrenchment ratio, width/depth ratio, sinuosity, slope, and pebble count are necessary to evaluate the existing condition of a stream. Therefore, this information is required if stream restoration activities are proposed as part of the mitigation plan. (b) Reference Site: The baseline information gathered by the bank sponsor for the reference site and the project site is used to identify the mitigation site potential and to assist in the development of appropriate performance standards. Therefore, a similar level of effort (see 4a above) is required to describe the existing condition of the reference site. The reference site should be located within the same watershed as the mitigation site. Since the reference site will be monitored throughout the life of the proposed project, it must be located in an area that will not be affected by the proposed restoration activities on the project site or future development of adjacent or nearby properties.

5. <u>Determination of Credits</u>: Service Area, Functional Assessment, and Credit Determination:

(a) <u>Service Area</u>: The service areas for each mitigation bank will be established by the IRT using 8 Digit Hydrologic Unit Codes, the Ecoregions of North Carolina and South Carolina, and project specific information. Service Areas generally fall within the following guidelines:

(1) The Primary Service Area for the mitigation bank will be bounded by the 8-Digit HUC and the South Carolina Ecoregion (Coastal Plain, Sand Hills, Piedmont, or Mountains) in which it is located.

(2) Secondary Service Areas for the mitigation bank may be approved by the IRT in adjacent 8-Digit HUCs within the same South Carolina Ecoregion and the same major drainage basin in which it is located.

(3) A Tertiary Service Area for the mitigation bank may be approved by the IRT in nonadjacent 8-digit HUCs that are within the same South Carolina Ecoregion and the same major drainage basin in which it is located. However, the bank may not be used to mitigate for impacts in the Tertiary Service Area if the impact site is located in the Primary or Secondary Service Area of any other currently operating bank, which is suitable for the impact type.
(4) Use of the mitigation bank outside the authorized service areas must be approved on a case-by-case basis. For example, if a permit applicant has conducted a thorough investigation of mitigation opportunities within the watershed where the impact site is located and the Corps determines that there are no practicable alternatives for compensatory mitigation, the Corps may evaluate project specific information to determine if a case by case exception regarding the service areas of an existing mitigation bank would be appropriate to meet the compensatory mitigation needs of a specific project

(b) Functional Assessment Method: For the purpose of determining whether a mitigation bank may provide compensatory mitigation for authorized impacts to a specific resource type, the bank sponsor must evaluate each aquatic resource type and describe the specific functions and services provided by the mitigation site. This information will also be used to determine whether the mitigation site provides in-kind or out-of-kind compensatory mitigation. Resource types that are not-specifically addressed in the MBI must be reviewed and approved on a case by case basis. All worksheets, tables, and numbers generated should be included in an appendix) (c) Credit Determination: The bank sponsor should use the most recent version of the Charleston District Standard Operating Procedures for Compensatory Mitigation to determine the potential number of credits generated by a mitigation bank. The potential number of credits is based on the anticipated change that would result from the proposed mitigation activities. The actual number of credits generated by the mitigation site will be based on a number of variables, such as the results of the baseline data collection, the success of restoration activities, the location of authorized projects (location factor), the resource types of authorized projects (kind factor), and minor modifications to the mitigation plan as a result of actual field conditions. A table should be provided showing the unit, the mitigation action, linear feet or acreage of affected area, and the potential number of mitigation credits generated by the mitigation activities.

6. <u>Mitigation Work Plan</u>: This section should include (as applicable) detailed design plans for the restoration and enhancement units and a description of the proposed activities for each area including existing and proposed elevation and slopes, construction methods, construction schedules, construction sequence, source of water including connections to existing waters and uplands; hydroperiod (seasonal depth, duration, and timing of inundation and saturation), methods for establishing the desired plant community; plans to control invasive plant species; proposed native plant species composition, source of species, plant location map, plant spatial structure, expected

natural regeneration, soil profile, source of soils, target soil characteristics, erosion and soil compaction control measures, planned habitat, planned buffer, interpretive signs, trails, and/or fences. For stream compensatory mitigation projects, the mitigation work plan may also include other relevant information such as planform geometry, channel form (e.g., typical channel cross-section), watershed size, design drainage, and riparian area plantings. For buffer enhancement, you must provide target vegetation composition, species list, cumulative density of plantings, and planting schedule. If removing impoundment structures or performing in-stream restoration, please provide detailed and specific information/design plans regarding proposed restoration techniques. Specific units should be determined based on the current status of the wetland or stream and the proposed mitigation treatment. Wetland areas and stream reaches with similar treatments (same assigned values in credit tables) should be included in one unit. All units should be clearly shown on a mitigation unit map.

7. <u>Maintenance Plan</u>: A description and schedule of maintenance requirements to ensure the continued viability of the resource once the initial construction is completed. This may include measures to control predation of mitigation plantings, temporary irrigation to facilitate plant establishment, procedures for conducting supplemental plantings and/or maintenance and repair of any water control or in-stream structures.

8. <u>Performance Standards</u>: Performance standards must be detailed for each management unit. A management unit should not include more than one aquatic resource type (stream, wetland, etc.) or mitigation method (restoration, enhancement, establishment, or preservation). Performance standards should describe the mitigation activities that are being conducted and should establish criteria for documenting the degree of success and whether the mitigation site has achieved the desired objectives. The following are examples of acceptable performance standards:

Forested Wetland - For areas involving vegetative restoration, plantings should include a diversity of species similar to those found in the reference site. An initial stocking density of 300 trees per acre (12' x 12' spacing) is recommended with a target density of 150-300 stems/acre and 85% canopy coverage after five years. In addition to survival rate, vegetative success criteria should state that seedlings show a consistent increase in height, lateral growth and root collar diameter throughout the monitoring period.

Hydrology - Wetlands would be considered successfully restored or enhanced when monitoring demonstrates that the degree and duration of flooding has increased over the baseline and is comparable to a suitable reference wetland. For effectively drained areas, success criteria should include quantitative criteria demonstrating the area meets jurisdictional criteria for vegetation and hydrology and that it is comparable to a reference area.

Stream Restoration - Following 5 years of monitoring and through two bank full events, the data demonstrates that the restored stream is in stable condition, stream parameters are comparable to the reference reach, and baseline conditions for stream biology and water quality have been maintained or improved. For units requiring riparian buffer plantings, including buffer enhancement units, vegetative success criteria should in addition to survival rate include that seedlings show a consistent increase in height, lateral growth and root collar diameter throughout the monitoring period.

Performance Standards may be based on functional, conditional, or other suitable assessment methods and/or criteria and may include hydrological, vegetative, faunal, and soil measures. This section of the MBI should also describe how the performance standards will be used to verify that the mitigation site is meeting interim success criteria and the objectives have been attained. The target values or range of values for the parameters specified in the performance standards should be calibrated with the reference site(s).

RELEASE	ACTION	PERCENTAGE	CREDITS
	Approval of MBI and execution of conservation		
Release 1	Easement	15%	
Release 2	Completion of construction	15%	
	Interim success 1-year after completion of		
Release 3	construction	10%	
	Interim success 2-years after completion of		
Release 4	construction	10%	
	Interim success 3-years after completion of		
Release 5	construction	15%	
	Interim success 4-years after completion of		
Release 6	construction	15%	
	Determination that all performance standards		
	have been met 5-years after completion of		
Release 7	construction	20%	

(a) Credit Release Schedule Example:

9. <u>Monitoring Requirements</u>: (5-year minimum) *Monitoring reports should be concise* and provide information to describe the site conditions and whether the mitigation project is meeting its performance standards. The report should include a narrative that provides an overview of site conditions and function; design drawings, maps, and photographs to illustrate site conditions, and functional assessments used to provide quantitative or qualitative measures of the functions provided by the mitigation project. Photographs should be formatted to print on a standard 8.5 x 11 sheet of paper, dated, and clearly labeled with the direction from which the photo was taken. Maps should show the location of the mitigation site, habitat types, locations of photographic reference points, transects, sampling data points, and/or other features pertinent to the mitigation site. Additional components of the narrative are:

(a) Name of party responsible for conducting the monitoring and the date(s) of the inspection.

(b) A brief description of the approved compensatory mitigation plan and the dates when specific mitigation activities were commenced and/or were completed.

(c) A paragraph describing whether the mitigation bank is developing as expected. This summary should be supported by a detailed description of each management unit, and whether or not each management unit is developing as expected and meeting the necessary performance standards.

(d) If one or more management units are not meeting the necessary performance standards, the bank sponsor must submit a description of the existing condition, identify the reason(s) that the management unit is not meeting performance standards, and submit a proposal to conduct remedial actions and bring the management unit into compliance with the approved MBI.

(e) Dates of any corrective or maintenance activities conducted since the previous report submission.

Monitoring Parameters should include:

(a) For stream restoration, channel stability should be monitored at permanently established monitoring stations located at the most upstream and downstream limits of the bank and at several cross sections at stations located within restoration reaches. For each station, measurements should include photographic documentation, plan view, longitudinal profile, and pebble counts. (b) Vegetative monitoring, for all units involving planting, should include measurements of height, lateral growth, and root collar diameter in addition to density of all trees by species including regeneration; composition, density, DBH, and height of all planted trees to determine survivability and growth rate; density and/or estimated coverage of all exotic species; and composition and estimated coverage of shrub and herbaceous (dominant, 10% or greater coverage) species. (c) Benthic macroinvertebrates should be sampled in accordance with SCDHEC qualitative sampling protocols. This data should be collected and analyzed by a state certified lab at permanently established monitoring stations located at the most upstream and downstream limits of the bank and at additional stations within the bank located downstream of each restoration reach. Biotic index, abundance, diversity, and the species list for each station should be listed in the monitoring report.

(d) Water quality data should include, but is not limited to, the following parameters: pH, dissolved oxygen, temperature, conductivity, hardness. This data should be collected and analyzed by a state certified lab at permanently established monitoring stations located at the most upstream and downstream limits of the bank and at additional stations within the bank located downstream of each restoration reach.
(e) Hydrology data: Monitoring wells should have corresponding rain gauges to show duration of saturation. For guidance on the installation of monitoring wells for wetland hydrology, please reference ERDC standards:

http://el.erdc.usace.army.mil/elpubs/pdf/tnwrap06-2.pdf

http://www.wes.army.mil/el/wrap/pdf/tnwrap00-2.pdf

10. Long-term Management Plan: This section describes activities that are expected to occur after all of the compensatory mitigation activities are completed and the mitigation plan is determined to be successful. Unlike maintenance activities that facilitate the development of the mitigation site during the operation of the mitigation bank, the long-term management plan should address activities that are required to ensure that the mitigation site continues to provide aquatic resource functions and services in perpetuity.

(a) <u>Ownership of the Mitigation Site</u>: The long-term management plan should state whether the existing property owner plans to convey the mitigation site to an appropriate conservation group or government agency, and the method for ensuring that the new property owner(s) understands their responsibility to protect the mitigation site in perpetuity (if applicable).

(b) Identity of Long-Term Steward: List the name of the Steward and a statement of their responsibilities.

(c) <u>Identification of Long Term Management Activities</u>: *Provide a list of activities,* such as burning, management of invasive species, etc. that are required to ensure

that the mitigation site will continue to provide the desired aquatic resource functions and services.

(d) Funding Mechanism: Describe how the management activities will be funded

(f) Justification for Level of Funding: The Long-Term Steward will be responsible for conducting the long-term management activities described above. The long-term management fund must provide a secure funding source for future maintenance, repair, and monitoring requirements. This justification must be based on real world estimates of the money required to manage the site in perpetuity. Quotes gathered for the estimate of restoration/enhancement costs may be used to generate this number. Amount should include monies for habitat work, infrastructure, and monitoring requirements along with any other requirements of the IRT. Either the amount agreed to between the Bank Sponsor and the IRT or the amount agreed to between the Bank Sponsor and Long-Term Steward WHICHEVER IS HIGHER shall be used to fund the account.)

<u>11. Adaptive Management</u>: In the event the mitigation bank, a a phase of the bank, or a specific management unit fails to achieve the necessary performance standards as specified in the banking instrument, the bank sponsor shall notify the members of the IRT and work with the IRT to develop contingency plans and remedial actions for review and approval by the IRT.

<u>12. Financial Assurances</u>: The sponsor shall provide financial assurances in the form of a Performance Bond or Letter of Credit for the mitigation banking activities. The bond or letter of credit shall assure performance of the Sponsor's obligation to restore, enhance and/or establish the aquatic resources as described in MBI during the operational phase of the mitigation bank. The bond or credit amount shall be based on estimated construction costs and the IRT will release the financial assurances after documentation and approval of project success. Banker must notify Corps 120 days prior to termination of financial assurances.

Identify the party responsible for establishing and managing the financial assurance, the specific type of financial instrument, the method used to estimate assurance amount, the date of establishment, and the release and forfeiture conditions. Documentation of estimated construction costs must be provided in a separate appendix of this document.

III. OPERATION OF THE BANK

A. <u>Reporting Requirements:</u> Once the MBI is approved, the bank sponsor is responsible for coordination with the IRT regarding the implementation of the approved mitigation plan. The bank sponsor should contact the IRT immediately if they are unable to implement all or a portion of the approved mitigation plan in accordance with the approved MBI. For example, the bank sponsor should notify the IRT if adverse weather conditions or site conditions result in delays to the overall project schedule and/or may result in a request to modify the approved mitigation plan. Failure to comply with the MBI or the terms and conditions of the DA permit authorizing restoration activities associated with the mitigation bank will result in a notification of non-compliance and a requirement for corrective measures.

B. <u>Provisions for the Release of Mitigation Credits</u>: Once the MBI has been approved and the necessary site protection instruments are executed, the bank sponsor may request an

initial release of mitigation credits from the IRT. These mitigation credits may be withdrawn from the mitigation bank to provide compensatory mitigation for projects authorized under Section 404 and 401 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. The bank sponsor may request additional releases of credits as the mitigation site achieves the necessary interim performance standards.

C. <u>Provisions for the Sale and Transfer of Credits</u>: Once the Corps receives documentation from the bank sponsor stating that they agree to accept responsibility for a permittee's compensatory mitigation requirements, the bank sponsor is responsible for assuring that the appropriate number and resource type of credits are protected in perpetuity.

D. <u>Accounting Procedures</u>: The bank sponsor is responsible for submitting a quarterly and annual ledger describing each action, the date of sale, the Corps permit number or other Federal, State or local action or permit number, the number of acres used and credits used from each unit of the mitigation bank, total acres and credits released, total acres and credits used and total acres and credits remaining. The following is a sample ledger that may be used to track mitigation credit sales:

No.	Sale Date	Permit No.	AC/LF Used	Credits Used	Total AC/Credit Used	Total AC/Credits Remaining
1						
2						
3						
4						
5						
6						
7						

E. <u>Provisions Covering the Use of the Land</u>: Use of the land will be restricted as detailed in the site protection instrument. (Appendix __). In accordance with the terms and conditions of the site protection instrument, other uses compatible with the purpose of the bank may be authorized by the Corps, SCDHEC, and/or the conservation easement holder (if applicable). For example, hunting leases are a common and accepted use of mitigation banks provided the owner accepts responsibility to correct any damage to the mitigation site caused by the lessee.

F. <u>Eminent Domain</u>: In the event all or part of this property is taken by exercise of the power of Eminent Domain or acquired by purchase in lieu of condemnation, whether by public, corporate, or other authority, so as to terminate the conservation easement in whole or in part, the mitigation bank sponsor is responsible for replacing any stream and/or wetland mitigation credits lost with in-kind mitigation credits.

G. <u>Provisions for Deficit</u>: If the IRT determines that the bank is operating at a deficit, debiting by the sponsor of credits shall immediately cease, and the authorizing agencies, in consultation with the IRT and the sponsor, will determine what remedial actions are necessary to correct the situation. As determined by the IRT and the sponsor, if conditions at the bank site do not improve or continue to deteriorate within one growing season from the date that the need for remediation was first identified in writing to the sponsor by the U.S. Army Corps of Engineers through the IRT, the agent responsible for the financial

assurances shall be directed by the Corps to transfer the amount necessary to correct the deficiency to a party acceptable to the IRT, to undertake corrective measures.

H. <u>Provisions For Bank Termination</u>: If the IRT determines that the Sponsor is in material default of any provision of this Agreement, the Corps may notify the Sponsor that the sale or transfer of any Credits will be suspended on all banks owned by the Sponsor until the appropriate deficiencies have been remedied. Upon notice of such suspension, the Sponsor agrees to cease all sales or transfers of Mitigation Credits until the IRT informs the Sponsor that sales or transfers may be resumed. Failure of the Sponsor to remedy deficiencies in a timely manner may result in termination of the MBI and any subsequent Bank operations.

I. <u>Force Majeure Clause</u>: Nothing herein shall be construed to authorize proceedings against the bank sponsor for any damages to the bank property caused by acts of God such as earthquake, fire, flood, storm, war, civil disturbance, strike, or similar causes. In the event of a force majeure event, the bank sponsor will notify the members of the IRT and work with the IRT to resolve the damages, if any, caused by the event. However, if the acts of God do not preclude the bank sponsor from resuming bank operations without unreasonable expense, then it shall not be relieved of its obligations under this document. Any impact to future credit releases or numbers of credits available for sale shall be discussed and determined by the IRT at that time.

IV. OTHER INFORMATION

The following information should be included in every MBI.

A. <u>Table of Contents</u>: Provide a table of contents corresponding to the outline above listing all tables, figures, and appendixes, and the page numbers where this information is located within the document. Maps and figures should be located behind the table of contents and in front of the MBI as Appendix 1. Tables and other Appendixes should be located in the rear of the document. When referencing a map, figure, table or other appendixes in the MBI, you must include the page number and Appendix number.

B. <u>Maps and Figures</u>: Provide a north arrow and the boundaries of the proposed bank (unless the map is of a specific area of the bank).

1. Location Map: Provide a map at lower magnification showing location of property at the county/state level and a map at higher magnification showing location at property at street level. Include street names

2. Watershed Map: Outline watershed boundaries for 8-digit HUC

3. Photographs: Include historical and recent aerials and representative photographs of the current site conditions.

- 4. Delineation Map of on-site jurisdictional waters: Must be verified by USACE
- 5. NRCS Soils Map: Include a list and description of the on-site soils
- 6. NWI Map: National Wetlands Inventory
- 7. USGS 7.5 Topographical Map: Include name of quad(s)
- 8. Service Area Map: Identify primary, secondary, and tertiary service areas

9. Map showing restoration, enhancement, preservation, establishment, and upland buffer areas: *Provide width of all buffer areas and include any on-site easements. Provide in large format.*

10. Map showing location of sampling sites, reference wells, monitoring wells, and rain gauges: *Provide latitude/longitude of all well/gauge locations*

11. Reference Site Maps: Provide numbers 1,2,3,5,6,7,and 10 for all reference sites

B. <u>Tables and/or other Appendixes</u>

1. Implementation Timeline: *Provide schedule of plantings*

2. Wetland/Stream Functional Assessment: Specify method used and provide assessment sheets notated with location of assessment

4. Wetland/Stream Baseline and Reference: *Physical, Chemical, and Biological Data* (by reach or wetland area)

- 3. Wetland and/or Stream Credit Worksheets
- 4. Credit Availability Schedule for each Habitat Type
- 5. Conservation Easement
- 6. Wetland Determination: Include verification letter, data sheets, etc.
- 7. Letter of Credit/Performance Bond
- 8. Cost Basis for Financial Assurances
- 9. FWS letter of concurrence
- 10. SHPO letter of concurrence
- 11. Design plans, longitudinal/cross-sectional data, etc.