Public Notice

US ARMY CORPS OF ENGINEERS
St. Louis District
Gateway to Excellence

Reply To:
U.S. Army Corps of Engineers
Attn: CEMVS-CO-F
1222 Spruce Street
St. Louis, Missouri 63103-2833

Public Notice Date:
December 29, 2003
Expiration Date :
January 29, 2004

PUBLIC NOTICE ANNOUNCING THE ST. LOUIS DISTRICT DRAFT MITIGATION POLICY

The U.S. Army Corps of Engineers St. Louis District Regulatory Branch (District) has prepared the attached St. Louis District Draft Mitigation Policy. The intent of this document is to assist applicants in understanding both District policies and specific requirements associated with proposed work requiring mitigation in regulated waters. The details and requirements of the policy are included in attachment A. Attachment B is a compensatory mitigation plan checklist with descriptions of the checklist items to assist applicants in developing appropriate and complete mitigation plans. Attachment C is a stream checklist, which is used by the District to gather baseline stream data for assessing proposed impacts to jurisdictional streams. This mitigation policy will provide the information needed to evaluate the appropriateness and enforceability of a proposed mitigation plan, while the information required by this mitigation policy will provide consistency to facilitate a more efficient project review process.

All comments regarding the draft mitigation policy must reach this office no later than the expiration date of the Public Notice to become part of the record and be considered in the implementation of the draft policy. Comments should be mailed to the following address:

U.S. Army Corps of Engineers

Regulatory Branch

1222 Spruce Street

St. Louis, Missouri 63103-2833

ATTN: Craig Litteken

Any questions or requests for additional information may be submitted by contacting any one of the three following Regulatory Branch project managers at the aforementioned address or by phone or electronic mail:

Craig Litteken, by phone at 314-331-8579 or by E-mail at Craig.J.Litteken2@mvs02.usace.army.mil

Keith McMullen, by phone at 314-331-8582 or by E-mail at Keith.McMullen@mvs02.usace.army.mil

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DANNY D. MCCLENDON
Chief, Regulatory Branch

Attachment A – Draft Mitigation Policy

Attachment B – Compensatory Mitigation Plan Checklist

Attachment C – Stream Checklist

NOTICE TO POSTMASTERS:

It is requested that this notice be conspicuously and continually placed for the duration of this notice.

St. Louis District
U.S. Army Corps of Engineers
Draft Proposed Mitigation Policy
December 28, 2003

I. Background to Policy

The U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the United States, including wetlands, under the authority of Section 404 of the Clean Water Act (33 USC 1344). The implementing regulations for the Act are found at (33 CFR 320-331). As a result, Department of the Army (DA) authorization is typically required for discharges resulting from activities such as filling, grading and mechanized land clearing when they occur in waters of the United States.

When reviewing a proposed project for DA authorization the Corps of Engineers applies a sequential three-step evaluation of the need for mitigation in order to maximize protection of the aquatic resource. The sequence is as follows:

Avoidance: The Corps requires the applicant to employ all practicable measures in order to avoid adverse impacts to the aquatic ecosystem that are not absolutely necessary.

Minimization: The Corps requires the applicant to employ all practicable measures in order to minimize adverse impacts to the aquatic ecosystem that cannot be reasonably avoided.

Compensation: Implement appropriate and practicable measures to compensate for all adverse impacts to the aquatic ecosystem that cannot be avoided or minimized. This is commonly referred to as compensatory mitigation.

The purpose of compensatory mitigation is to replace those aquatic ecosystem functions that would be lost or impaired because of the authorized activity. The amount and the type of mitigation required for a particular activity will be commensurate with the nature of and the extent of the activity's impacts on the aquatic ecosystem. The mitigation requirements will be determined by the District Engineer, on a case-by-case basis, and must be practicable in terms of cost, existing technology and logistics in light of the overall project purpose.

Appropriate compensatory mitigation may include restoration, creation, enhancement, or in some cases preservation of wetlands and other aquatic resources including forested riparian corridors. Restoration is the re-establishment of functions and characteristics that have either ceased to exist or exist in a substantially degraded state. Enhancement is activities conducted in, on or adjacent to existing waters of the United States that are intended to enhance one or more aquatic functions. Creation is the establishment of a wetland or other aquatic resource where one did not previously exist. Preservation is the protection of existing ecologically important waters of the United States in perpetuity by implementing certain legal and physical mechanisms such as easements and/or deed restrictions.

Two general approaches to implementing compensatory mitigation are project-specific mitigation and third-party mitigation.

A project-specific mitigation project is one that compensates for the adverse impacts of a single activity requiring DA authorization. This type of mitigation is usually designed and implemented by the permittee upon the approval of the St. Louis District Corps of Engineers (SLDCOE). The project-specific mitigation is often located on-site or near the authorized activity. The permittee is responsible for monitoring the mitigation site, typically for a period of 5-10 years, in order to assure that the aquatic ecosystem that is similar to the one that was lost is re-established or re-created at an appropriate site.

The third-party approach to mitigation consolidates various types of impacts to the aquatic environment at various locations requiring DA authorization into one or more off-site mitigation projects. In this approach a third-party individual, group or organization accepts the responsibility of designing, implementing and assuring the success of the compensatory mitigation for the permittee. This approach includes such activities as mitigation banking, combined or joint mitigation projects and in-lieu fee and fee-based trusts. A brief description of each follows:

Mitigation Banking: Mitigation systems that provide consolidated off-site compensation for various authorized impacts to the aquatic environment in advance of the impacts resulting from the authorized project. The mitigation bank is developed and operated according to the terms agreed to in the banking instrument by the bank owner, the SLDCOE and the Mitigation Bank Review

Team (MBRT). In most cases DA authorization is required for the construction of the mitigation bank. For more information on mitigation banking, refer to "Federal Guidance for the Establishment, Use and Operation of Mitigation Banks", published in the Federal Register on November 28, 1995 (Vol. 60, No. 228, pp. 58605-58614).

Combined or joint-project mitigation: These are mitigation systems that provide compensatory mitigation for more than one permitted project that adversely impact the aquatic ecosystem. Unlike the mitigation bank, a joint-project typically does not provide compensation in advance of project impacts. Development of a combined or joint-project mitigation area typically requires DA authorization.

In-lieu fee and fee-based mitigation: Mitigation systems that provide a DA permittee an opportunity to pay a fee in lieu of conducting project-specific compensatory mitigation. Fees are used to fund projects designed to restore, enhance, create or in some cases preserve aquatic ecosystem functions. The projects designed with the fees must reflect the nature and the extent of the aquatic functions that are adversely affected by the authorized activities.

II. St. Louis District Mitigation Requirements

A. Project-Specific Mitigation

When required, a Department of the Army permittee is responsible for the development of a compensatory mitigation plan. The plan must to be submitted to the SLDCOE for review and for concurrence prior to implementation. The proposed mitigation plan must adequately offset the adverse impacts to the aquatic ecosystem that will result from the unavoidable impacts of the authorized project. In addition, the permittee is responsible for developing any and all real estate arrangements such as easements or deed restrictions that will normally be required to assure long-term avoidance of the mitigation area. The requirement for an easement or a deed restriction is at the discretion of the SLDCOE. The easement or deed restriction requirement may be waived if the compensatory mitigation is completed on public lands. However, a maintenance agreement with the public landowner will be required if the permittee is not the owner of the mitigation lands. At a minimum, a compensatory mitigation plan must include the following:

1. A complete description of the alternatives investigated and the efforts made to avoid and to minimize adverse impacts of the project on the aquatic ecosystem. Include a discussion of the authorized impacts on the local hydrology, on the upstream and downstream aquatic ecosystem and on the adjacent wildlife habitat.
2. A thorough description of the proposed compensatory mitigation area including a discussion of how the authorized impacts will be adequately re-established or re-created at the mitigation site. In addition, include a vicinity and site map, aerial and ground photographs of the site, land-use history including current easements, an assessment of potential endangered species and archaeological and/or cultural resource impacts, a soil map with interpretations of the soil suitability for the proposed hydrology and native plantings, an assessment of the local hydrology and the dominant vegetative communities present on the site.
3. A jurisdictional determination (JD), including wetland delineation, if appropriate, conducted in accordance with the 1987 Corps of Engineers Wetland Delineation Manual must be completed on the proposed mitigation site. The JD must include a site description, complete field data sheets for all wetlands, summary of findings, a map of the site indicating the location and the extent of all waters of the United States, including wetlands and a signed statement granting permission to the SLDCOE to access the site in order to review the JD and to revisit the site upon notification of the landowner.
4. A detailed description of the nature and the location of all ground disturbance activities and all structures required to adequately construct the aquatic ecosystem. This should include a grading plan, land clearing requirements, location of construction roads, type of water control structures with intake and outfall elevations and volumes and type of materials to be discharged. Include both temporary and permanent activities and structures.
5. A planting plan that includes a list of native species to be used, density of planting, planting methods, planting schedule and survival success criteria.
6. A monitoring plan designed to analyze and to document the success of the compensatory mitigation area. The plan must include the name, address and telephone number of the responsible party, the success criteria and a reporting program. Generally, monitoring reports for the mitigation site will be required annually for the first three years after construction is complete. Then a report will be due every other year for a period of 5 to 10 years depending on the level of success documented in the monitoring reports.
7. A contingency plan must be completed that outlines remedial measures to compensate for impacts to the aquatic environment in the event that the compensatory mitigation plan fails.
8. Financial assurances, such as a performance bond, generally are required for all mitigation plans when the authorized impacts occur prior to the successful completion of the compensatory mitigation.
9. The St. Louis District proposes to use acres and/or linear feet as the unit of mitigation credits. At no time will the mitigation requirements be less than a 1:1 ratio (acres and/or linear feet) of impacted habitat to created habitat. Mitigation ratios of greater than 1:1 may be imposed if warranted. The District will continue to evaluate habitat

assessment methods and the credit ratio requirement could change with the adoption of an approved habitat assessment method.

*** Any and all aquatic resource mitigation, including any associated upland areas, created beyond that required by any DA authorization must be approved in accordance with the banking process outlined in the federal guidance on mitigation banking as described below.**

Mitigation proposals submitted to the St. Louis District Corps of Engineers, Regulatory Staff are evaluated to determine if the proposed mitigation plan meets the minimum requirements of this proposed Draft Mitigation Policy.

B. Mitigation Banks

1. The establishment of all mitigation banks within the SLDCOE geographic regulatory area must meet the minimum requirements of the "Federal Guidance for the Establishment, Use and Operation of Mitigation Banks." The guidance document is published in the November 28, 1995 Federal Register (Vol. 60, No. 228, pp. 58605-58614). Also available at **http://www.usace.army.mil/inet/functions/cw/cecwo/reg/mitbankn.htm**
2. The Corps will typically serve as the lead agency for the establishment of mitigation banks. However, bank sponsors proposing establishment of a mitigation bank solely for the purpose of complying with the "Swampbuster" provisions of the Food Security Act, as amended, should submit their prospectus to the USDA-Natural Resources Conservation Service (NRCS).
3. The Lower Missouri Wetland Mitigation Bank, Westwinds Mitigation Bank, Big Rivers Wetland Mitigation Bank, Rosedale Wetland Mitigation Bank, and Fox Creek Stream Mitigation Banks are approved mitigation banks available for compensatory mitigation of aquatic impacts that occur on the Missouri side of the St. Louis District. The Richland Creek Wetland Mitigation Bank and the Southern Illinois Wetland Mitigation Bank are approved mitigation banks available for compensatory mitigation of aquatic impacts that occur on the Illinois side of the St. Louis District.
3. Individuals and/or organizations interested in mitigation bank development should submit a bank prospectus to the SLDCOE.

C. In-Lieu Fee Mitigation

1. Currently there are no opportunities for in-lieu fee mitigation within the SLDCOE geographic regulatory area.
2. To propose an in-lieu fee mitigation program to the SLDCOE a prospectus must be submitted.

D. Fee-Based Mitigation

1. Fee-based mitigation is available in the SLDCOE geographic regulatory area within the State of Missouri through the Missouri Conservation Heritage Foundation's Stream Stewardship Trust Fund. This option is primarily for compensatory mitigation of aquatic ecosystems as related to authorized stream channel impacts. However, on a limited basis, small wetland impacts can be mitigated through this instrument when it is determined to be in the public's interest by the SLDCOE.
2. Documentation of receipt of payment from the Missouri Conservation Heritage Foundation must be provided to the SLDCOE prior to incurrence of the aquatic impacts or as required by special condition contained within the DA Permit.

III. References

1. U.S. Army Corps of Engineers, Regulatory Guidance Letter 02-02, dated December 26, 2002.
2. *"Compensating for Wetland Losses Under the Clean Water Act",* National Research Council, 2001
3. *"Federal Guidelines for the Establishment, Use and Operation of Mitigation Banks"*, Federal Register, November 28, 1995
   (Vol. 60, No. 228, pp 58605-58614)
4. National Environmental Protection Act of 1969 (NEPA), as amended,
   (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975 and Pub. L. 97-258, 4(b), September 13, 1982).

CHECKLIST: COMPENSATORY MITIGATION PLAN

1. Mitigation Goals and Objectives
    - Describe functions lost at impact site
    - Describe functions to be gained at mitigation site
    - Describe overall watershed improvements to be gained

2. Baseline Information for Impact and Proposed Mitigation Sites
    - Provide data on physical attributes of sites (soils, vegetation, hydrology)
    - Describe historic and existing land uses and resources impacted
    - Describe reference site attributes if available

3. Mitigation Site Selection and Justification
    - Describe process of selecting proposed site
    - Likelihood of success, future land use compatibility, etc.

4. Mitigation Work Plan
    - Location
    - Construction Plan
    - Describe planned hydrology, vegetation, soils, buffers, etc.

5. Performance Standards
    - Identify success criteria
    - Compare functions lost and gained at impact and mitigation sites
    - Describe soils, vegetation and hydrology parameter changes

6. Site Protection and Maintenance
    - List parties and responsibilities
    - Provide evidence of legal protective measures
    - Maintenance plan and schedule

7. Monitoring Plan
    - Provide monitoring schedule, identify party (ies) and responsibilities
    - Specify data to be collected, including assessment tools and methodologies

8. Adaptive Management Plan
    - Identify party (ies) and responsibilities
    - Remedial measures (financial assurances, management plan, etc.)

9. Financial Assurances
    - Identify party (ies) responsible for assurances
    - Specify type of assurance, contents and schedule

DESCRIPTION: COMPENSATORY MITIGATION PLAN CHECKLIST

This document is intended as a technical guide for Clean Water Act (CWA) Section 404 permit applicants[1] preparing compensatory mitigation plans. Compensatory mitigation is required to offset impacts that cannot be avoided and minimized to the extent practicable. The purpose of this document is to identify the types and extent of information that agency personnel need to assess the likelihood of success of a mitigation proposal. Success is generally defined as: a healthy sustainable wetland/water that – to the extent practicable – compensates for the lost functions of the impacted water in an appropriate landscape/watershed position. This checklist provides a basic framework that will improve predictability and consistency in the development of mitigation plans for permit applicants. Although every mitigation plan may not need to include each specific item, applicants should address as many as possible and indicate, when appropriate, why a particular item was not included (For example, permit applicants who will be using a mitigation bank would not be expected to include detailed information regarding the proposed mitigation bank site since that information is included in the bank's enabling instrument). This checklist can be adapted to account for specific environmental conditions in different regions of the U.S.

1. Mitigation Goals and Objectives

Impact Site

a. Describe and quantify the aquatic resource type and functions that will be impacted at the proposed impact site. Include temporary and permanent impacts to the aquatic environment.

b. Describe aquatic resource concerns in the watershed (e.g. flooding, water quality, habitat) and how the impact site contributes to overall watershed/regional functions. Identify watershed or other regional plans that describe aquatic resource objectives.

Mitigation Site

c. Describe and quantify the aquatic resource type and functions for which the mitigation project is intended to compensate.

d. Describe the contribution to overall watershed/regional functions that the mitigation site(s) is intended to provide.

2. Baseline Information - for proposed impact site, proposed mitigation site & if applicable, proposed reference site(s).

a. Location

1. Coordinates (preferably using DGPS) & written location description (including block, lot, township, county, Hydrologic Unit Code (HUC) number, as appropriate and pertinent.
2. Maps (e.g., site map with delineation (verified by the Corps), map of vicinity, map identifying location within the watershed, NWI map, NRCS soils map, zoning or planning maps; indicate area of proposed fill on site map).
3. Aerial/Satellite photos.

b. Classification – Hydrogeomorphic as well as Cowardin classification, Rosgen stream type, NRCS classification, as appropriate.

[1] The checklist may be used in other federal or state programs as well; however, additional information may be needed to satisfy specific program requirements. For example, Attachment A indicates additional information needed by the Natural Resources Conservation Service (NRCS) to satisfy the Swampbuster provisions of the Food Security Act.

[1] The checklist may be used in other federal or state programs as well; however, additional information may be needed to satisfy specific program requirements. For example, Attachment A indicates additional information needed by the Natural Resources Conservation Service (NRCS) to satisfy the Swampbuster provisions of the Food Security Act.

c. Quantify wetland resources (acreage) or stream resources (linear feet) by type(s).
d. Assessment method(s) used to quantify impacts to aquatic resource functions (e.g., HGM, IBI, WRAP, etc.); explain findings. The same method should be used at both impact and mitigation sites.
e. Existing hydrology
    1. Water budget. Include water source(s) (precipitation, surface runoff, groundwater, stream) and losses(s). Provide budgets for both wet and dry years.
    2. Hydroperiod (seasonal depth, duration, and timing of inundation and/or saturation), percent open water.
    3. Historical hydrology of mitigation site if different than present conditions
    4. Contributing drainage area (acres).
    5. Results of water quality analyses (e.g., data on surface water, groundwater, and tides for such attributes as pH, redox, nutrients, organic content, suspended matter, DO, heavy metals).
f. Existing vegetation
    1. List of species on site, indicating dominants.
    2. Species characteristics such as densities, general age and health, and native/non-native/invasive status.
    3. Percent vegetative cover; community structure (canopy stratification).
    4. Map showing location of plant communities.
g. Existing soils
    1. Soil profile description (e.g., soil survey classification and series) and/or stream substrate (locate soil samples on site map).
    2. Results of standard soils analyses, including percent organic matter, structure, texture, permeability.
h. Existing wildlife usage (indicate possible threatened and endangered species habitat).
i. Historic and current land use; note prior converted cropland.
j. Current owner(s)
k. Watershed context/surrounding land use.
    1. Impairment status and impairment type (e.g., 303(d) list) of aquatic resources.
    2. Description of watershed land uses (percent ag, forested, wetland, developed).
    3. Size/Width of natural buffers (describe, show on map).
    4. Description of landscape connectivity: proximity and connectivity of existing aquatic resources and natural upland areas (show on map).
    5. Relative amount of aquatic resource area that the impact site represents for the watershed and/or region (i.e., by individual type and overall resources).

3. Mitigation Site Selection & Justification

a. Site-specific objectives: Description of mitigation type(s)[2] , acreage(s) and proposed compensation ratios.
b. Watershed/regional objectives: Description of how the mitigation project will compensate for the functions identified in the Mitigation Goals section 1(c).
c. Description of how the mitigation project will contribute to aquatic resource functions within the watershed or region (or sustain/protect existing watershed functions) identified in the Mitigation

[2] That is, restoration, enhancement, creation or preservation: see Regulatory Guidance Letter (RGL) 02-2, Mitigation RGL, for definitions for these terms.

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Goals section 1(d). How will the planned mitigation project contribute to landscape connectivity?
d. Likely future adjacent land uses and compatibility (show on map or aerial photo).
e. Description of site selection practicability in terms of cost, existing technology, and logistics.
f. If the proposed mitigation is off-site and/or out-of-kind, explain why on-site or in-kind options[3] are not practicable or environmentally preferable.
g. Existing and proposed mitigation site deed restrictions, easements and rights-of-way. Demonstrate how the existence of any such restriction will be addressed, particularly in the context of incompatible uses.
h. Explanation of how the design is sustainable and self-maintaining. Show by means of a water budget that there is sufficient water available to sustain long-term wetland or stream hydrology. Provide evidence that a legally defensible, adequate and reliable source of water exists.
i. USFWS and/or NOAA Fisheries Listed Species Clearance Letter or Biological Opinion.
j. SHPO Cultural Resource Clearance Letter.

4. Mitigation Work Plan

a. Maps marking boundaries of proposed mitigation types; include DGPS coordinates.
b. Timing of mitigation: before, concurrent or after authorized impacts; if mitigation is not in advance or concurrent with impacts, explain why it is not practicable and describe other measures to compensate for the consequences of temporal losses.
c. Grading plan
    1. Indicate existing and proposed elevations and slopes.
    2. Describe plans for establishing appropriate microtopography. Reference wetland(s) can provide design templates.
d. Description of construction methods (e.g., equipment to be used)
e. Construction schedule (expected start and end dates of each construction phase, expected date for as-built plan).
f. Planned hydrology
    1. Source of water.
    2. Connection(s) to existing waters.
    3. Hydroperiod (seasonal depth, duration, and timing of inundation and saturation), percent open water, water velocity.
    4. Potential interaction with groundwater.
    5. Existing monitoring data, if applicable; indicate location of monitoring wells and stream gauges on site map.
    6. Stream or other open water geomorphic features (e.g., riffles, pools, bends, deflectors).
    7. Structures requiring maintenance (show on map) Explain structure maintenance in section 6(c).
g. Planned vegetation
    1. Native plant species composition (e.g., list of acceptable native hydrophytic vegetation).
    2. Source of native plant species (e.g. salvaged from impact site, local source, seed bank) stock type (bare root, potted, seed) and plant age(s)/size(s).
    3. Plant zonation/location map (refer to grading plan to ensure plants will have an acceptable hydrological environment).

[3] See Federal Guidance on the Use of Off-Site and Out-of-Kind Compensatory Mitigation under Section 404 of the CWA.

[3] See Federal Guidance on the Use of Off-Site and Out-of-Kind Compensatory Mitigation under Section 404 of the CWA.

4. Plant spatial structure – quantities/densities, % cover, community structure (e.g., canopy stratification).
5. Expected natural regeneration from existing seed bank, plantings, and natural recruitment.

h. Planned soils
1. Soil profile
2. Source of soils (e.g., existing soil, imported impact site hydric soil), target soil characteristics (organic content, structure, texture, permeability), soil amendments (e.g., organic material or topsoil).
3. Erosion and soil compaction control measures.

i. Planned habitat features (identify large woody debris, rock mounds, etc. on map).

j. Planned buffer (identify on map).
1. Evaluation of the buffer's expected contribution to aquatic resource functions.
2. Physical characteristics (location, dimensions, native plant composition, spatial and vertical structure.

k. Other planned features, such as interpretive signs, trails, fence(s), etc.

5. Performance Standards

a. Identify clear, precise, quantifiable parameters that can be used to evaluate the status of desired functions. These may include hydrological, vegetative, faunal and soil measures. (e.g., plant richness, percent exotic/invasive species, water inundation/saturation levels). Describe how performance standards will be used to verify that objectives identified in 3(b) and 3(c) have been attained.

b. Set target values or ranges for the parameters identified. Ideally, these targets should be set to mimic the trends and eventually approximate the values of a reference wetland(s).

6. Site Protection and Maintenance

a. Long-term legal protection instrument (e.g. conservation easement, deed restriction, transfer of title).

b. Party(ies) responsible and their role (e.g. site owner, easement owner, maintenance implementation). If more than one party, identify primary party.

c. Maintenance plan and schedule (e.g. measures to control predation/grazing of mitigation plantings, temporary irrigation for plant establishment, replacement planting, structure maintenance/repair, etc.).

d. Invasive species control plan (plant and animal).

7. Monitoring Plan

a. Party(ies) responsible for monitoring. If more than one, identify primary party.

b. Data to be collected and reported, how often and for what duration (identify proposed monitoring stations, including transect locations on map).

c. Assessment tools and/or methods to be used for data collection monitoring the progress towards attainment of performance standard targets.

d. Format for reporting monitoring data and assessing mitigation status.

e. Monitoring schedule

8. Adaptive Management Plan

a. Party(ies) responsible for adaptive management.

b. Identification of potential challenges (e.g., flooding, drought, invasive species, seriously degraded site, extensively developed landscape) that pose a risk to project success. Discuss how the design accommodates these challenges.

c. Discussion of potential remedial measures in the event mitigation does not meet performance standards in a timely manner.

d. Description of procedures to allow for modifications of performance standards if mitigation projects are meeting mitigation goals, but in unanticipated ways.

9. Financial Assurances

a. For each of the following, identify party(ies) responsible to establish and manage 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:
   1. Construction phase
   2. Maintenance
   3. Monitoring
   4. Remedial measures
   5. Project success

b. Types of assurances (e.g., performance bonds, irrevocable trusts, escrow accounts, casualty insurance, letters of credit, etc.).

c. Schedule by which financial assurance will be reviewed and adjusted to reflect current economic factors.

ATTACHMENT A
NATURAL RESOURCES CONSERVATION SERVICE (NRCS) PROGRAM REQUIREMENTS[4]

- ☐ NRCS conservation practice standards and specifications
- ☐ NRCS Environmental Evaluation
- ☐ Mitigation agreement
- ☐ Federal/State/Local required permits
- ☐ Compatible use statement:
  - Allowable uses (e.g. hunting, fishing)
  - Prohibited uses (e.g. grazing, silviculture)
  - Uses approved by compatible use permit
- ☐ Copy of recorded easement
- ☐ Subordination waiver on any existing liens on mitigation site
- ☐ Statement of landowner's tax liability
- ☐ Copy of Warrantee Deed from landowner's attorney (no encumbrances, if so list)
- ☐ Copy of certified wetland determination:
  - NRCS-CPA-026 Highly Erodible Land and Wetland Conservation Certification
  - Wetland label map
- ☐ Copy of FSA Good Faith Waiver
- ☐ Copy of easement(s) ingress/egress granted to USDA employees for gaining legal access to mitigation site
- ☐ Copy of NRCS-CPA-38 Request for Certified Wetland Determination/Delineation

[4] For a complete list of the program requirements needed by NRCS to satisfy the Swampbuster provisions of the Food Security Act see the National Food Security Act Manual.

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Stream Description Information

Project Name_____ File #_____ Date_____

Office Determination

- USGS 7.5 minute topographic map
  - Drainage pattern _____ Y _____ N
  - Blue line _____ Y _____ N
  - Evidence of channelization _____ Y _____ N
- NWI map
  - Riverine classification _____ Y _____ N
  - Adjacent wetlands _____ Y _____ N
  - Evidence of channelization _____ Y _____ N
- USDA soil map (if available)
  - Stream shown on map _____ Y _____ N
  - Evidence of channelization _____ Y _____ N
- Aerial photo (if available)
  - Riparian corridor shown _____ Y _____ N
  - Evidence of channelization _____ Y _____ N
- Consultant/Engineering information available _____ Y _____ N
- On 303d list _____ Y _____ N
- Size of Watershed _____ Acres
- District-Designated Water (Circle One) Yes No _____ Creek
- Notes:

_____
_____

Field Determination

- OHWM present _____ Y _____ N
- Type of Flow Ephemeral_____ Intermittent_____ Perennial_____
- Estimation of channel size
  - Width at top of bank _____ ft.
  - Width at OHWM _____ ft.
  - Height to top of bank _____ ft.
  - Height to OHWM _____ ft.
- Evidence of OHWM
  - Natural shelving _____ Y _____ N
  - Natural bank line _____ Y _____ N
  - Soil change _____ Y _____ N
  - Vegetation loss _____ Y _____ N
  - Clear shoreline _____ Y _____ N
  - Presence of litter/debris _____ Y _____ N
  - Local characteristics:

_____
_____

- Riparian corridor present at project site _____ Y _____ N
- Estimation of corridor width _____ ft.
- Notes:_____

_____

- Riparian corridor present upstream _____ Y _____ N
- Riparian corridor present downstream _____ Y _____ N
- Wetlands adjacent to stream at project site _____ Y _____ N
- Riffles/pools present at project site _____ Y _____ N
- Meanders present at project site _____ Y _____ N
- Notes regarding other characteristics (ex. caving banks, farmed to edge of stream, etc.):

_____
_____

Jurisdictional Channel (Circle One) Yes No