



**U.S. Army Corps  
of Engineers  
Baltimore District**

# Public Notice

**In Reply Refer to NAB-2008-01083(Maple Dam  
Conservation, LLC/Maple Dam Mitigation Bank)**



**Maryland Department of  
the Environment**

PN 13-55

Comment Period: September 12, 2013 to October 12, 2013

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**The Baltimore District Corps of Engineers (Corps) and Maryland Department of the Environment (MDE) are soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the proposed revisions and additions to Maple Dam Conservation, LLC /Maple Dam Mitigation Bank and the potential of the proposed mitigation bank to provide appropriate compensatory mitigation for activities authorized by Department of the Army and/or State of Maryland Nontidal Wetlands Act permits.**

**At this time, no decision has been made as to whether or not a permit will be issued or if proposed revisions to the existing “Maple Dam Mitigation Bank” will be approved. We are requesting your comments to determine if approval should be granted for the proposed revisions to the existing compensatory wetland mitigation bank known as the Maple Dam Mitigation Bank. The purpose of the proposed revisions to the mitigation bank is to bring the existing Bank into consistency with the terms of the 2008 Mitigation Rule, to expand the existing Bank’s geographic service area and to continue to provide compensatory mitigation for projects that result in unavoidable wetland impacts authorized by the Department of the Army and State of Maryland Nontidal Wetlands Act permits and for future development projects. The proposed primary service area would be in the Tangier Sound drainage basin (USGS hydrologic unit code (HUC) 02080110), the Nanticoke River drainage basin HUC (02080109), and the portion of the Choptank River drainage basin HUC (02060005) from Route 404 to the southern-most boundary of that HUC within the State of Maryland. The secondary service area would include the Pocomoke-Western Lower Delmarva HUC (02080111) in the State of Maryland. This would include all of Dorchester County, Wicomico County, Somerset County and portions of Caroline County, Talbot County, and Worcester County, Maryland.**

**In addition, we are soliciting comments to consider in our evaluation of the impacts to Waters of the United States for the construction of this Bank that requires DA authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344). A preliminary review indicates that the proposed work may qualify for U.S. Army Corps of Engineers (Corps) authorization under Nationwide Permit 27, Aquatic Habitat Restoration, Establishment, and Enhancement Activities. The Nationwide Permit has undergone a full public interest review as required by Corps regulations (33 CFR 320.4(a)), and NEPA documentation has been prepared that addresses environmental considerations. A field review of the proposal indicates that there are waters of the United States, including wetlands within the project area. These areas are regulated pursuant to Section 404 of the Clean**

**Water Act and the work described below will require Department of the Army authorization. The project will also require a MDE authorization.**

The Corps and MDE have received a Wetland Mitigation Bank prospectus to establish, design, construct, and operate Phases 2 and 3 of the existing compensatory Maple Dam Mitigation Bank, expand the existing Bank's Phase 1 and proposed Phase 2 and 3 geographic service area, and bring the entire existing Maple Dam Mitigation Bank into consistency with the terms of the 2008 Mitigation Rule. This attached prospectus provides a summary of the information regarding the proposed Mitigation Bank and is in accordance with the Department of Defense/Environmental Protection Agency Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332 and 40 CFR Part 320) and MDE's Mitigation Banking regulations.

Oversight of this Mitigation Bank will be undertaken by the Maryland Interagency Review Team (IRT), which is comprised of Federal and State regulatory and resource agencies. The Baltimore District, U.S. Army Corps of Engineers serves as chair of the IRT and the Maryland Department of the Environment serves as co-chair of the IRT.

The purpose of this proposed Bank is to provide compensatory mitigation for future unavoidable impacts to aquatic resources, including nontidal wetlands that result from activities authorized under Section 404 of the Clean Water Act and the Maryland Nontidal Wetlands Protection Act, provided such use has met all applicable requirements and is authorized by the appropriate authority(s). The Mitigation Bank would be used to comply with the special condition mitigation requirements of permitted projects by providing in-kind compensation for authorized wetlands losses. The Mitigation Bank may only be used for future projects after all appropriate and practical steps to avoid and minimize adverse impacts to aquatic resources, including nontidal wetlands and streams have been taken. All remaining unavoidable impacts must be compensated to the extent appropriate and practicable.

The final mitigation instrument does not provide ultimate DA and/or State authorization for specific future projects impacting Waters of the United States, exclude such future projects from any applicable statutory or regulatory requirements, or preauthorize the use of credits from the Bank for any particular project. The Corps provides no guarantee that any particular individual or general permit will be granted authorization to use this Mitigation Bank to compensate for unavoidable aquatic resource impacts associated with a proposed permit, even though compensatory mitigation credits may be available within the proposed defined service area.

APPLICANT/BANK SPONSOR: Maple Dam Conservation, LLC  
Mr. Don Miko  
P.O. Box 33  
Fork, Maryland 21051

PROJECT LOCATION: The 42-acre Bank is located approximately 3.5 miles south of the City of Cambridge, in the headwaters of the Little Blackwater River, on the east side of Maple Dam Road, Dorchester County, Maryland, presently owned by Don Miko of Maple Dam Conservation, LLC. The Latitude of the bank is 38° 29' 50.50" N and the Longitude is 076° 04' 55.14"W

BANK DESCRIPTION: Phase 1 of the Maple Dam Mitigation Bank has been constructed, planted and monitored for five years such that a release of that phase on the Bank was received from the IRT in 2012. The Sponsor proposes, in accordance with

the attached plans, to establish, design, construct, and operate Phases 2 and 3 of the compensatory Maple Dam Mitigation Bank, expand the existing Bank's Phase 1 and proposed Phase 2 and 3 geographic service area, and bring the entire Maple Dam Mitigation Bank into consistency with the terms of the 2008 Mitigation Rule. The parcel for Phases 2 and 3 is presently a farmed cropland consisting of a total of 25.35 acres. The site presently consists of crop stubble with a ditch bisecting Phases 2 and 3 and other surrounding drainage ditches. The Mitigation Bank will be subject to a Mitigation Banking instrument that institutes guidelines and responsibilities for the establishment, use operation and maintenance of the proposed Bank.

The sponsor has proposed, for purposes of Section 404 of the Clean Water Act, the primary geographic service area (GSA) of the Mitigation Bank site to include the Tangier Sound drainage basin (USGS hydrologic unit code (HUC) 02080110), the Nanticoke River drainage basin HUC (02080109), and the portion of the Choptank River drainage basin HUC (02060005) from Route 404 to the southern-most boundary of that HUC within the State of Maryland. (See Exhibit B of the Prospectus)

The design objectives of the proposed mitigation bank consist of plugging of the main jurisdictional ditch that bisects Phases 2 and 3, the construction of low berms to maintain wetland hydrology, scuffing the area by bulldozer to create more effective micro topography and small ephemeral ponds, removal of excess soil, trucking in and incorporating organic material into the soil evenly across the site, trucking in and placing large stumps and logs evenly around the site, and planting a cover crop to provide natural fertilizer and soil preparation. Once the site is prepared, it will be planted with wetland trees and shrubs plus certain areas seeded with a wetland emergent seed mix to create the natural wetland environment that is native to the Geographic Service Area of this Bank. Wetland hydrology will be provided by the seasonal high water table and direct precipitation. The Elkton soils prevent rapid percolation of rainwater resulting in temporary ponding of depressions for various time periods.

The overall proposed goal of the Mitigation Bank is to make available 42.0 acres of wetland mitigation on a hydric soil crop field in order to provide effective off-site mitigation, through the reestablishment of forested, scrub/shrub and emergent wetland habitat in three separate phases.

Wetland Types in Each Bank Phase

|                         | Seasonal Water/Emergent | Emergent | Scrub-Shrub | Forested |
|-------------------------|-------------------------|----------|-------------|----------|
| Phase I (16.64 acres)   | 0.39                    | 0        | 0.14        | 16.11    |
| Phase II (15.26 acres)  | 0.40                    | 0.78     | 0.69        | 13.39    |
| Phase III (10.09 acres) | 0.56                    | 0.65     | 0.30        | 8.58     |

**WORK REQUIRING CORPS AND MDE AUTHORIZATION:**

The total impacts of approximately 300 square feet for the reestablishment of wetlands on a hydric soil crop field would include the installation of a ditch plug within the main jurisdictional ditch that bisects proposed Phases 2 and 3. A 10-foot wide by 30-foot long ditch plug will be constructed by removing an existing culvert and filling with approximately 7 cubic yards of clean fill material.

The above mitigation impacts are shown in Exhibit D, Proposed Mitigation Work Plan.

A preliminary review of this application indicates that the proposed work will not affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended. As the evaluation of this proposal continues, additional information may become available which could modify this preliminary determination.

Review of the latest published version of the National Register of Historic Places indicates that no registered properties listed as eligible for inclusion therein are located at the site of the proposed work. Currently, no known archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permit for the mitigation bank construction. As the evaluation of this proposal continues, additional information may become available which could modify this preliminary determination.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed project is not located in Essential Fish Habitat and is not likely to affect EFH.

The decision whether to adopt these changes to the Mitigation Bank instrument and issue a permit would be based upon an evaluation of the probable impacts including cumulative impacts to the proposed Bank on the public interest. That decision would reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline, erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and, in general, the needs and welfare of the people.

All work is to be completed in accordance with the approved plan (s) and exhibits, which are available for review at the Baltimore Corps District Office, and the Maryland Department of the Environment, both in Baltimore, Maryland. If you have any questions concerning this matter or wish to review the appendices, please contact Ms. Kelly Neff, MDE, at (410) 537-4018 ([kelly.neff@maryland.gov](mailto:kelly.neff@maryland.gov)) or Mr. Eugene Morgenthaler, Corps, at (410) 820-8629 ([eugene.j.morgenthaler@usace.army.mil](mailto:eugene.j.morgenthaler@usace.army.mil)).

The applicant must obtain any State or local government permits which may be required.

It is requested that you communicate the foregoing information concerning the proposed work to any persons known by you to be interested and being known to this office, who did not receive a copy of this notice.

Written comments concerning the activity described above must be submitted directly to the District Engineer, U.S. Army Corps of Engineers, Baltimore District, Attn: CENAB-OP-RMS, P.O. Box 1715, Baltimore, Maryland, 21203-1715 and/or the Water Management Administration, Maryland Department of the Environment, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708, within the comment period as specified above to receive consideration.

The permit tracking number for this project is (Maple Dam Conservation, LLC / Maple Dam Mitigation Bank,) 2008-01083

Attachments:

Maple Dam Wetland Mitigation Bank Modification Upgrade to 2008 Wetland Regulations dated July 2013

FOR THE DISTRICT ENGINEER:

Kathy B. Anderson  
Chief, Maryland Section Southern  
U.S. Army Corps of Engineers

# **PROSPECTUS**

## MAPLE DAM WETLAND MITIGATION BANK MODIFICATION UPGRADE TO 2008 WETLAND REGULATIONS

July 2013

Dorchester County, Maryland

Prepared By:

Maple Dam Conservation, LLC  
P.O. Box 33  
Fork, Maryland 21051

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## 1.0 INTRODUCTION

The Maple Dam Wetland Mitigation Bank (the “Bank”) is located in Cambridge, Dorchester County, Maryland and was created in 2006 to provide effective off-site mitigation for the unavoidable loss of non-tidal wetlands resulting from activities authorized under Section 404 of the Clean Water Act and activities authorized under Maryland’s Non-tidal Wetlands Protection Act provided such activities have met all applicable requirements and are authorized by the appropriate authority. The Bank was created prior to the Final Compensatory Mitigation Regulations issued by the Environmental Protection Agency and the Army Corps of Engineers on March 31, 2008 (the “2008 Regulations”). The Bank Sponsor (Maple Dam Conservation, LLC) is proposing revisions to the Maple Dam Mitigation Banking Instrument (MBI) to bring the bank into compliance with the 2008 Regulations. The purpose of the proposed modification is to bring this existing Bank into consistency with the terms of the 2008 Mitigation Rule and to expand the existing Bank’s geographic service area. Some of the major areas in the existing Mitigation Banking Instrument (MBI) requiring update for consistency with the Mitigation Rule include an updated conservation easement for the bank, a long term management plan, escrow creation/funding for long term management and catastrophic events, monitoring for future phases of the bank and adaptive management.

During the initial design phase of the Bank and the public notice review period, the Bank site was found to be in compliance by the Mitigation Banking Review Team with respect to Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act and Essential Fish Habitat.

1. A public notice response was received by the Maryland Department of Natural Resources dated May 31, 2006 with no comments or objections to the Bank project in regards to endangered species. No response was received from the US Fish and Wildlife Service or the Environmental Protection Agency which were considered to have no objection to the Bank project. All of these agencies are on the current Interagency Review Team (IRT) and will have an opportunity to comment on this new prospectus.
2. A public notice response was received from the Maryland Historical Trust (in cooperation with Dorchester County) on November 2, 2006 which made the following conclusion: “The Maryland Historical Trust determined that the project will have ‘no effect’ on historic properties”.
3. A public notice response was received from the National Marine Fisheries Service on June 12, 2006 which specified “No action” in regards to Essential Fish Habitat on the Bank site.

## 2.0 OBJECTIVES OF THE BANK

The objectives of the Bank are to compensate for unavoidable impacts to jurisdictional wetlands of the United States within the Geographic Service Area of this Bank or in other areas as determined and approved by the Corps and MDE. The main goal of the project will be to provide the establishment of new wetlands for mitigation purposes (to replace non-tidal wetlands impacted by current development projects elsewhere in the GSA) and to provide additional habitat for various wildlife species. The project will take an existing parcel of land that is presently being farmed and convert it back to forested, scrub/shrub and emergent wetlands.

The bank site has been an agricultural field along with all the attendant ditches and surface drainage conveyances needed for poorly drained soils. As a result, surface water quickly runs off into ditches that carry it a relatively short distance west to the Little Blackwater River. Excess fertilizer and pesticides are transported to the river along with the water. The establishment of the mitigation bank reestablishes the site as forested wetlands along with all the values of a forested wetland. Runoff will be decreased along with sediment, nutrient and pesticides loads to the Little Blackwater River. Habitat will be improved for a variety of wildlife species from amphibians to Delmarva fox squirrel.

The Bank was originally designed in three phases in 2005. All three phases of the Bank contain three types of wetland habitat – forested, scrub/shrub and emergent – so that mitigation acreage/credits can be provided for all three types of wetlands as needed. See Table 2.1 below. The seasonal water/emergent areas will be shallow seasonal areas of open water that will drawdown various amounts depending on precipitation during the growing season. Some years the soil will be completely exposed and other years will retain several inches of surface water well into the growing season. It is anticipated these areas will be colonized by emergent wetlands similar to what has already occurred in Phase I. The emergent areas in Phases II and III will be seeded with a wetland seed mix, but will likely contain shallow water during the winter and into the early spring. Seasonal freshwater emergent wetlands such as shallow marsh and wet meadow areas are among the least common wetland types on the Delmarva Peninsula. As a result, many of the plant and animal inhabitants of these wetland types are considered uncommon to rare. The mitigation bank will increase available habitat for these species.

The first phase (16.64 acres) was constructed in 2006/2007 and successful monitoring of the site was completed in December of 2011. Construction and planting of the second and third phases (25.36 acres) will begin if the Sponsor determines there is a financial justification to proceed in the future.

Table 2.1 Wetland Types in Each Bank Phase

|                         | Seasonal Water/Emergent | Emergent | Scrub-Shrub | Forested |
|-------------------------|-------------------------|----------|-------------|----------|
| Phase I (16.64 acres)   | 0.39                    | 0        | 0.14        | 16.11    |
| Phase II (15.26 acres)  | 0.40                    | 0.78     | 0.69        | 13.39    |
| Phase III (10.09 acres) | 0.56                    | 0.65     | 0.30        | 8.58     |

If the Sponsor decides to proceed with Phases 2 and 3, the original/existing bank design will be used since Phase 1 was successful and has proven that the original design is valid for the other phases of the Bank as well (since Phases 2 and 3 are adjacent to Phase 1 and have the same hydric soil types and hydrologic characteristics as Phase 1). However, the monitoring, long term management, etc. will be performed in accordance with the 2008 Regulations and will be defined in detail in the new MBI. If Phases 2 and 3 are established, the total size of the Bank would be 42 acres.

The Sponsor has also completed soil analysis and hydrology studies on the remainder of the site to possibly extend the size of the Bank by an additional 100+/- acres. If the Sponsor decides to build out all or part of that 100 acre area in the future, the design/survey work/etc. would be completed by the Sponsor and approved by the Inter Agency Review team (IRT) and, if approved, would be added to the MBI as an addendum and follow the same rules and procedures.

### **3.0 ESTABLISHMENT AND OPERATION OF THE BANK**

A Mitigation Banking Instrument (MBI) regarding the establishment, use, operation, and maintenance of The Maple Dam Road Mitigation Bank, was made and entered into by and among the Sponsor, the U.S. Army Corps of Engineers (CORPS), the Maryland Department of the Environment (MDE), the U.S. Environmental Protection Agency (EPA) and the Maryland Department of Natural Resources (DNR), on August 28, 2007. The first phase of the Bank has been created and operated successfully by the Sponsor since that time. Upon completion of the prospectus phase of the MBI review process, a new MBI will be developed and submitted by the Sponsor to upgrade and continue operations of the Bank as a private commercial wetland mitigation bank under the 2008 Regulations. The MBI will contain detailed background information about the Bank, the development plan that would be used for Phases 2 and 3 (and possibly the addition of other future phases on the Bank site as an addendum), an updated real estate protection instrument, updated monitoring guidelines, a long term management plan, geographic service territory amendments and adaptive management guidelines.

#### **3.1 Location, Scope of Work and Anticipated Schedule**

The Bank is located approximately 3.5 miles south of the City of Cambridge, in Dorchester County, Maryland (Exhibit A). The latitude and longitude coordinates are 038° 29' 55.50" N and 076° 04' 55.14" W.

Phase 1 of the Bank has been constructed, planted and monitored for five years such that a release of that phase of the Bank was received from the IRT in 2012 since the Bank met and/or exceeded the success criteria specified in the original MBI. Under the new MBI, all remaining credits from Phase 1 have been released for sale by the Sponsor as the need occurs. No additional maintenance and monitoring of Phase 1 will occur under the new MBI, but future sales will be

subject to long term management and catastrophic event fees/funds as described below in Section 6.3 and in the new MBI.

Phases 2 and 3 are presently being farmed and will be converted back to forested, scrub/shrub and emergent wetlands. Construction will include plugging of the appropriate ditches and the creation of low berms to maintain a wet hydrology, scuffing the area by bulldozer to create more effective micro topography and small ephemeral ponds, removal of excess soil, trucking in and incorporating organic material into the soil evenly across the site, trucking in and placing large stumps and logs evenly around the site, and planting a cover crop to provide natural fertilizer and soil preparation. Once the site is prepared, it will be planted with wetland trees and shrubs plus certain areas seeded with a wetland emergent seed mix to create the natural wetland environment that is native to the Geographic Service Area of this Bank. Wetland hydrology will be provided by the seasonal high water table and direct precipitation. The Elkton soils prevent rapid percolation of rainwater resulting in temporary ponding of depressions for various time periods.

See Exhibit D for a proposed work plan showing the design implemented in Phase 1 and the design that will be used for Phases 2 and 3 if constructed in the future.

It is estimated that the new MBI for this Bank will be approved during Fall 2013 and the Bank will begin operations under the new MBI at that time. Construction and planting of Phases 2 and 3 will begin sometime over the next three to five years. This is, however, dependent on the economy and the demand for wetland credits improving over time. This schedule estimate may move further out in the future if demand remains slow. Once a decision is made to establish Phases 2 and 3, a formal schedule will be created where construction of the site will start during the first summer (dry season) available and the planting of the site would occur during the following fall and spring (wet) growing seasons, per IRT direction and Bank design.

Phases 2 and 3 will be subject to funding of the maintenance and monitoring fund to cover maintenance and monitoring of those phases for up to ten years. The maintenance and monitoring fund will also be described in detail in the MBI. Phases 2 and 3 will also be subject to funding of the long term management and catastrophic event funds described below in Section 6.3 and in the MBI.

### 3.2 Proposed Credits and Proposed Credit Release Schedule

There are 16.64 acres/credits in Phase 1 which have already been established and the success criteria have been approved by the IRT. The remaining credits in Phase 1 will be released at 100% when the new MBI is approved.

There are 25.36 acres/credits in Phases 2 and 3. When those phases are established (as well as any future phases), a credit release schedule similar to the following will be specified in the new MBI using performance-based milestones:

- 15% on initial approval of new MBI and the approved milestones specified in the MBI
- 15% on approval of first success criteria as specified in the new MBI
- 15% on approval of second success criteria as specified in the new MBI
- 15% on approval of third success criteria as specified in the new MBI
- 15% on approval of fourth success criteria as specified in the new MBI
- 15% on approval of fifth success criteria as specified in the new MBI
- 10% on approval of final success criteria as specified in the new MBI (approx. year 10)

### 3.3 General Maintenance, Monitoring and Contingency Plans

The Bank Sponsor will perform all necessary work to maintain the Bank consistent with the maintenance criteria established in the new MBI. The Bank Sponsor shall continue with such maintenance activities until completion of the monitoring period. Deviation from the monitoring and maintenance provisions in the new MBI and the Bank Development Plan requires review and written approval by the IRT.

The Bank Sponsor will perform all necessary work to monitor the Bank to demonstrate compliance with the Success Criteria established in the new MBI. Monitoring shall be conducted during Years 1, 2, 3, 5, 7, and 10 following construction of any phase of the bank site. Monitoring may be terminated or the extent of monitoring may be reduced over part or the entire site at the discretion of the IRT. Unless otherwise agreed to by the Sponsor and the IRT, monitoring protocol will follow the Maryland Department of the Environment “Monitoring Protocol for Wetland Mitigation Projects” dated November , 2011.

The Bank Sponsor shall develop necessary contingency/adaptive management plans and implement appropriate remedial actions in coordination with the IRT to address the possibility that the Bank or a specific phase of the Bank may fail to achieve the Success Criteria specified in the new MBI.

### 3.4 General Accounting and Reporting

The Bank Sponsor shall submit to the IRT reports describing the conditions of the Bank and relating those conditions to the Success Criteria as defined in the new MBI. Reports will be submitted to the IRT and an electronic version shall be submitted to the Corps and MDE and/or uploaded to the Corps’ Regional Internet Banking Information Tracking Systems (RIBITS) by December 31 of each monitoring year.

The Bank Sponsor shall submit a statement to the Corps and MDE each time Credits are Debited or additional Credits are approved. If requested, the Corps will distribute the statement to other members of the IRT. The Bank Sponsor shall update credit ledgers on RIBITS by December 31 for the previous year. In addition, the Bank Sponsor shall submit an annual Ledger to the Corps for distribution to all members of the IRT, showing all transactions at the Bank for the previous

twelve (12) months and a cumulative tabulation of all transactions to date. At a minimum, each Ledger must include the following information: permittee, Permit number, type of permit, locality, type of impacted system (Cowardin Classification), amount of wetland and/or stream impacts, amount of wetland and/or stream Debit from Mitigation Bank, USGS HUC Catalog Unit, Date of transaction. The IRT will review the annual report and, acting through the Corps and MDE, adjust the credit composition to assure no net loss of wetlands acreage. Annual Ledgers and transaction reports shall be submitted to the IRT as long as Credits remain in the Bank and/or the Bank remains operational.

### 3.5 Financial Assurances

The Sponsor shall maintain escrow accounts that are controlled by the IRT as defined in the new MBI to provide funding for maintenance/monitoring, long term management and catastrophic events. The maintenance and monitoring escrow account will be established if the Sponsor decides to construct Phases 2 and 3 (or future phases) of the Bank in the future. As defined in the new MBI, a percentage of each credit sale will be used to fund the account and it will be used to cover costs associated with the maintenance and monitoring of Phases 2 and 3 of the Bank. A similar escrow account will be established for long term management and catastrophic events for Phases 1, 2 and 3 (and any future phases). As defined in the new MBI, a percentage of each credit sale will be used to fund the account which will be used to cover costs associated with long term management and catastrophic events for all phases of the Bank.

## 4.0 GEOGRAPHIC SERVICE AREA OF THE BANK

The Geographic Service Area (GSA) of the existing bank is defined as all of Dorchester County in Maryland which includes portions of three different Hydrologic Unit Codes (HUC) listed in the new GSA (Exhibit B) below. To conform to the new regulations, the GSA for this Bank will now use HUC boundaries instead of a county boundary line. Based on like-kind hydrology, soil types and plant species, the new primary service area for the Bank will include the Tangier HUC (02080110), the Nanticoke HUC (02080109) and the portion of the Choptank HUC (02060005) from Route 404 to the southern-most boundary of that HUC within the State of Maryland. The secondary service territory will include the Pocomoke-Western Lower Delmarva HUC (02080111) in the State of Maryland. Use of the bank site to compensate for impacts beyond the GSA may be considered by the Corps and MDE on a case-by-case basis.

The proposed GSA contains similar geographic, soil and vegetation characteristics between the various watersheds. Most wetlands within the GSA have similar hydrology inputs in the form of precipitation and seasonal high groundwater unless they are located adjacent to a stream large enough to provide substantial flood water. Even these wetlands are driven primarily by groundwater and precipitation as the flood events are typically short-lived.

## **5.0 NEED AND TECHNICAL FEASIBILITY OF THE BANK**

### **5.1 Need**

The bank is located within the Tangier watershed. Primary land uses are agriculture and forest, although there is high percentage of tidal wetlands also present along the major tributaries and bays. Major tributaries within this watershed are the Nanticoke and Wicomico Rivers. While the Wicomico River drainage is almost entirely within Maryland, a significant portion of the Nanticoke drainage is located, and originates, in Delaware. Major urban areas within this watershed include Salisbury, MD and the southern portion of Cambridge, MD. Both areas were experiencing development pressures during the last housing boom. Salisbury has a regional shopping and manufacturing area and has continued to experience commercial and residential growth, although at a slower pace. Once the economy recovers, it is expected much of the growth pressures will resume due to the location of the cities and their lower land costs relative to adjacent regions. All tributaries are experiencing some form of water quality impairment, primarily from excess nutrients.

The bank site is located near and east of the Little Blackwater Creek. The agricultural fields contain perimeter ditches and shallow surface water ditches that ultimately discharge into the Little Blackwater Creek. Conversion of the site from row crop use to wetland mitigation use will reduce the amount of surface runoff with pesticides and fertilizer entering the Little Blackwater Creek. The mitigation site consists of drained hydric soils surrounded on three sides by existing woodland. The mitigation will fill in a gap in the existing forest and provide additional habitat diversity through the inclusion of shrub, emergent, and seasonal pools within the wetland forest.

### **5.2 Technical Feasibility**

The Bank site has proven technical feasibility via the completion of Phase 1. The site was chosen due to the existing hydrology, the existing hydric soil types and the site's ability to support the growth of native wetland plant species.

Under the Bank Development Plan, which provides information for site preparation, restoring hydrology and vegetation, and the amount and type of wetlands to be established, the Sponsor will establish up to 42.0 acres in three separate phases of 16.64 acres for phase 1, 15.26 acres for phase 2 and 10.09 acres for phase 3, in accordance with the provisions of the MBI, and shall then maintain the Bank in such condition for 10 years in accordance with the bank closure procedures or until all credits are sold, whichever is later. Given the site location within a large area of hydric soils and adjacent to and surrounded on three sides by existing forest, there are no known threats to the Bank site from future development.

The Bank site is within a large block of mapped hydric soils (Elkton and Othello silt loams). Agricultural ditching appears to have been primarily designed to remove surface water and areas of shallow, seasonal ponding. The perimeter ditches around the site are mostly 2-3 feet deep and are not deep enough to have significant impacts on adjacent groundwater levels. The fine texture

of the soils also results in considerable perching of precipitation. The site design provides for ditch plugging within the site where adjacent properties will not be impacted. Also, the shallow drainage swales created across the sites to convey surface water to the ditches will be plugged by a low level (less than 2 foot high) berm adjacent to the perimeter ditches. Site hydrology before conversion to cropland consisted of seasonal high water tables and direct precipitation. These sources have largely been restored. The flat topography and existing ditches in the area prevent the site from receiving runoff from adjacent properties. Hydrology monitoring prior to site design and during the first five years of Phase I has shown the site to be self-sustaining in regards to hydrology. The only maintenance need anticipated, and so far observed, is control of invasive plant species. To date that has consisted of cattail control within the ephemeral pools, and small areas of Canada and bull thistle. Cattail control was only required during the first two years and the thistle has been greatly reduced.

## **6.0 OWNERSHIP ARRANGEMENTS AND LONG TERM MANAGEMENT STRATEGY OF THE BANK**

### **6.1 Ownership Arrangements**

Bank Sponsor/Owner:  
Maple Dam Conservation, LLC  
P.O. Box 33  
Fork, MD 21051  
Bank Sponsor Contact:  
Don Miko  
443-629-6097

The Sponsor owns 188 +/- acres of land in Maryland, recorded among the Land Records of Dorchester County, Maryland as Parcel 20 - Deed Parcel 1 on Tax Map 52, Bank Site Map and Vicinity Map (Exhibit A), and the Sponsor has developed a mitigation plan under a Landowner Agreement for a Wetland Mitigation Site for the establishment of 42.0 acres of (forested, scrub/shrub and emergent) wetland habitat in three separate phases of 16.64 acres for phase 1, 15.26 acres for phase 2 and 10.09 acres for phase 3. Phase 1 has been completed under the existing/new MBI and Phases 2 and 3 may be constructed in the future if economically feasible as determined by the Sponsor. Future long term ownership of the Bank site/property of the Sponsor will continue to be held by the Sponsor for the foreseeable future.

## 6.2 Real Estate Provisions

When the Bank was initially approved in 2007, a site protection instrument for Phase 1 was recorded in the Land Records of Dorchester County at Liber 678 Folio 615, at Parcel 20 - Deed Parcel 1 on Tax Map 52. The Sponsor shall replace the original site protection instrument with the new site protection instrument (based on the 2008 Regulations) that is specified in the new MBI for the Bank land prior to certification of any credits. This will preserve Phase 1 of the Bank property as wetlands and wildlife habitat in perpetuity. The Sponsor will record the site protection instrument for each phase prior to certification of any credits in that phase. The Sponsor, at his/her sole discretion, will determine if Phases 2 and 3 (or any other phase) should be constructed, along with placing a site protection instrument on the remaining site acreage within those phases as required.

There are no other encumbrances including mortgages, recorded easements, liens, right-of-ways or servitudes of any kind on the Bank site.

## 6.3 Long Term Management Strategy

There are some long term management needs of the Bank site such as management of invasive species of plants and periodic inspections. The Sponsor or an IRT/Sponsor-approved Long Term Steward will manage the Bank site per the new MBI's Long Term Management Agreement to protect the Bank site in perpetuity for long term management needs or catastrophic events as deemed necessary based on periodic inspections or as specified by the IRT. The Sponsor or Long Term Steward will perform the periodic inspections as specified in the new MBI and will use funds from the Long Term Management Escrow Fund described in this section below to pay for costs associated with the inspections and/or any work required as a result of those inspections.

It is also possible that a Long Term Steward may provide amendments to the site protection instrument or their own conservation easement for the various Phases of the Bank Site. If this occurs, it will be defined in detail in the new MBI and reviewed/approved by the IRT prior to implementation. In any case, the site protection instrument will be held by the Corps/MDE or possibly the Long Term Steward.

An escrow account to cover long term management and catastrophic events in perpetuity will be funded by the Sponsor. The long term management and catastrophic event funds will cover general long term management of the Bank (spraying invasive plants, repairing berms/ditch plugs, adaptive management, etc.) and catastrophic events such as fire, hurricanes, tornados or insect infestations that can cause damage to the Bank. The funds will be defined in detail in the MBI and will require a large one-time deposit from the Sponsor within an established period of time or each credit sale will require a percentage of the total sale to be deposited into the escrow account.

## **7.0 QUALIFICATIONS OF THE SPONSOR**

The Sponsor and the Sponsor's team of consultants, engineers and contractors have successfully demonstrated via Phase 1 of this Bank that the Sponsor is qualified to design, construct, monitor, operate and maintain a wetland mitigation bank under the 2008 Regulations. In addition, the Sponsor's wetland consultant has developed many successful wetland sites over the last 25 years and has an established working relationship with the IRT from past projects.

## **8.0 ECOLOGICAL SUITABILITY OF THE BANK SITE**

The ecological suitability of the Bank site is based on existing conditions within the topography of the region. The site already contains hydric soils and the hydrology has not been greatly modified. All of the fields within the proposed 42 acre mitigation site were part of "prior converted cropland" as determined by the Natural Resources Conservation Service. Pre-design feasibility studies included soil boring descriptions, installation of groundwater monitoring wells including water level recorders, spot elevations and review of USGS quads and aerial photography. All data confirmed that the site could feasibly be returned to its previous status as a forested wetland.

Phase 1 has been designed/constructed/planted and monitored for five years. Some remediation work was performed during the monitoring period for drought damage to seedlings and some invasive/noxious weed control. These issues were resolved to the satisfaction of the IRT. A letter of acceptance by the IRT for successful completion of Phase 1 was received in 2012. This letter acknowledges that the proper design, hydrology and vegetative growth were achieved in Phase 1 for this site.

The property in Phases 2 and 3 is currently being farmed in soybeans, corn or wheat until the Bank phases are constructed. Soils on the site are Elkton series. The hydrology will be provided to the site from seasonal high water table and direct precipitation. The use of the Site is consistent with the provisions and restrictions currently placed on the property. The Site drains to the west towards Maple Dam Road and the Blackwater River.

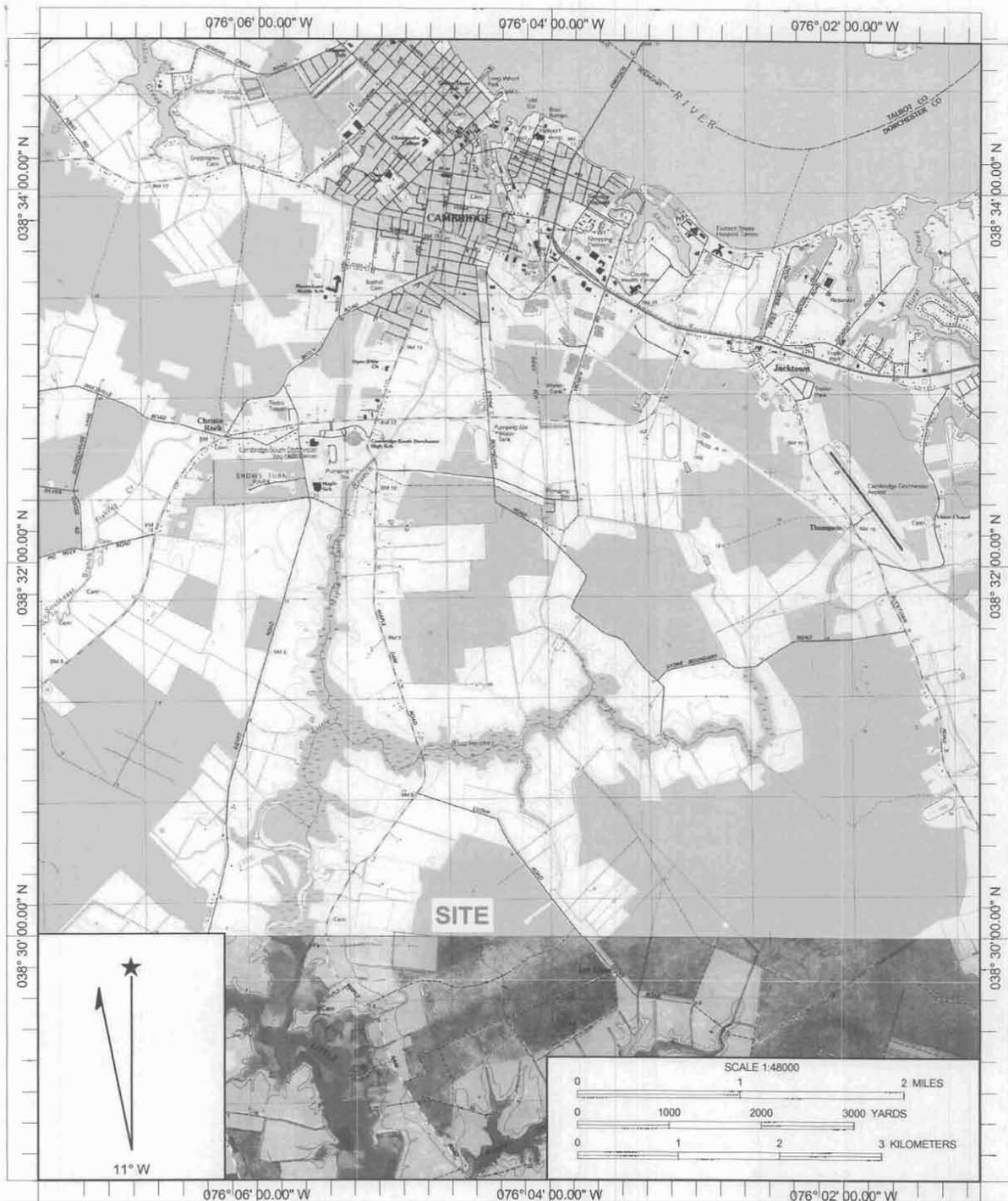
The bank site was approved for use in 2007 as a commercial wetland mitigation bank by the IRT. There were no existing waters of the U.S. identified on the bank site during that approval process. The IRT may require a review of the site as part of a jurisdictional determination but this determination would, in no way, impact the approval to build out phases 2 and 3 under the old MBI if the new MBI is not approved or if the Sponsor decides not to proceed with the new MBI for any reason.

## **9.0 ASSURANCE OF SUFFICIENT WATER RIGHTS TO SUPPORT LONG TERM SUSTAINABILITY OF THE BANK**

The pre-design feasibility studies showed that seasonal high groundwater and direct precipitation were adequate to provide hydrology similar to that which existed on the site prior to its conversion to agricultural use. Minimum ditch plugging and excavation will be required to restore site hydrology conditions as much as can be done without impacting adjacent properties. Because of the perimeter ditches and relatively flat topography of the region, there are little to no offsite drainage areas contributing runoff to the site.

During the monitoring period for Phase 1, the Sponsor has confirmed the site contains adequate hydrology to support wetland creation and long term success. Five years of successful water well monitoring and photos taken throughout the growing season from Phase 1 of the site and contained in the monitoring reports, have demonstrated that adequate hydrology is available for the Bank site from the seasonal high water table and direct precipitation.

# EXHIBIT A – VICINITY MAP



Name: CAMBRIDGE

Date: 3/21/2006

Scale: 1 inch equals 4000 feet

Location: 038° 29' 55.50" N and 076° 04' 55.14" W

Caption: LOCATION

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## EXHIBIT B – GEOGRAPHIC SERVICE AREA MAP

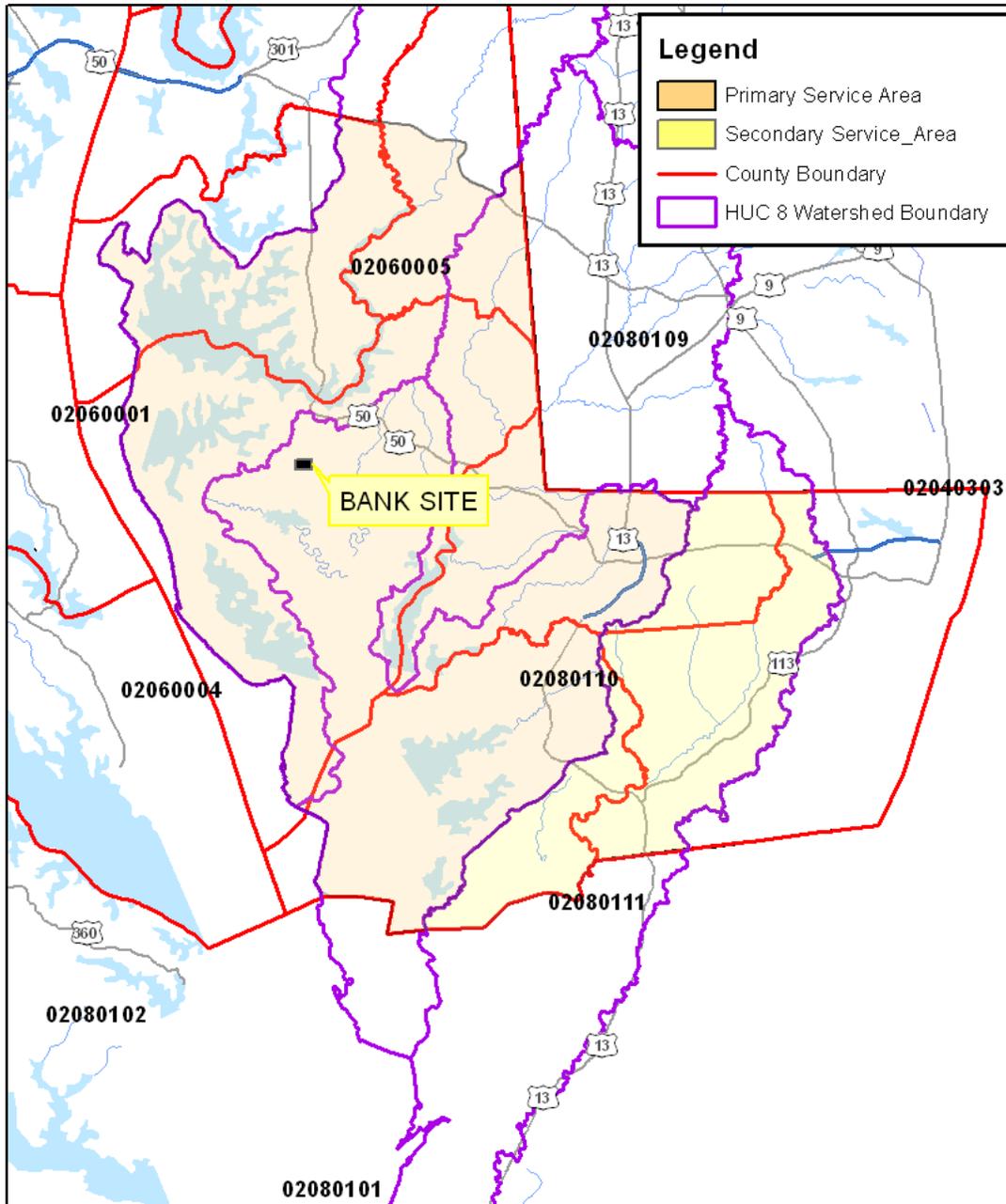
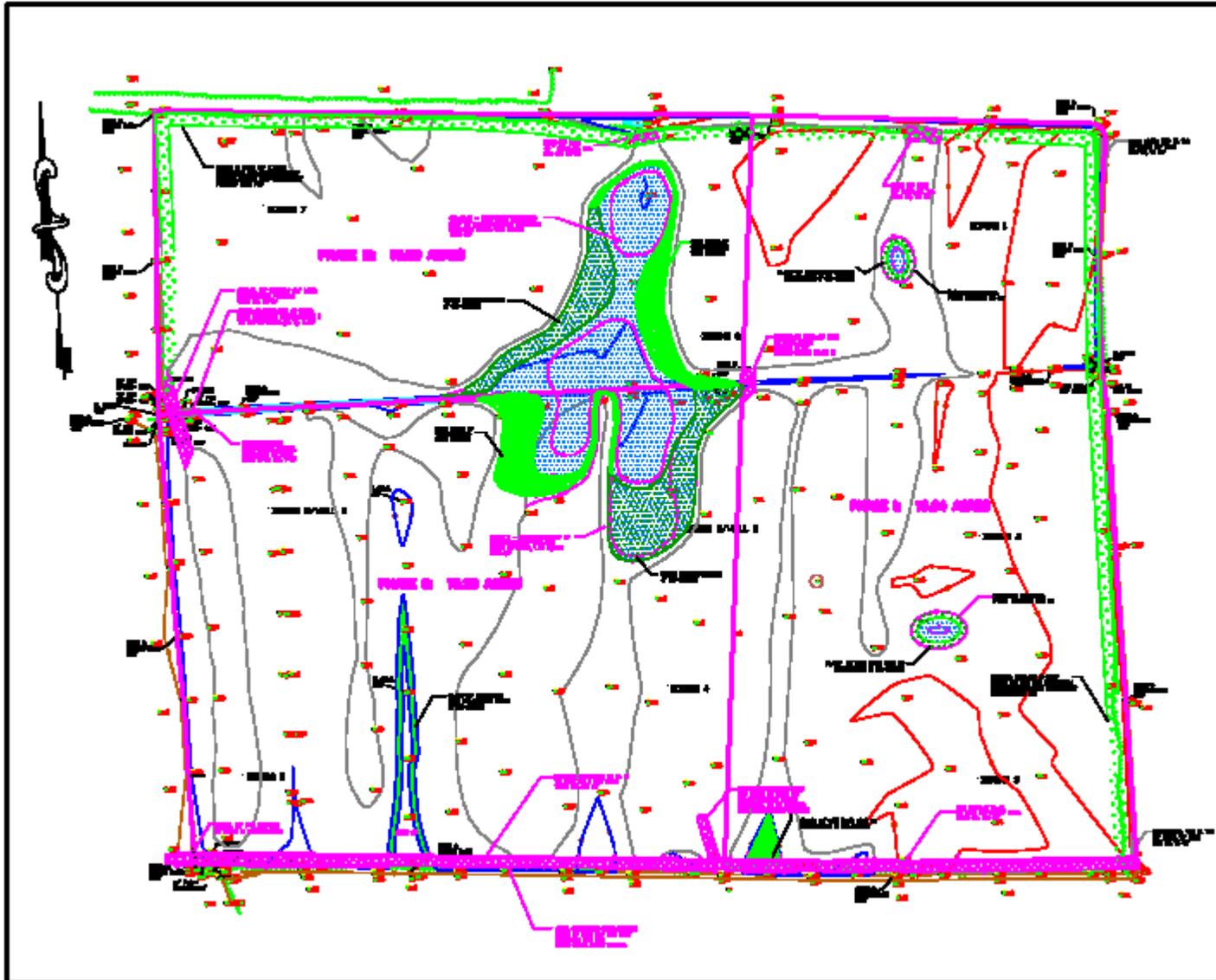


EXHIBIT B

MAPLE DAM WETLAND MITIGATION BANK SERVICE AREAS



## EXHIBIT D – PROPOSED MITIGATION WORK PLAN



Note: The proposed mitigation work plan can be opened in Adobe Acrobat by clicking on the work plan and then right clicking the drawing, selecting “Acrobat Document Object” and then selecting “Open”. This should launch Adobe Acrobat with a more detailed view of the work plan.