

PHASE I MITIGATION PLAN – REQUIRED INFORMATION

Revised November, 2014

MITIGATION is the replacement of wetland acreage, functions and human values that were or will be lost, due to filling, excavation, changes to hydrologic regimes or any other activity that may degrade or destroy an existing wetland. Mitigation can be achieved through:

Creation -Establishing wetlands on an upland site (e.g., grading an existing upland agricultural field so that the topsoil is saturated for a sufficient duration to support wetland plants)

Restoration -Establishing wetlands on former wetland sites (e.g., excavating a previously filled nontidal wetland to restore wetland functions or removing drainage improvements)

Enhancement -Providing additional protection to, or improving the functions of, a nontidal wetland (e.g., discontinuing farming practices on a farmed nontidal wetland)

Since all information requested must be provided as part of a permit application in order for the application to be considered complete, it is in an applicant's best interest that the information is filled out correctly and completely. It is advisable for the applicant to secure the services of a competent environmental consultant in order to help formulate their mitigation plan. A list of environmental consulting firms is available on MDE's website. The [Maryland Nontidal Wetland Mitigation Guidance](#) document provides more detail about the wetland mitigation process, and is also available on MDE's website.

PHASE I MITIGATION PLAN Requirements:

1. A written description of the type and acreage of the proposed nontidal wetland loss, including the types of wetland plant communities and the associated dominant species in the existing wetland, the amount (in square feet) of wetlands that will be lost due to the permitted activity, and the functions that the existing wetland presently provides.

Wetlands provide many functions, including fish and wildlife habitat, habitat for rare, threatened and endangered species, water quality improvement, erosion control, stormwater/flood control, timber production, and recreational opportunities. Applicants may use their best judgement in determining the functions of a particular nontidal wetland. However, it may be in their best interest to employ the services of knowledgeable environmental consulting firm to make these determinations.

- Assess actual functional loss from any conversion impacts, as affected by long-term management of the conversion sites (e.g. herbicide application, mowing, etc.). Mitigation to impact ratios will vary based on the functional losses.
- Are there any additional indirect wetland impacts from the proposed activity (e.g., changes in stormwater runoff resulting in reduced hydrology being directed to existing wetlands, lowering of the water table adjacent to existing wetlands)?
- Are there any: vernal pools, Wetlands of Special State Concern, Tier II watersheds, Maryland Scenic and Wild Rivers, Important Bird Areas, Forest Interior Dwelling Species habitat, Green Infrastructure, Anadromous fish migration routes and spawning tributaries, or other significant resources?

2. A location map and description of the proposed wetland mitigation project(s) and how they will replace proposed nontidal wetland losses in acreage and function.

Include source of hydrology for the proposed wetland mitigation project.

Replacement ratios are expressed as a relationship between two numbers. The first number specifies the acreage of wetlands to be mitigated and the second number specifies the acreage of wetlands lost. The standard replacement ratios are 2:1 for forested and scrub/shrub wetlands and 1:1 for emergent wetlands, with higher ratios for impacts to Wetlands of Special State Concern and other sensitive resources (e.g. vernal pools).

If there is an approved wetland mitigation bank with available credit, the applicant may propose to purchase wetland mitigation credits from that bank. The Department may authorize alternative forms of mitigation or payment into the Nontidal Wetlands Compensation Fund when strict adherence to the replacement ratios is not possible or when in-kind replacement is not technically feasible.

3. A description of the mitigation site selection process and a justification for the selection of the proposed mitigation site. Describe how the proposed mitigation is consistent with goals and recommendations for the watershed, as described in watershed management plans such as MDE's Priority Areas for Wetland Restoration, Preservation, and Mitigation and the interagency-developed Watershed Resource Registry. Links to these watershed management plans are available through MDE's website. When feasible, mitigation projects should be located on the same site that the wetlands impact(s) occurred. If mitigation on site is not feasible, then the mitigation project should take place as close to where the nontidal wetland impact occurred as possible, in the same watershed. Compare the watershed of the proposed nontidal wetland impacts with the watershed of the proposed mitigation site.

Mitigation projects located at a single site are preferred over those that are scattered over multiple sites.

A. Lands preferred for mitigation may have one or more of the following physical characteristics: Disturbed areas, areas in agricultural production, former wetland areas that may now be degraded, areas adjacent or connected to existing nontidal wetlands, waterways or within the 100-year floodplain, and that are accessible to necessary construction equipment.

B. Areas that are not acceptable for wetland mitigation are forested uplands, dredge disposal sites; and areas identified as important habitat for rare, threatened and endangered plants or wildlife.

4. A draft copy of the selected protection mechanism(s) to be used for each mitigation site.

Approved methods of protection include conservation easements, deed restrictions, restrictive covenants, or deeding the land to an organization or public agency. The selected protection mechanism must be approved by the Department prior to actual implementation. Documentation that the selected protection mechanism has been executed must be submitted to the Department within 60 days of the completion of construction of the mitigation project.

5. Additional information that must be considered:

- Does the proposed mitigation site contain any Rare Threatened and Endangered species?
- Does the proposed mitigation site contain any Maryland Historical Trust concerns?

- Are there any existing or planned easements within or adjacent to the proposed mitigation sites (e.g. utility easements, Forest Conservation Easements, etc).
- Will the proposed mitigation site impact waterways, open water, or floodplains? If so, you may be required to get authorization to impact these resources from MDE's Waterways Division.
- Will the proposed mitigation site impact existing wetlands? A wetland delineation of the proposed mitigation site may be required.
- Will you be disturbing greater than an acre? If so, you may be required to get a NOI Permit from MDE Compliance.
- Does the mitigation project require a County grading permit? It is the applicant's responsibility to get all required permits and approvals for the work (e.g. sediment and erosion control, grading, etc.).
- Will the mitigation be completed in advance of the impacts? Otherwise a bond may be required. For all projects that qualify under the Maryland State Programmatic General Permit-4 (MDSPGP-4), a bond will be required PRIOR to authorization.
- Will Public Notice be required? The Phase I Mitigation Plan will not be approved prior to the Public Notice comments being received and considered.
- Include a draft schedule for completing the mitigation project.

For all projects that qualify under the Maryland State Programmatic General Permit-4 (MDSPGP-4), the mitigation must also meet the requirements of the 2008 Federal Mitigation Rule (Mitigation Rule). As specified in 33 CFR 332.4(c), the Mitigation Plan must address the 12 elements of the Mitigation Rule (attached). For the Phase I Mitigation Plan, the applicant should briefly address the following elements: objectives, site selection, site protection instrument, baseline information, determination of credits, long-term management, adaptive management plan, and financial assurances. All twelve elements will need to be addressed in detail in the Phase II Mitigation Plan.

When all required information is received by the Wetlands and Waterways Program, a decision concerning the acceptability of Phase I of the mitigation plan will be part of the final permit decision. The Program will also provide guidance to the applicant regarding the content, timing and necessity of proceeding with Phase II of the mitigation plan. In some cases, including to maintain consistency with the U.S. Corps of Engineers, the Program may require the Phase II Mitigation Plan be submitted and approved earlier in the process. The 2008 Federal Mitigation Rule requires that the Phase II Mitigation Plan be approved prior to impacts to regulated resources for a General Permit and prior to permit issuance for an Individual Permit.

Certain information, such as hydrologic data from test wells, may be needed for Phase II of the mitigation plan and must be collected over an extended period of time. Therefore, it benefits the applicant to begin collecting relevant information regarding the proposed mitigation site at the earliest possible opportunity.

12 Components of a Compensatory Mitigation Plan / Elements of the 2008 Mitigation Rule

1. **Objectives.** A description of the resource type(s) and amount(s) that will be provided, the method of compensation (restoration, establishment, preservation etc.), and how the anticipated functions of the mitigation project will address watershed needs.
2. **Site selection.** A description of the factors considered during the site selection process. This should include consideration of watershed needs, onsite alternatives where applicable, and practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the mitigation project site.
3. **Site protection instrument.** A description of the legal arrangements and instrument including site ownership, that will be used to ensure the long-term protection of the mitigation project site.
4. **Baseline information.** A description of the ecological characteristics of the proposed mitigation project site, in the case of an application for a DA permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other characteristics appropriate to the type of resource proposed as compensation. The baseline information should include a delineation of waters of the United States on the proposed mitigation project site. A prospective permittee planning to secure credits from an approved mitigation bank or in-lieu fee program only needs to provide baseline information about the impact site.
5. **Determination of credits.** A description of the number of credits to be provided including a brief explanation of the rationale for this determination.
 - For **permittee-responsible mitigation**, this should include an explanation of how the mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.
 - For **permittees intending to secure credits from an approved mitigation bank or in-lieu fee program**, it should include the number and resource type of credits to be secured and how these were determined.
6. **Mitigation work plan.** Detailed written specifications and work descriptions for the mitigation project, including: the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water; methods for establishing the desired plant community; plans to control invasive plant species; proposed grading plan; soil management; and erosion control measures. For stream mitigation projects, the mitigation work plan may also include other relevant information, such as planform geometry, channel form (e.g., typical channel cross-sections), watershed size, design discharge, and riparian area plantings.
7. **Maintenance plan.** A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.
8. **Performance standards.** Ecologically-based standards that will be used to determine whether the mitigation project is achieving its objectives.
9. **Monitoring requirements.** A description of parameters monitored to determine whether the mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting monitoring results to the DE must be included.
10. **Long-term management plan.** A description of how the mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long-term management.
11. **Adaptive management plan.** A management strategy to address unforeseen changes in site conditions or other components of the mitigation project, including the party or parties responsible for implementing adaptive management measures.
12. **Financial assurances.** A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the mitigation project will be successfully completed, in accordance with its performance standards.