

**Interim Wetland Mitigation Plan Development Guidance
Document for Food Security Act Purposes Only**

EXPIRES: SEPTEMBER 30, 2014

The wetland mitigation plan (WMP) must fully document the actions required to compensate for all wetland functions lost through conversion or proposed conversion activities. The mitigation site must meet the following criteria:

1. Mitigation site acreage must equal or exceed the converted wetland acres.
2. Soils must be similar between conversion and mitigation sites (e.g. wetlands with organic soils must be mitigated to organic soil sites; wetlands with mineral soils must be mitigated to mineral soil sites).
3. The mitigated site must have a similar hydrologic regime as the conversion site.
4. The mitigated site must have a similar plant community as the conversion site.
5. All mitigation sites that are not within the original footprint of the conversion site will require a recorded Warranty Easement Deed (WED) in the public records.
6. Permanent metal posts will be driven into the ground at these bounding coordinate locations plus each 500 foot of straight run to delineate the boundary of the mitigation site.

All restoration practices must be in accordance with the appropriate Michigan Natural Resources Conservation Service (NRCS) practice standard. Practice standards may be found at: http://efotg.sc.egov.usda.gov//efotg_locator.aspx

All mitigation activities that do not result in the restoration of lost wetland function in the same footprint as the conversion site will require an easement. The WED will become recorded with the property deed. Upon approval of the WMP, Wetland Mitigation Agreement (WMA) will be developed by NRCS and must be signed by the participant, NRCS State Biologist and any involved third parties (e.g. landowner if different from participant).

The header of the WMP will contain the label "EXHIBIT B" in the upper right hand corner. The WMP must include all of the following Sections and elements:

A. General Information

1. Participant information - Include the Participant's name and mailing address.
2. Landowner information- Include the Landowner's name and mailing address if different from Participant. **Note that proof of control of land is required if an easement is to be obtained on land not owned by the participant.**
3. Farm Service's Agency (FSA) Farm number(s), Tract number(s) and Field number(s) for both the conversion site and the mitigation site.
4. Public Land Survey System (PLSS) information- Section, Township, Range of the conversion site and mitigation site.
5. The county and state of the conversion site and mitigation site.

B. Description of Converted Site

1. A written description of the location including:
 - a. PLSS (e.g. east ½ of the northeast ¼ of Section X, Township Y, Range Z), and State.
 - b. Distance to nearest intersection (e.g. Y feet north and X feet west of the intersection of A road and B road).
2. The Michigan Natural Features Inventory (MNFI) natural community type(s). Include a description of the target dominant tree, shrub and herbaceous plant species. Natural community information is available at the MNFI website: <http://mnfi.anr.msu.edu/>
3. Acreage of converted wetlands by MNFI natural community type.
4. Soil description including soil series, hydric rating, texture, restrictive layers, etc.
5. Hydrology description including amount, frequency, timing and duration of wetland hydrology.
6. Description of existing micro/macrotopography (e.g. pit and mound, flat, etc.).

C. Description of Mitigation Site

1. A written description of the location including:
 - a. PLSS (e.g. east ½ of the northeast ¼ of Section X, Township Y, Range Z), and State.
 - b. Distance to nearest intersection (e.g. Y feet north and X feet west of the intersection of A road and B road).
2. The target Michigan Natural Features Inventory (MNFI) natural community type(s). In most cases the target community type should be the same as the community type of the conversion site. Include a description of the target dominant tree, shrub and herbaceous plant species.
3. Acreage of mitigated wetlands by MNFI natural community type.
4. Soil description including soil series, hydric rating, texture, restrictive layers, etc.
5. Target hydrology description including amount, frequency, timing and duration of wetland hydrology.
6. Target micro/macrotopography (e.g. pit and mound, flat, etc.).

D. Assessment of Wetland Functions

1. An assessment of wetland functions including hydrologic, nutrient cycling, organic carbon storage, plant community and wildlife habitat functions for:
 - a. the conversion site prior to conversion activities
 - b. the conversion site after conversion activities
 - c. the mitigation site prior to restoration activities
 - d. the mitigation site after restoration activities

The Michigan Rapid Assessment Method (MiRAM) will be used to determine wetland functions, available at: https://www.michigan.gov/deq/0,4561,7-135-3313_3687-240071--,00.html

Note that functions gained through restoration of mitigation site must equal or exceed functions lost from the converted site.

E. Description of Restoration Activities

- I. Description of grading or other earthmoving activities required to restore the mitigation site, such as establishment of microtopography (pit and mound topography), berm construction, etc. Include existing and proposed site contours, typical cross sections, and proposed grades. Also identify the equipment that will be used to create the desired conditions.
2. Description of measures to prevent erosion and transport of sediment, if necessary (e.g. mulching of earthen structures, silt fence installation, etc.).
3. Vegetation establishment plan including:
 - a. species to be actively seeded/planted (trees, shrubs and/or herbs)
 - b. species expected to colonize through natural regeneration including details of seed source (seed barik, adjacent seed wall, etc.)
 - c. types and quantities of plant materials to be used (e.g. bare root seedlings, containerized, vegetative plugs, seed, etc.) for each species
 - d. timing and methods of site preparation and/or weed control
 - e. planting schedule
 - f. description of follow-up maintenance required (e.g. mowing, herbicide, etc.) for vegetation to become established

With the exception of species used to stabilize earthen structures or used for temporary seedlings/cover crops, only species native to the appropriate regional ecosystem section will be acceptable. Regional ecosystem information may be obtained from: <http://www.npwrc.usgs.gov/resource/habitat/landscape/index.htm> Information on Michigan native plants and their distributions is available at: <http://michiganflora.net/>
4. Invasive species management plan if invasive species are a concern.
5. Description of how mitigated wetland will be marked in the field. At a minimum, site must be marked per opening statement of this document, item 6 (above).

F. Success Criteria

- I. List the criteria used to determine the successful restoration of wetland function for hydrology, soils and vegetation. Success criteria must be measurable and include a time reference (e.g. there will be 50% cover of tussock sedge by year 3 of the restoration). At a minimum the following criteria must be met:
 - a. **The mitigation site must meet all three wetland criteria in a normal year: wetland hydrology, hydric soils and hydrophytic vegetation.**
 - b. For forested wetland communities, a minimum of 50% canopy coverage is required by year 10 of the restoration.
 - c. Where tree/shrub establishment is a component of the mitigation, a minimum of 80% survivorship is required one year after planting.
 - d. Invasive species must not comprise more than 20% of the mitigation site.

G. Permits

1. If permits are required, include a copy of the permit with the WMP. It is the responsibility of the participant to obtain all necessary permits.

H. Construction Schedule

1. List the sequence and target dates of mitigation activities and the anticipated completion date.

I. Monitoring and Maintenance

1. Include details regarding the methods, frequency and duration of monitoring activities. At a minimum, the site will be monitored by NRCS for compliance purposes at least once annually.
2. What activities will be required for:
 - a.maintenance of desired plant community
 - b.maintenance of the integrity of structures (e.g. berms, spillways, structures for water control, etc.)
3. Include the frequency and duration for which these maintenance activities are expected to be required.

J. Signatures

1. The WMP must be signed by:
 - a. The participant requesting the mitigation exemption
 - b. The NRCS State Biologist
 - c. The NRCS District Conservationist
 - d. Any third party (e.g. landowner if different from participant)

K. Appendices

1. Additional supporting documentation should be included in this section. This includes any photographs of the conversion site and mitigation site, functional assessment worksheets, NRCS practice standard job sheets, engineering designs, etc. All maps must include a title, north arrow, scale bar and legend. Wherever possible include the nearest road intersection for ease in location identification. FSA Farm, Tract and Field numbers and wetland boundaries and acreages must be clearly labeled. At a minimum, the following elements are required in the appendix:
 - a. A table containing the coordinates for the boundary comers of the proposed mitigation easement. Coordinates should be in Geographic Coordinate System (GCS) Decimal Degrees (a minimum of 7 decimal places); Datum= WGS_84. A written description of the ingress/egress route must also be included (including length of access and direction to the nearest public road). This element will contain the label "EXHIBIT C" in the upper right hand comer of the header.
 - b. A map depicting the location of the converted wetland. This element will contain the label "EXHIBIT D" in the upper right hand comer of the header.

- c. A map depicting the location and planned practices of the mitigation site. This map must depict the boundary corners of the proposed easement that correlate with those points identified in Exhibit C. Ingress/Egress to the nearest public road must also be shown. This element will contain the label "EXHIBIT E" in the upper right hand corner of the header.

If more than one map is required for any exhibit, the maps should be labeled EXHIBIT X-1, EXHIBIT X-2, etc.