

DEPARTMENT OF ENVIRONMENTAL QUALITY ♦ LAND AND WATER MANAGEMENT DIVISION

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In accordance with the administrative rules for Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, a mitigation plan must be submitted by the permit applicant when wetland mitigation is required by the Michigan Department of Environmental Quality. The following items must be submitted in the wetland mitigation plan:

- Wetland Mitigation Goals and Objectives: Goals and objectives, including:
 - a. The acreage to be restored, created, or preserved by ecological type.
 - b. A description of the ecological types, hydrology, soils, and vegetation of the wetlands to be impacted.
 - c. A description of the functions provided by the wetlands to be impacted and the proposed mitigation wetlands.

- Map: A map showing the location of the wetland mitigation site in relation to surrounding roads and other landmarks.

- Baseline conditions: Characterization of the existing conditions at the proposed wetland mitigation site including:
 - a. A description of the topography, soils, hydrology, and vegetation. Soil boring information and groundwater monitoring data should supplement this description.
 - b. A plan view that includes topographic information (1 or 2 foot contour intervals), roads, trails, structures, property lines, directional arrows, scale, and the exact size and boundaries of existing wetlands, streams, and floodplain to the 100-year elevation.
 - c. Typical cross-sections.
 - d. An explanation of why the site was selected.

- Site Development Plan: The proposed wetland mitigation design including:
 - a. A description of the sources of hydrology, the source and type of soil amendments, wetland vegetation establishment, and wildlife structures.
 - b. A plan view showing all of the proposed conditions of the mitigation site including all contour elevations (at 1 foot contour intervals), structures, the type and size of all proposed wetland areas, property lines, directional arrows, scale, and the conservation easement area.
 - c. Typical cross-sections.
 - d. A water budget of inputs and outputs to the proposed wetland (e.g., precipitation, groundwater, runoff, evapotranspiration).
 - e. A vegetative establishment plan which includes a plan view, methods, species list with scientific and common names, and source of any plant or seed stock.

- Performance Standards: Criteria by which the mitigation wetland will be evaluated to determine if the wetland mitigation requirements have been met.

- Monitoring Plan: Locations of vegetative sampling transects, photo points, monitoring wells, and staff gauges for monitoring should be shown on a plan view.

- Schedule and Construction Methods: A schedule for completion of the mitigation site must be provided (e.g., initiation, planting, completion). The site preparation and soil erosion/sedimentation control methods to be used during construction should be described.

- Long-term Protection: Information on current site ownership, the conservation easement, and other provisions for the long-term protection of the site must be provided. Methods to be used to prevent and control the establishment of invasive plant species, to prevent over-grazing of vegetation, to remove trash, etc., should be identified.

- Financial Assurances: Cost estimates for construction, planting, monitoring, and any necessary land acquisition should be provided by the applicant to allow the Land and Water Management Division to determine the financial assurance amount necessary to be used to complete corrective action in the event of mitigation default or failure.