



**MITIGATION PROJECT MONITORING REPORTS**

**CHECKLIST FOR COMPLETENESS**

All mitigation sites must be monitored starting the first full growing season after the construction/planting of the mitigation project is completed and shall be monitored for five years unless a different timeframe is specified in the approved mitigation proposal. It is recommended that monitoring occur twice a year in the early spring and the fall. Below are the submission requirements for a complete monitoring report. Please read each section and place a check in the box adjacent to each requirement once completed. Please submit three paper copies of the monitoring report and one CD containing an electronic copy of the report. All monitoring reports are due to the Department no later than December 31.

**Section A: All monitoring reports must include three copies of the following information**

- 1. An executive summary briefly describing the mitigation project and results of monitoring.
- 2. The requirements and goals of the approved mitigation proposal.
- 4. The following maps and imagery, with the mitigation site and access points clearly indicated:
  - i. A USGS quad map,
  - ii. A county road map showing the location of the mitigation site, including the lot and block of the mitigation site.
  - iii. A copy of an aerial photograph of the mitigation site.
- 5. A field delineation of the wetlands at the wetlands mitigation project site, based on techniques specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, published in 1989, including raw data sheets from sampling points describing the vegetation present, the percent coverage of the vegetation, soil borings and location of the water table.
- 6. A plan showing the flagged wetlands delineation and GPS data points.
- 7. As-built plans which depict final grade elevations at one foot contours, plantings (including species, size, and densities), and any structures included in the approved mitigation proposal. Submit a table listing the vegetative species and quantities of each that were planted including any grasses that may have been used for soil stabilization purposes.
- 8. One set of color photographs depicting the mitigation site conditions and project. Photographs must be mounted on 8½ -inch by 11-inch paper and accompanied by a map showing the location and direction from which each photograph was taken. Copies of photographs are acceptable provided they are color copies. Black and white copies of photographs are not acceptable.

**Section B: In addition to the information required in Section A above, all monitoring reports except the final report must include the following information**

□1. A detailed explanation of the ways in which the mitigation has or has not achieved progress towards the goals of the approved mitigation proposal including, for example, acreage of wetlands, percent vegetative cover, percent cover of invasive species, soil profile, and soil organic content. Raw data sheets should be included to support this explanation. If mitigation has not achieved anticipated progress, this report must also include a list of corrective actions to be implemented and a timeframe for completion.

2. Separate assessments of the planted vegetation, species that are naturally colonizing the site, and an overall assessment of vegetation coverage. These assessments shall include the location and percent coverage of each species. The data should document that the site is progressing towards 85 percent survival and 85 percent area coverage of mitigation plantings or target hydrophytes (target hydrophytes are noninvasive native species to the area and similar to ones identified on the mitigation planting plan). If the proposed plant community is a scrub/shrub or a forested wetland the permittee must also demonstrate each year with data that the woody species are thriving, increasing in stem density and height each year. To document this, the Department recommends a grid-sampling pattern across the site. There should be sufficient samples taken to accurately assess the vegetation, hydrology and soil conditions across the entire mitigation site. The location of where the samples were collected should be provided in order for the Department to confirm the consultant's findings.

3. Documentation demonstrating that the hydrologic regime specified in the mitigation proposal, which proves the mitigation site is a wetland, is present. The documentation shall include, as appropriate, monitoring well data, stream gauge data, photographs and/or field observation notes collected throughout the monitoring period.

4. Documentation on the development of hydric soils across the mitigation site. Include description of soil borings and location they were collected.

5. Documentation of any invasive or noxious species colonizing the site and how they are being eliminated. This should include a detailed discussion of each invasive species present, and the location and area of each species and monocultures, in addition to a sitewide assessment of the area of invasive species.

The permittee is required to eliminate either through hand-pulling, application of a pesticide or other Department approved method any occurrence of an invasive/noxious species on the mitigation site during the monitoring period. Note that application of pesticide in wetlands requires an approval from the Department's Bureau of Pesticides and Applications and must be performed by a licensed applicator.

**Section C: In addition to the information required in Section A above, all final monitoring reports must include the following information:**

□1. Documentation that demonstrate that the goals of the wetland mitigation project including acreage and the required transition area, vegetative cover, percent cover of invasive species, soil profile, and soil organic content, as stated in the approved wetland mitigation proposal and the permit, have been satisfied. Raw data sheets should be included to support this demonstration.

2. Documentation that the mitigation site is a wetland, including a field wetland delineation of the wetland mitigation project based on the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) which shows the exact acreage of State open waters, emergent, scrub/shrub and/or forested wetlands in the mitigation area. Submit a plan showing the flagged wetland delineation referenced above for review and approval by the Program. The wetland line must include global positioning system data points. This documentation must also include monitoring well data, stream gauge data, relevant tidal data (when appropriate), photographs, and field observation notes collected throughout the monitoring period demonstrating the area contains hydric soils or reduction is occurring in the soil, and that the hydrologic regime specified in the mitigation proposal has been achieved.

3. Documentation that the wetland community comprised of the planted vegetation or targeted hydrophytes as detailed in the approved mitigation proposal and permit conditions has been achieved, or, if not yet achieved, all site indicators suggest that the site is on a positive trajectory to meeting the desired wetland plant community.

4. Documentation that the mitigation provided meets all applicable requirements of N.J.A.C. 7:7A-11, including that the mitigation fully compensates for lost functions and values.

5. Documentation that the mitigator has executed and recorded a conservation restriction for the mitigation area that meets the requirements of N.J.A.C. 7:7A-12 through the submission of the recorded conservation restriction.