

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

## MITIGATION PROJECT MONITORING REPORTS FOR COASTAL WETLAND

### 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. The mitigation project must be monitored for three **full** growing seasons. Below are the submission requirements for a complete monitoring report. Please read each section and check each area after you have fully completed the information for each applicable requirement.

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

- 1. A USGS quad map, and a county road map showing the location of the mitigation site, including the lot and block of the mitigation site. Furthermore provide a copy of an aerial photograph of the mitigation site. This information must clearly indicate the point(s) of access to the mitigation site.
- 2. A copy of the permit that required the mitigation.
- 3. A brief description of the mitigation project.
- 4. Photographs of the mitigation site with a location map indicating where they were taken on the site.
- 5. An assessment of the planted vegetation as well as the species that are naturally colonizing the site. This assessment shall include the location and percent coverage of each species.
- 6. 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.
- 7. Data sheets from sampling points, which describe the vegetation present, the percent coverage of the vegetation, soil borings and location of the water table.
- 8. Documentation, based on field data, that the goals of the wetland mitigation project (including the transition area) as stated in the approved wetland mitigation proposal will be satisfied.
- 9. A narrative evaluating the success/failure of the site.
- 10. If problems with the site are identified, identify actions that should be taken which will permanently rectify the situation.

**Section B: In addition to the information required in Section A above, all successful first full growing season monitoring reports must include the following information. If any one or more of the below listed parameters are not met then this full growing season monitoring period must be repeated until satisfied.**

- ❑ 1. Documentation that demonstrates through soil borings that the appropriate soil was used on the site as indicated in the mitigation approval.
- ❑ 2. As built plans, which demonstrate that the site was graded and planted in accordance with the approved mitigation plans. Any deviations from the approved mitigation plans must be highlighted and explained to the Program for review and approval.
- ❑ 3. Documentation that the hydrologic regime specified in the approved mitigation proposal, which proves the mitigation site is a wetland, appears to be present. Any deviations from the approved proposal must be highlighted and explained to the Program for review and approval.
- ❑ 4. Documentation that demonstrates that there is at least 30% areal coverage of the planted vegetation or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan.
- ❑ 5. Documentation that demonstrates less than 10 percent of the site is occupied by invasive or noxious species such as but not limited to: *Acer platanoides* (Norway Maple), *Ailanthus altissima*, (Tree of Heaven), *Allaria petiole* (Garlic mustard), *Ampelopsis brevipedunculata* (Porecelain berry), *Artemisia biennis* (Biennial wormwood) *Artemisia vulgaris* (Mugwort or Common wormwood), *Berberis thunbergii* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Carex kobomugi* (Japanese sedge), *Celastrus orbiculatus* (Asian Bittersweet), *Centaurea biebersteiniior maculosa* (Spotted knapweed), *Cirsium arvense* (Canadian thistle), *Dipsacus fillonum* (Wild teasel), *Dipsacus laciniatus* (Cut-leaf teasel), *Elaeagnus angustifolia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Euonymus alata* (Winged spindletree), *Lespedeza cuneata* (Chinese bush-clover), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet), *Lonicera japonica* (Japanese honeysuckle), *Lonicera morrowii* (Morrow's bush honeysuckle), *Lonicera tartarica* (Tartarian honeysuckle), *Lythrum salicaria* (Purple loosestrife), *Melilotus officinalis* (Yellow sweetclover), *Microstegium vimineum* (Japanese stiltgrass), *Myriophyllum spicatum* (Eurasian water-milfoil), *Phalaris arundinacea* (Reed canary grass), *Phragmites australis* (Common reed grass), *Polygonum cuspidatum* (Japanese knotweed), *Polygonum perfoliatum* (Mile-a-minute), *Potamogeton crispus* (Curly leaf pondweed), *Pueraria montana* (Kudzu), *Ranunculus ficaria* (Lesser celandine), *Rhamnus cathartica* (Common buckthorn), *Robinia pseudoacacia* (Black locust), *Rosa multiflora* (Multiflora rose), *Rubus phoenicolasius* (Wineberry), *Typha latifloia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail).

**Section C: In addition to the information required in Section A above, all successful second full growing season monitoring reports must include the following information. If any one or more of the below listed parameters are not met then this full growing season monitoring period must be repeated until satisfied.**

- ❑ 1. Documentation that the hydrologic regime specified in the approved mitigation proposal, which proves the mitigation site is a wetland continues to appear to be present.
- ❑ 2. Documentation that demonstrates that there is at least 60% areal coverage of the planted vegetation or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan.

- 3. Documentation that demonstrates less than 10 percent of the site is occupied by invasive or noxious species such as but not limited to *Phalaris arundinacea* (Reed canary grass), *Phragmites australis* (Common reed grass), *Pueraria montana* (Kudzu), *Typha latifolia* (Broad-leaved cattail), *Typha angustifolia* (Narrowed leaved cattail), *Lythrum salicaria* (Purple loosestrife), *Ailanthus altissima* (Tree-of-heaven), *Berberis thunbergii* (Japanese barberry), *Berberis vulgaris* (Common barberry), *Elaeagnus angustifolia* (Russian olive), *Elaeagnus umbellata* (Autumn olive), *Ligustrum obtusifolium* (Japanese privet), *Ligustrum vulgare* (Common privet) and *Rosa multiflora* (Multiflora rose).

**Section D: In addition to the information required in Section A above, all successful third and final full growing season monitoring reports must include the following information. If any one or more of the below listed parameters are not met then this full growing season monitoring period must be repeated until satisfied.**

- 1. Documentation which demonstrates that the goals of the wetland mitigation project (including the required transition area) as stated in the approved wetlands mitigation proposal and the permit, has been satisfied. This documentation must include information concerning invasive/noxious plant species and the percent coverage of these species on the site.
- 2. Documentation which demonstrates that the proposed hydrologic regime as specified in the mitigation proposal, which proves the mitigation site is a wetland has been satisfied. The documentation shall include when appropriate monitoring well data, stream gauge data, photographs and field observation notes collected throughout the monitoring period.
- 3. Documentation that demonstrates that there is at least 85% areal coverage of the planted vegetation or target hydrophytes which are species native to the area and similar to ones identified on the mitigation planting plan.
- 4. A field wetland delineation of the wetlands mitigation project based on techniques specified in the Federal Manual for Identifying and Delineation Jurisdictional Wetlands (1989).
- 5. 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.

**Monitoring reports shall be submitted to:**

New Jersey Department of Environmental Protection  
Land Use Regulation Program  
P.O. Box 439  
Trenton, New Jersey 08625-0439  
Attn: Virginia Kop'Kash