

Maryland Department of the Environment



**Tier II Mitigation Plan
Required Elements for Reforestation,
Afforestation, and Certain Out-of-kind
Activities**



Project Tracking Number/Common Name: _____

Applicant Signature: _____

Date Plan or Plan Proposal Submitted for MDE Review: _____

Background

MDE has determined that the project and applicant referenced above requires a Tier II Mitigation Plan.

Applicants may use this template as a guide to ensure that the minimum amount of information necessary is submitted to Maryland Department of the Environment (MDE) for plan approval. Plans (or plan proposals) must be approved prior to permit issuance. Attach this signed checklist to the monitoring plan/plan proposal.

Introduction

- ☐ Brief application project summary.
- ☐ Purpose of mitigation.
- ☐ Determination of credit.

Plan View Scaled Drawings

- ☐ Vicinity map showing mitigation site(s) and land use.
- ☐ GIS polygon layer of the mitigation site(s) receiving credit.
- ☐ The location, type, and acreage of proposed mitigation activities. Show the boundaries of each area being counted for each type of mitigation credit along with credit, in acres for each area.
- ☐ The location of sediment and erosion control practices incorporating the Best Management Practices for Working in Tier II Waters (see pg. 4).
- ☐ Grading plans.
- ☐ Map showing environmental features.
- ☐ Locations of other land uses such as existing easements and Forest Conservation Act requirements.
- ☐ Include the afforestation or reforestation activities in the sequence of construction.

Planting Plan

- ☐ Limits of disturbance cleared for the project should be reforested.
- ☐ Density: minimum 100 specimens per acre with 50% that will have a diameter of at least 2 inches at 4.5 feet above ground at the end of the monitoring period.
- ☐ Focus on local sources of native materials.
- ☐ Provide an inventory of existing and potential invasive species.
- ☐ Methods used for plant protection from predation and invasive species.
- ☐ Location of afforestation and reforestation areas.
- ☐ Where possible, select appropriate species and distribution patterns for a site that will mimic natural patterns such as random distribution or nonrandom clusters.
- ☐ A planting schedule, including planting dates.
- ☐ An as-built site design plan shall be submitted to MDE within 60 days of the completion of the mitigation project. These plans shall depict the final areas receiving mitigation credit and their area in acres.
- ☐ Describe the project's sustainability when considering the potential effects of climate change.
- ☐ Will the proposed sites fall within an area identified in the Environmental Justice screening tool? If so, how will the project benefit the community? Benefits can be used to provide additional social justification for the Tier II review. (<https://mdewin64.mde.state.md.us/EJ/>)

Monitoring and Maintenance

- ☐ Minimum 2-year monitoring and maintenance plan and agreement establishing responsibilities including watering, removal of invasive species, and dead or damaged tree removal and replacement.
- ☐ Annual monitoring reports.
- ☐ An assessment of existing conditions and needs for elements such as water, fertilizer, etc.
- ☐ Provide evidence of legal rights to implement the plan and generate monitoring reports.
- ☐ The person/consultant responsible for preparing and submitting the monitoring reports.

Conservation Documentation

- ☐ Final protection easement, recordation required to obtain a 20-CP or,

- ☐ Draft protection easement, non-recorded where recordation proof will be submitted as per special individual permit condition with compliance site visits.
- ☐ Easement must grant MDE access to the site in perpetuity.

Best Management Practices for Working in Tier II Waters

Applicants must utilize enhanced BMPs or additional controls, potentially above those minimally required in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, to protect high quality Tier II stream resources.

Incorporate applicable items, check off practices incorporated, and identify the practice locations in plans. Some practices may be marked N/A (e.g. no sediment traps are used). The list below is not exhaustive, and you may summarize in an attachment, additional information related to avoidance and minimization in Tier II watersheds.

Erosion and Sediment Plan

1. Notes

- ☐ To the maximum extent practicable activities should take place during times when sediment transport are likely to be lower as predicted by National Oceanic and Atmospheric Administration 1 or 3 clear day weather forecast
- ☐ Conduct inspections daily. Log books may be reviewed.

2. Grading and Stabilization

- ☐ If limit of disturbance allows, locate stockpiles > 100 ft from stream resources.
- ☐ Permanent mulch application depth shall not exceed 6". Temporary mulch spreading and matting to minimize compaction is allowable.

3. Filtering

- ☐ Near streams upgrade silt fencing to super silt fencing or an equivalent measure (for example large compostable filter logs).

4. Sediment Trapping

- ☐ For road adjacent work include: Trash rack, oil/water separator, and/or skimmers.
- ☐ Forebays or designs to maximize detention time (for example includes baffle boards).
- ☐ Flocculants or other chemical additives (may require additional approvals or conditions for use).

5. Dewatering

- ☐ Discharges take place beyond the existing stable vegetated buffer of 100 ft.
- ☐ Discharges within the buffer occur through Agency approved secondary or redundant control (for example sediment bag treated with sediment filtration aid).

6. Tier II Notes

- ☐ Signage and flagging within buffer zone. Text: Tier II Waters: High Quality Waters Erosion & Sediment Control Measures Strictly Enforced & Monitored.
- ☐ Temporary access bridges shall be utilized over fords.
- ☐ Vehicles operating within the stream buffer must carry oil/gas/grease clean up kits for spill accidents.

Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606