# NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES



# Riparian Buffer and Nutrient Offset Buffer Mitigation Plan Template (ver. 1.0)

## **Applicability**

This Mitigation Plan Template is intended for use on all projects that propose reforestation as the primary means of generating riparian buffer or nutrient offset mitigation credits for the NCDENR Ecosystem Enhancement Program. Other mitigation credit generating activities (e.g. stormwater BMPs) may require substantially more documentation. This template is intended to provide structure and standardization, but does not prevent the inclusion of additional information considered appropriate by the mitigation services provider.

# **General Formatting**

- The report should be printed double sided on 8.5" x 11" paper.
- Maps and other Appendices may be 11" x 17" and single sided.
- Reports should have standard footers including the project name, EEP project number, submittal date and page number.
- All data must show units of measurement throughout the report.
- Generally, an 11 pt font size is preferred for narratives; font sizes for tables, graphs and other figures should be no smaller than 9 pt.
- Electronic files in Adobe PDF format or equivalent should be submitted on compact disc or uploaded through the EEP portal.

#### **Outline of Contents**

- 1.0 MITIGATION PROJECT SUMMARY
  - 1.1 <u>Brief</u> narrative that states river basin, hydrologic unit code and type(s) of credits to be produced, and describing the current site conditions, historic land use, proposed project activities and associated water quality benefits anticipated from the proposed buffer mitigation.
  - 1.2 Project location: intended to facilitate site visits. May include vicinity map, driving directions, latitude and longitude, and/or map of HUC as needed.
  - 1.3 Site map(s): to include property boundaries, current aerial photography, mitigation project boundaries, conservation easements, utility easements, drainage features,

other rights of way, and any other relevant geographic features. The site map(s) shall be presented in a way that does not obscure current land cover

#### 2.0 REGULATORY CONSIDERATIONS

- 2.1 Determination of credits: may be limited to a summary table showing acreage, activity (restoration, enhancement), mitigation credit ratios, and total expected credits to be generated from each part of the project. All calculations must be clearly presented for nutrient offset credits.
- 2.2 Asset Map that clearly shows restoration, enhancement and preservation areas, as applicable. Mitigation areas shown on the Asset Map should clearly correspond to the credit summary table and shall be mapped in a way that does not obscure current land cover.
- 2.3 Other map(s) and additional documents that may be needed to demonstrate flow regime, jurisdictional status, or other natural resource characteristics.
- 2.4 Other regulatory and permitting considerations that may be relevant to the project.

#### 3.0 IMPLEMENTATION PLAN

- 3.1 Site Preparation: if applicable, this section would include a grading plan, diffuse flow scheme, and brief descriptions of any other land preparation or management activities.
- 3.2 Materials and Methods: brief narrative describing plant materials (e.g. 2.0 bare root seedlings, pre-germinated acorns, etc.), a list of at least four (4) woody species native to the area that will be established, and the method(s) of establishment (e.g. natural colonization, direct seeding, hand planting, etc.).
- 3.3 Other design details that may be appropriate (e.g. level spreader, fencing).
- 4.0 MONITORING PLAN: describe field methods, sample locations (or quasi-random sampling strategy), frequency and density of data collection to be applied to document project success. Note: the amount and type of monitoring activities may vary by year.
- 5.0 PROJECT SUCCESS CRITERIA: clearly state objective criteria by which project success will be measured for regulatory approval of credits and final project close-out.

#### 6.0 LONG-TERM MANAGEMENT

- 6.1 Name and contact information for entity responsible for long-term management
- 6.2 Summary of long-term maintenance needs or other management activities

## **Appendices to the Mitigation Plan**

Site Protection Instrument
NCDWQ Stream Determination Letter (if appropriate)
NCDWQ Mitigation Viability Letter