

**NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY**



Riparian Buffer and Nutrient Offset Buffer Mitigation Plan Template (ver. 2.0)

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 NCDEQ Division of Mitigation Services. 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.

All items in this Mitigation Plan must follow NCAC rule 15A NCAC 02B .0295, effective November 1, 2015 and Nutrient Offsets Payments Rule 15A NCAC 02B. 0240, amended effective September 1, 2010 and DWR – 1998. Methodology and Calculations for determining Nutrient Reductions associated with Riparian Buffer Establishment.

General Formatting

- The report should be printed double sided on 8.5" x 11" paper, stapled.
- Maps may be single sided, Z-folded, on 11" x 17" paper.
- Reports should have standard footers including the project name, DMS 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 should be submitted on compact disc, and include all tables, digital files (GIS and AutoCad), word, and Adobe PDF format.

Outline of Contents

1.0 MITIGATION PROJECT SUMMARY

- 1.1 Brief narrative that describes current site conditions, historic land use, proposed project activities and features, and associated water quality benefits anticipated from the proposed buffer mitigation. If justification is required for buffer features per NCAC, provide it in this section. Include 'Buffer_Mitigation_Tables_1.0, Table 1 (Buffer Project Attributes, .xls)'.
- 1.2 Project location: intended to facilitate site visits. 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: Insert Buffer_Mitigation_Tables_1.0, Table 2 (.xls). All areas should be clearly shown on the asset table.
- 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. GIS attribute table should match map and tables.
- 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 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

- 4.1 Describe field methods, sample locations (or quasi-random sampling strategy), timing and density of data collection that have been applied to monitoring.

5.0 PROJECT SUCCESS CRITERIA

- 5.1 Clearly state objective criteria by which project success will be measured for regulatory approval of credits and final project close-out.

6.0 STEWARDSHIP

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

Appendices to the Mitigation Plan

Site Protection Instrument

NCDWQ Stream Determination Letter (if appropriate)

NCDWQ Mitigation Viability Letter