

**NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENTAL QUALITY**



**Riparian Buffer and Nutrient Offset Buffer  
Baseline & Annual Monitoring Report Template (ver. 2.0)**

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**Applicability**

This Baseline & Annual Monitoring Report 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 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)'.

## 2.0 REGULATORY CONSIDERATIONS

- 2.1 Determination of credits: Include 'Buffer\_Mitigation\_Tables\_1.0, Table 2 (.xls)'.
- 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.

## 3.0 BASELINE

- 3.1 Planting: Describe site preparation, materials and methods, and other implementation details that occurred when tree planting occurred. Describe any deviations from mitigation plan, including substitutions. Include total number of trees planted by species.

## 4.0 ANNUAL MONITORING

- 4.1 Methods: describe field methods, sample locations (or quasi-random sampling strategy), timing and density of data collection that have been applied to monitoring.
- 4.2 Tables: Data should be presented in the document by species, plot, and year (Table 3).
- 4.3 Results and Discussion: all monitoring data should be described, analyzed and presented in the context of the project success criteria set forth in the approved Mitigation Plan as briefly as possible. Maps may be used as needed to describe spatial variability of results. Photos should be included as needed to describe site conditions.
- 4.4 Maintenance and Management: A brief statement should describe any maintenance activities planned for the coming year, as well as any remedial activities needed to address performance deficiencies.