



NORTH CAROLINA

Original Wetland Acreage	Remaining Wetland Acreage	Acreage Lost	% Lost
11,089,500	5,689,500	5,400,000	-49%

North Carolina Wetlands: Palustrine wetlands account for most of the wetland acreage in North Carolina. These include forested wetlands (bottom-land hardwood forests, fringe wooded swamps, wet pine flatwoods, pine savannas, and hardwood flats), wetlands that are classified as forested or scrub-shrub wetlands, depending on the characteristics of the dominant vegetation (Carolina bays, pocosins, and bogs), and emergent wetlands (nontidal and tidal fresh marshes). The total area of lacustrine and riverine wetlands in the State is not known but is small relative to the area of palustrine wetlands. North Carolina contains more than 3,000 miles of tidal (estuarine and ocean) shoreline, between 183,000-236,000 acres of salt marsh (emergent wetlands).

Summary	Individual Features	Regulation	Water Quality Standards	Mitigation	Monitoring and Assessment	Restoration	Public/Private Partnerships
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SUMMARY

Overall Program

The state has adopted a strong coastal wetland protection program as part of a broader coastal zone management effort. Protection for freshwater wetlands is provided through the Section 401 Water Quality Certification Program, riparian buffer protection programs in several nutrient-impacted river basins and the Isolated Wetland Permitting Program. State also has an in-lieu fee program (North Carolina Wetlands Restoration Program (NCWRP)) which is very active in wetland and stream mitigation.

Innovative Features and New Programs/Initiatives

The state has been issued a "state programmatic general permit" from the U.S. Army Corps of Engineers (Corps) for certain activities in coastal wetlands.

New initiatives in the freshwater wetland regulatory arena include development of a Statewide Wetland and Stream Management Strategy, intensive development and implementation of a stream mitigation program with corresponding guidance documents including examination of the impact of stream restoration on aquatic macrobenthos, implementation of a Cumulative Impact policy, examination of the aquatic life value of intermittent streams, and various stream mapping initiatives.

The Department of Environment and Natural Resources along with the Department of Transportation (DOT) has begun to implement the Ecosystem Enhancement Program to provide functionally-based wetland and stream compensatory mitigation with a watershed focus for all DOT mitigation. This program will be fully operational by the year 2005.

State Wetland Conservation Plan

Draft completed and sent toward Governor Easley for signature.

No Net Loss/Net Gain Goal

All wetland impacts that exceed one acre require at least 1:1 restoration or creation. Accounting of wetland fill versus mitigation is done annually by the NCWRP and has shown positive gain the past three years (2000-2002).

INDIVIDUAL FEATURES:

Regulation

Wetland Regulatory Statutes and Administrative Rules

North Carolina Gen. Stat. #113-229. A permit is required from the Department of Natural Resources (DNR) for any excavation or filling of estuarine waters, marshlands, or state owned lands.

Coastal Area Management Act. North Carolina Gen. Stat. #113A-100 et. seq. A permit is required from the Coastal Resources Commission or a local government which is acting as a permitting authority for activities within coastal areas of "environmental concern." Estuarine waters and coastal wetlands are included in such areas of environmental concern.

Wetland water quality standards (15A NCAC 2B .0231) provide a strong underpinning for the state's freshwater wetland regulatory programs. 401 Water Quality Certifications are required for all 401 Permits issued by the Corps as well as for other Federal permits such as Federal Energy Regulatory Commission Permits. The procedures for applying for a 401 Certification in North Carolina are outlined in 15A NCAC 2H .0500 and generally follow the 404(b)(1) guidelines (avoid, minimize and then mitigate). The State has also adopted a list of activities which are exempt from state wetland permitting in 15A NCAC 2B .0230 that are very similar to the 404 exemptions. The state has adopted comprehensive riparian buffer protection rules for the Neuse (15A NCAC 2B .0233), the Tar-Pamlico River basin (15A NCAC 2B .0259) and the Randleman Lake watershed (15A NCAC 2B .0250). Less comprehensive rules are in place for the mainstem Catawba River and lakes (15A NCAC 2B .0243). Finally the state has adopted rules regulating the fill of isolated wetlands and isolated waters in 15A NCAC 2H .1300 based on the existing authority of the state to regulate impacts to state waters.

Wetland Definition and/or Delineation; Comparability With Federal Definition

Marshlands are defined by presence of listed species and regular tidal (wind or lunar) flow.

Freshwater wetlands follow Corps definition by regulation. Wetlands have also been determined to be "waters of the state" (based on a 2003 State Court of Appeals decision) based on the broad language of the state statute.

Evaluation Methodology

A North Carolina Wetland Rating System has been developed by an interdepartmental committee (fourth version). A fifth version has been prepared and will be tested soon. In addition, an extensive effort is

underway to develop GIS-based and field-based functional assessment methodologies for streams and wetlands involving a wide variety of state and federal agencies.

Regulated and Exempted Activities

Coastal Area Management Act: Dredging, filling, excavation, dumping, driving of pilings, clearing, alteration of land, construction of any structure.

Exemptions include agriculture, timbering, roadwork, and construction of accessory buildings.

Wetland standards protect wetlands from impacts such as draining that remove the protected uses without written authorization (401 Certification or Isolated Wetland Permit).

401 Certification Program: Regulates disposal of fill material in wetlands. The 401 Certification exemptions are similar to those provided in Section 404.

Permits are also required for disposal of fill material into isolated wetlands and waters under separate state authority.

Authorizations to riparian buffers are also required in several river basins. Allowed activities are generally stream crossings (i.e., driveways, sewer lines, etc.) with a provision for the provision of diffuse flow of stormwater.

Special Provisions for Agriculture and Forestry

Exempted for Coastal Area Management Act and 404. A similar set of exemptions (15A NCAC 2B .0230 also applies to state wetland standards and state freshwater wetland permitting activities.

Penalties and Enforcement

Coastal Area Management Act for tidal. The North Carolina Division of Water Quality (DWQ) has developed a thorough compliance and enforcement process for wetland standards, the 401 Certification Program, riparian buffer protection rules and Isolated Wetland Permits in consultation with the Corps. Penalties can be up to \$10,000 per day but are commonly less. Mitigation of the damage on-site (i.e. on-site restoration) is the main goal of this compliance and enforcement program.

Permit Tracking

A 401 Certification and Isolated Wetland Permit tracking system exists with data back to 1992 (best quality data since 1996). The North Carolina Division of Coastal Management (NCDCM) has a permit tracking system as well.

State General Permit (PGP or SPGP) for 404

A SPGP exists for tidal wetlands.

A SPGP has been discussed for nationwide permits but not being pursued at this time.

Assumption of Section 404 Powers

Studied and rejected.

Joint Permitting

The Corps Public Notice serves as Public Notice for the states 401 Certification Program. Development of joint mitigation guidance manuals has been completed for stream and wetland mitigation. Coordination of isolated wetland determinations is also in place.

Special Area Management Plans and Advanced Identification Plans

Yes. Some special management planning is taking place.

Role of Local Governments

Some coastal county governments have wetland policies in land use plans. In addition, several local governments have riparian buffer protection programs.

Staffing

401 Certification Program – approximately 20 person years.

Coastal Program - approximately 30 person years.

Water Quality Standards

Wetlands and Water Quality Standards

The state has adopted wetland standards and procedures for the Section 401 Certification Program as well as Isolated Wetland Permit Program (see above for citations).

Wetland Definition

The Corps definition is also used by state agencies.

Designated Uses

Provided in 15A NCAC 2B .0231 and exemptions to those standards provided in 15A NCAC 2B .0230.

Narrative and/or Numeric Criteria

Provided in 15A NCAC 2B .0231 and exemptions to those standards provided in 15A NCAC 2B .0230.

Antidegradation Policy

The state's antidegradation policy (15A NCAC 2B .0201) explicitly applies to wetlands except when a 401 Certification or Isolated Wetland Permit has been issued.

Other

Standards prevent wetland draining (unless a state authorization has been issued to permit the draining) since the natural hydrology of the wetland must be maintained.

Staffing

Regulatory – staff is about 20, evenly divided between Central and Regional Offices.
DOT-funded staff – about six positions to manage DOT projects.
Policy development/applied research – about six staff have these duties.

Mitigation

Mitigation Policy

Yes, Coastal Area Management Act (but rarely used).

A Mitigation policy (no net loss) is in place for 401 Certification and Isolated Wetland Permitting Programs.

Mitigation Banks

There are about a dozen private mitigation banks for wetlands, streams and/or riparian buffers in North Carolina. In addition, the DOT has about a dozen banks and many compensatory mitigation sites.

In Lieu Fee Program

Yes. The North Carolina Wetlands Restoration Program.

Ad Hoc Arrangements

None.

Mitigation Database

Yes. Losses are tracked in 401 Certification database. The NCWRP prepares an annual report accounting for losses and gains in both the regulatory and non-regulatory programs.

Staffing

NCWRP has 17 staff. The DOT has about seven staff members engaged in wetland mitigation.

Monitoring and Assessment

Mapping/Inventory

The state distributes the National Wetland Inventory (NWI) maps which are now available electronically for the state. However, some areas do not have NWI maps.

The NCDCM has an extensive wetland mapping effort nearing completion in the entire coastal plain based on NWI maps, hydric soils and land use/land cover data.

The DWQ is beginning a wetland monitoring program which will also address wetland status and trends on an annual basis by building off the NCDCM's efforts, state reports wetland status and trends in the 303(b) reports to EPA.

Also the DWQ and DOT will soon begin an effort to map stream locations to supplement the U.S. Geological Survey topographic map data layer.

Wetland Classification and Assessment

Yes, used under Section 401 permitting. Wetlands with significant uses versus those with nonsignificant uses.

In addition the NCDCM has a wetland mapping process that also determined wetland functions in the coastal plain of North Carolina. An effort has just begun to expand this process statewide.

Overall Wetland Gain and Loss Tracking System

The DWQ has begun developing a wetland monitoring program to address this issue. In addition, the annual reports of the NCWRP account for annual losses and gains of wetlands through various permitting programs.

Staffing

The DWQ has two positions devoted to this effort (funded by the U.S. Environmental Protection Agency (EPA) Wetland Program Development Grants).

Restoration

Program Description

N/A

Restoration Program Goals

N/A

Eligibility Criteria

N/A

Restoration Database

N/A

Staffing

N/A

Public/Private Partnerships

Acquisition Program

The State's Clean Water Management Trust Fund as well as smaller programs for land acquisition are actively involved in wetland acquisition.

Public Outreach/Education

N/A

Tax Incentives

N/A

Technical Assistance

The North Carolina Natural Heritage Program provides assistance to local landowners on request.

Other Nonregulatory Incentives for Private Landowners

N/A

Wetland Training and Education

The DWQ is actively involved in developing and administering training programs on wetland and buffer rules, stream origins and buffer determinations, macrobenthos collection and macrobenthos identification as well as stream mitigation..

Watershed Planning

N/A

Special Problems

N/A

Coordination

N/A

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Contact Points

The freshwater wetland and stream regulatory programs have a website at <http://www.2o.enr.state.nc.us/ncwetlands>.

Guidebooks, Brochures, Websites, Other Educational Materials

All relevant reports are available on the websites.