

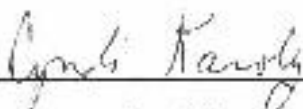
North Carolina Division of Water Resources

Activities proposed in support of the NC Wetland Program Plan 2015-2019

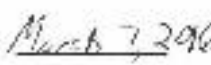
Submitted by:
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Introduction:

North Carolina's Wetland Program Plan was developed with input from a stakeholder group, and efforts were made for the final document to include all of the actions or activities proposed by stakeholder group members during the development process. Since North Carolina's State agencies cannot work on or accomplish all of the activities listed in the NC WPP, NC DWR will consider primary topic areas, and potential specific projects to help North Carolina's wetland program and support the goals of the ESTP over the next five years.

The proposed projects primarily support the Monitoring and Assessment, and Regulation sections of the Core Element Framework. The projects fall into four broad categories: monitoring and assessing wetlands, review of state regulations, outreach and education, and tool development.

The background information on the history and current status of North Carolina's Monitoring and Assessment, Regulation, Voluntary Restoration and Protection, and Water Quality Standards for Wetlands can be found in the accompanying NC WPP document. NC DWR's potential projects and how they support the NC WPP document (*listed in italics under each Action*), which was developed with input from stakeholder group members, are listed below.

Monitoring and Assessment:

Action 1: Participate in the 2016 National Wetland Condition Assessment [2016]

NC DWR will be participating in the 2016 National Wetland Condition Assessment. NC DWR staff will be sampling 21 sites as part of the national effort. Ten of the 21 sites are sites that were also sampled in 2011. This will also provide North Carolina additional data to add to our database on long-term monitoring sites.

NC WPP Monitoring & Assessment 1.2.a. Conduct various types of wetland monitoring efforts such as ambient monitoring, basinwide/watershed monitoring, probability-based (random) monitoring, EPA's NWCA [2016]

NC WPP Monitoring & Assessment: 1.2.b Focus wetland monitoring to include i. Routine, consistent, long-term monitoring data so valid data will be available and can be used for decision making purposes

Action 2: Support groups/agencies with their Monitoring and Assessment Efforts [2016-2019]

NC DWR staff are participating as part of the NC Wetland Monitoring Workgroup to support their mission of, "provide[ing] technical guidance and coordination for wetlands monitoring in North Carolina and the integration, sharing, and effective use of the resulting data." NC DWR staff will also continue to provide monitoring data; training on field techniques (e.g., Surface Water Identification Training and Certification (SWITC)); and reports on permitted stream, wetland, and buffer impact and compensatory mitigation (e.g., EPA quarterly reports, graduate student research inquiries, inquiries on areas in need of compensatory mitigation).

NC WPP Monitoring & Assessment 2.3.a. NC DWR wetland monitoring data and other data from wetlands in the state (e.g., Carolina Vegetation Survey (CVS), university study sites, mitigation monitoring data) will be available to assist with...

NC WPP Monitoring & Assessment 2.3.f. Report NC DWR permitted wetland impacts and compensatory mitigation as part of the quarterly reports for NC DWR's strategic plan

NC WPP Monitoring & Assessment Objective 3: Make wetland monitoring and assessment data available to inform wetland planning and policy actions

NC WPP Regulation: 1.2.a. Seek sustainable ways to continue to provide guidance and support training on Surface Water Identification Training and Certification (SWITC)

Action 3: Address Important and/or Urgent Issues [2016-2019]

The North Carolina Department of Environmental Quality (NC DEQ), North Carolina's 401 and Buffers permitting branch, and local governments and municipalities ask NC DWR to provide information that can help make decisions on important and/or urgent matters that arise. Some of these issues are short-term while others are long-term in nature. New and historic data can prove beneficial in addressing these issues. While these issues may be transient in nature, some of the issues that NC DWR currently sees as needing to be addressed in the next five years include:

1. Identification of informative wetland macroinvertebrate species [2017-2019]
2. Studying oligohaline macroinvertebrate criteria [2016-2019]
3. Neonicotinoids levels and/or their effects in NC streams and stream/wetland complexes [2018-2019]
4. Improving the ability to detect water quality improvements in impaired streams (e.g.; small improvements due to stream restoration or stormwater BMP projects) [2016-2018]
5. Evaluate success criteria for Alternative Mitigation Projects [2018-2019]
6. Evaluating effectiveness of Riparian Buffers on Improving Water Quality [2017-2019]

NC WPP Monitoring & Assessment 2.2.c. Evaluate the feasibility of establishing a Level 2 assessment for restored wetlands to help determine the success or functionality of the wetland site (possibly include a sliding scale/benchmarks based on the age of the site)

NC WPP Monitoring & Assessment 3.4.a. Wetland monitoring and assessment data will be made available to assist with the success of wetland restoration and enhancement projects by providing data to:

i. support success criteria that take the restoration of wetland extent, function, quality, services and condition of restoration and enhancement sites into account

iii. evaluate additional or alternative success criteria for wetland restoration sites within urban areas

NC WPP Monitoring & Assessment 3.5.c. Evaluate and develop tools to monitor and assess the success of wetland or wetland-stream complex mitigation sites (e.g., mitigation project construction protocols, C of C values, IBI, wetland profiles of biological communities, rapid assessments, measures of hydrologic function, services)

NC WPP Monitoring & Assessment 3.5.e. Evaluate which watersheds have current and/or future needs for carbon and nutrient offset credits to mitigate for permitted impacts, and suggest areas that would benefit from the production of additional carbon and nutrient credits

NC WPP Regulation 2.4.c. Determine if there are any resources (e.g., water quality, wetland types, aquatic species) in certain locations that need additional enhancement or restoration through flexible mitigation options (may need to go outside of the HUC or watershed, areas around known T&E or state listed species, especially landscape scale projects)

NC WPP Regulation 3.2.a. Continue to examine opportunities for flexibility in mitigation by looking at local needs and specific resources (e.g., alternative mitigation methods, watershed planning, stormwater and sediment erosion control methods, preservation in threatened areas)

Action 4: Tool Development [2016-2019]

NC DWR will look to develop monitoring and assessment tools based on the data that is gathered or analyzed while addressing the important and/or urgent issues noted above. Tool development may include a list of informative/indicative macroinvertebrate wetland species (e.g., duration of inundation, minimum pH, salinity, chemical levels, improvements in water quality) and/or ways to measure the success of alternative mitigation projects.

NC WPP Monitoring & Assessment: 2.2.a. Develop and validate assessment tools to assist with the monitoring of natural and mitigation wetland sites

NC WPP Regulation 3.2.a. Continue to examine opportunities for flexibility in mitigation by looking at local needs and specific resources (e.g., alternative mitigation methods, watershed planning, stormwater and sediment erosion control methods, preservation in threatened areas)

NC WPP Regulation 3.2.e. Evaluate current mitigation success criteria including hydrology and herbaceous vegetation and examine success criteria/methodologies based on the current science

NC WPP Water Quality Standards for Wetlands 2.2.d. Evaluate ways to assess how restoration projects improve downstream water quality and ecosystem services

Action 5: Public Outreach and Education [2016-2017]

NC DWR currently has information related to wetlands that is not readily available to the public. NC DEQ is making a concerted effort to disseminate information to the public, including the launch of a new website on February 15, 2016. The new website provides an accessible platform for sharing data and is a good place to share user friendly, non-technical, public oriented information. Some of the information that may be shared with the public includes, but is not limited to, public summary reports of previous work, wetland condition analysis and public summary, and a wetlands “tour guide” of publicly accessible quality wetlands.

NC DWR also has a large amount of field data that has been collected, but has not been compiled and/or analyzed as part of peer reviewed publications. The data collected over the past ten years can be used as the foundation for writing peer reviewed journal article(s). These articles

may then be used by state agencies and the EPA to assist with providing summary documents, or by the scientific community to better understand the streams and wetlands of North Carolina.

NC WPP Monitoring & Assessment: 3.1.a. Facilitate the development of a means of sharing wetland monitoring data electronically: i. Ensure public outreach and education to share monitoring data in a useable format

NC WPP Regulation: 1.2.c.iv. Provide outreach and education to the general public and high use groups (e.g., city officials, planners, real estate agents, consultants)

NC WPP Regulation: 1.2.e. Educate the regulated community regarding permitting impacts to wetlands and waters as a joint effort among several agencies and/or local governments

NC WPP Water Quality Standards for Wetlands: 1.2.a.i. Provide public outreach and education

Action 6: Southeast Wetlands Workgroup [2017-2019]

With funding assistance from the EPA, NC DWR was instrumental in establishing the Southeast Wetlands Workgroup (SEWWG). Through SEWWG, expert botanists developed a wetland plant Coefficient of Conservatism database for the Southeast region of the United States. The SEWWG also provides a website with wetland information relevant to the Southeast, has conducted wetland webinar series, and provided a platform for the North Carolina Wetland Monitoring Work Group to share data. NC DWR would like to continue to promote collaborations amongst the southeastern states and support SEWWG and its goals of providing “participating southeastern states and tribes with technical training, facilitate[ing] communication among wetland scientists, and encourage[ing] the exchange of data, techniques, and methodologies that enhance monitoring and assessment programs.”

NC WPP Monitoring and Assessment 1.2.c. Participate with the organization of a regional wetland monitoring network in the Southeast

Regulation:

(Note: Actions 1 and 2 are items that NC DWR will be implementing over the next five years, while Action 3 would build the capacity of the wetland program.)

Action 1: Regulatory Rules Review [2016-2017]

In 2013, a NC state law was adopted that required North Carolina state agencies to review their existing rules every 10 years. NC DWR is in the process of reviewing their rules according to the schedule established by the North Carolina Rules Review Commission. NC DWR will continue to solicit comments and/or provide public outreach and education on any proposed and/or accepted changes to the 401, Buffer, and Isolated Water rules.

NC WPP Regulation 1.1.b. Evaluate and identify where the state and federal regulatory programs are different/inconsistent from each other and determine how the differences/inconsistencies affect the aquatic resources

NC WPP Regulation 1.2.c.iv. Provide outreach and education to the general public and high use groups (e.g., city officials, planners, real estate agents, consultants)

NC WPP Regulation 1.2.e. Educate the regulated community regarding permitting impacts to wetlands and waters as a joint effort among several agencies and/or local governments

NC WPP Regulation 1.3.b. Periodic review of the regulatory programs to ensure aquatic resources are not being overlooked and are regulated as needed in an efficient and effective manner (NC House Bill 74 Part I Section 3 and §150B-21.3A)

NC WPP Regulation 2.2.a. Reconcile rules (e.g., 401 with isolated waters, state with federal) where possible

NC WPP Regulation 2.2.b. Continue to coordinate and improve upon program implementation among state and federal agencies: determine where the various programs overlap, reduce redundancy, increase resources in needed areas, share data across agencies

NC WPP Regulation 2.2.c. Investigate programmatic changes that could increase the efficiency of the 401 permitting program (e.g., 404 assumption, State Programmatic General Permits (SPGP), review of the DWR/USACE joint review process)

Action 2: Review of 401 General Certifications with renewal of 404 Nationwide Permits [2016-2017]

The USACE 404 Nationwide Permits (NWP) are set to expire on March 18, 2017. The USACE will be reissuing, editing, or adding NWPs at that time. In conjunction with the changes in the NWPs, North Carolina's 401 program will be reviewing and reissuing, editing, or adding corresponding General Certifications (GCs) at the same time. These edits and reviews will be able to evaluate the consistency of the state and federal programs and work to eliminate any discrepancies or duplications between the state and federal programs. This renewal process supports the same portions of the NC WPP as those noted in Action 1: Regulatory Rules Review above.

Action 3: Development of a Stream Call mapping tool [2017-2019]

NC DWR staff make stream identification calls on a regular basis. Currently stream identifications are tracked as a latitude and longitude in our BasinWide Information Management System (BIMS). Currently, field staff do not have a way of identifying other stream calls that may have already been made in the vicinity of a proposed project. The only means presently available for mapping stream calls is to export latitude and longitude data for all stream calls from BIMS into a mapping program in the office. Development of a mobile mapping application that could be utilized on a handheld phone or field device to pinpoint a stream call location directly into a mapping and database program while in the field would be very beneficial. Permit information, adjacent project information, land use, soil survey and topographic maps, etc. could be accessible on site, allowing for live data to be utilized in the field at all times to help make a more informed decision.

NC WPP Monitoring & Assessment 3.5.b. Develop mapping tools to help prioritize monitoring, management, and mitigation areas