

# North Carolina Department of Environment and Natural Resources

Pat McCrory Governor John E. Skvarla, III Secretary

# **MEMORANDUM**

TO: ENVIRONMENTAL REVIEW COMMISSION

The Honorable Brent Jackson, Chairman The Honorable Ruth Samuelson, Co-Chairman The Honorable Mike Hager, Co-Chairman

FROM: Neal Robbins

Director of Legislative Affairs

SUBJECT: Annual Stormwater Management Program Report

DATE: October 1, 2013

Pursuant to G.S. 143-214.7(e), the Department is required to report annually to the Environmental Review Commission on the implementation of the Stormwater Management Programs. The attached report satisfies this reporting requirement.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at neal.robbins@ncdenr.gov.

cc: Mitch Gillespie, Assistant Secretary for Environment Carr McLamb, Deputy Director of Legislative Affairs Fred F. Steen, Office of the Governor Jennifer Hoffman, Fiscal Research Division Tracy Davis, Director, Division of Energy, Mineral, and Land Resources

# 2013 Stormwater Management Program Annual Report

In Accordance With G.S. 143-214.7(e)

## **Executive Summary**

G.S. 143-214.7(e) requires the Environmental Management Commission to annually report to the Environmental Review Commission on the implementation of the Stormwater Management Rules and Programs. The Department of Environment and Natural Resources implements a number of stormwater management programs to protect surface waters from the impacts of runoff from developed and developing areas across the state. The Department has continued with ongoing efforts to provide updated technical guidance materials on stormwater management design practices with updates to its quidance manual. Updates have been finalized for the use of permeable pavement practices and updates are in the drafting stages for the use of green roofs, rainwater harvesting practices and Low Impact Development alternatives. Over the past year, the Department has worked with a number of interested parties to form technical review workgroups to help develop more effective guidance materials. Work also continues in the day to day administration of stormwater permitting programs for post construction stormwater runoff from new development activities along with federally mandated point source stormwater permitting for industrial activities and municipalities. Eleven general permits covering over 1,700 industrial facilities were renewed to include updated permit requirements. For the first time, this process included an electronic renewal component to help save time for permitees and costs for Department printing and mailing. The stormwater programs were transferred to the Department's Division of Energy, Mineral, and Land Resources (DEMLR) effective August 1, 2013. Activities are underway to integrate the requirements of construction stormwater program with the erosion and sedimentation control program (E&SC) through a combined inspection and inspection report so that one inspector is the point of contact for all compliance activities at a construction site for both programs, a combined self inspection and monitoring form, and cross training of all DEMLR Land Quality Section staff in the regional offices to add efficiencies to permit review, inspections and accessibility of staff for technical assistance. Additional activities are being developed and implemented to ensure the efficient integration of programs and making updated information readily available to the public and regulated customers.

#### **Background**

The Environmental Management Commission (EMC), through the N.C. Department of Environment and Natural Resources (DENR), implements state and federal programs to control the water quality impacts of stormwater runoff from development activities and urban and developing areas. These programs include the federal National Pollutant Discharge Elimination System (NPDES) program for stormwater discharges that requires permits for point source discharges of stormwater from industrial activities and from certain municipal areas in urbanizing and developing areas. This program is a requirement of the federal Clean Water Act. In addition, the EMC and Department implement state stormwater permitting programs that are designed to control stormwater runoff from new development and redevelopment activities occurring near sensitive areas (Water Supply Watersheds, High Quality and Outstanding Resource Waters, Nutrient Sensitive Waters, Coastal Waters, and post-construction activities adjacent to regulated municipal NPDES areas). These state stormwater programs may be implemented on the state level or on the local level by cities and counties.

# Stormwater Program Transition from Division of Water Resources to the Division of Energy, Mineral, and Land Resources

The Department has recently undergone internal restructuring in some environmental program areas. Effective August 1, 2013, responsibility for implementation of a number of the Department's stormwater programs has been transferred from the Division of Water Resources (DWR) to the Division of Energy, Mineral, and Land Resources (DEMLR). This has involved the transfer of around thirty staff members in

the central office and regional offices. The two Divisions continue to work on the logistics of the move and on training efforts to assure that the changes are implemented efficiently and effectively. The Division is in the process of cross-training central and regional staff to integrate construction stormwater permitting and inspection with its erosion and sedimentation control program. DEMLR and DWR have partnered for a number of years to have both permits issued at the same time. Recent changes have established a combined inspection report that is being used by regional staff to have one inspector visit a construction project and inspect for compliance with both permits. This provides one point of contact, one set of recommendations for permit compliance issues and one report being issued to the developer. This will save time and resources for both the regulated community and the Division. All of the stormwater programs within DEMLR will continue to work closely with the Division of Water Resources to ensure protection of surface waters from stormwater impacts.

# **State Stormwater Programs**

The Department continues to implement various post-construction state stormwater programs across the state as noted above. More information on the state stormwater programs can be found at: http://portal.ncdenr.org/web/lr/state-stormwater. As these programs often require the use of engineered stormwater controls, the Division continues to provide technical guidance on stormwater control measures through its Stormwater Best Management Practices (BMP) Manual that is available online at: http://portal.ncdenr.org/web/lr/bmp-manual. Over the past year the Division has worked in a number of key areas to improve and update the information and options available in the manual. These efforts have been undertaken with the help of research from N.C. State University and with the input of a large number of interested stakeholders. In the 2012 Stormwater Management Program Annual Report, efforts to update the permeable pavement section of the manual were highlighted. After extensive review, public input and a series of workshops, this section has been finalized. It provides more flexibility for the design and use of these systems throughout the state. In addition, efforts are ongoing to finalize updates to sections covering the use of green roofs and water harvesting as stormwater management measures. Recent legislative changes to G.S. 143-214.7 highlighted the use of stormwater capture and reuse measures of this type. Work is also ongoing under a federal grant to develop procedures for implementation of Low Impact Development (LID) stormwater management approaches. These efforts have involved a workgroup of design professionals, environmental representatives, university representatives and agency staff. Guidance on LID approaches will provide added flexibility to all of the regulated community and will provide guidance for the voluntary use of LID measures to meet the stormwater requirements. A major workshop is planned on these efforts in the spring of 2014.

On the federal level, the Environmental Protection Agency continues to promote the use of green infrastructure measures for stormwater control. Federal facilities are required to control stormwater runoff and utilize green infrastructure methods in their new development activities. The Division's activities to develop guidance for permeable pavement, rainwater harvesting and LID practices gives more alternatives under existing stormwater programs, and also provides guidance to entities that are seeking to meet green infrastructure approaches.

The Division has worked over the past year with the Professional Engineers of North Carolina to form a stormwater Technical Review Workgroup (TRW) to provide ongoing input into key issues associated with the implementation of stormwater rules and the design of stormwater BMPs. This group is separate from the LID workgroup mentioned above and has been meeting monthly beginning in early 2013. The TRW includes entities from across the state and across various interest groups and is providing valuable input into technical implementation issues in the stormwater program. The TRW is working with a large number of complex technical issues including: the proper design storm to use to achieve appropriate stormwater control, the appropriate design methodologies for calculating stormwater runoff, information on seasonal high water table issues and ways to address them in various stormwater designs, approaches to meeting rule requirements for "effective infiltration" near sensitive coastal waters, re-

evaluation of design approaches for wet detention ponds, and review of needed rule changes to accomplish recommendations of the group. The group continues to target additional areas that need review and discussion by the various interest groups and as items are drafted, will make their work products available for public review and comment. Some of the results of this workgroup may lead to statutory or regulatory changes to achieve more efficient implementation of the stormwater programs.

#### **Federal Stormwater NPDES Programs**

#### Municipal Separate Storm Sewer System NPDES Permits

Previous reports have outlined ongoing activities associated with implementation of the federal municipal (municipal separate storm sewer systems or MS4) NPDES stormwater program. Permits under this program currently regulate 115 governmental entities across the state. The Division has worked with local governments, state and federal agencies (including EPA Region IV) over the last year to renew permit coverage for fifteen of these entities. In addition, coverage for eight new MS4 permits was issued over the past year. The Division and EMC are required to continue to review other potential entities for designation into this program. No additional municipalities have been designated through these procedures over the past year. On the federal level, EPA has released information on the most recent census data. Federal regulations automatically designate local governments located in federally designated urbanized areas. In North Carolina, this will impact a number of municipalities across the state making them subject to the MS4 permitting requirements.

The Division provides outreach and information to these local government entities in various meeting opportunities. This outreach is provided, in part, through an ongoing audit program the Division implements to assess portions of the permitted communities each year. This audit process for MS4s is coordinated with audits for other existing programs like the Water Supply Protection program. The Water Supply Protection Program requires local implementation of program requirements in around 280 local government entities across the state to protect surface waters used for drinking water supplies. This coordination allows the Division and local entities to maintain efficient oversight of related stormwater program areas through one program review. Division staff participates in workshops and other meetings to continue to provide regular updates on program issues as well as participating and providing educational materials for local and regional outreach events.

## **Industrial Stormwater NPDES Permits**

In the industrial stormwater NPDES permitting program, the Division has current permit coverage for around 4.000 industrial facilities across the state. The Division reissued six general stormwater permits covering close to 1,000 facilities statewide at the end of October 2012. Five additional general permits were reissued in 2013 covering around 700 facilities across the state. The renewals made several procedural changes to promote stormwater pollution prevention and the development of more effective tools to help the permit holders and the Division to comply with federal regulations. These permits and associated technical guidance information can be found at http://portal.ncdenr.org/web/lr/npdesstormwater#tab-3. In our most recent permit renewal process, the Division implemented electronic renewal procedures for our permittees. This allowed permitees to request renewal of their permits through our website, provide updates to information online, and download the new permit online. This process saved time for the permitees and the Division received significant positive feedback from our customers. It also allowed the Division to save on mailing and printing costs compared to previous renewals. The process does not yet allow the permittee's data corrections to go directly into our permitting database, but overall the process was very beneficial and a very high percentage of the permitees choose to utilize it. Over the coming year, the Division has seven more general permits up for renewal covering over 950 additional facilities. Work will also begin on permit renewals for a significant number of individually permitted facilities.

In the industrial NPDES permitting area, the Division also regulates construction activities that disturb one acre or more of land. The construction stormwater program has always partnered with the state sediment program in this process to have one application review and approval procedure. Once an entity receives their erosion and sedimentation control plan approval, they are also given their permit coverage under the construction stormwater NPDES permit. In the past, DWR and DEMLR have coordinated inspection and compliance efforts associated with this process to avoid overlap. With the recent transfer of stormwater programs from DWR to DEMLR, responsibility for the NPDES construction permit is now housed along with the sediment program in DEMLR's Land Quality Section. As the integration of these two programs progresses, the Division anticipates that cross training of staff and integration of reporting and inspection activities can work to add efficiencies in the implementation of both construction related regulatory programs.

## **Response to Legislative Changes**

The stormwater program continues to work with implementation of recent legislative changes that affect these program areas. Over the last few years, changes have been made that give the Department more authority to transfer permits when the original owner is unwilling or unable to agree with the transfer. The most recent change (H279) helps to expedite some procedures to get permits in the hands of the entities that should be responsible for them. This change has been used most in the situation of foreclosed properties where original owners are no longer involved with the property. In addition, the Division will also be working to implement provisions of HB 480 that requires development of minimum design criteria and procedures and rules for fast track post-construction stormwater reviews. This will require work with a technical workgroup to establish minimum design criteria that must be met by design professionals and establishment of necessary rules for implementing the fast track process. The work of the TRW group that is already well under way will be useful in this process.

## Rule Making Efforts – Federal and State

The Division continues to monitor potential rule changes to federal stormwater regulations in a number of key areas. The EPA is working to draft new rules that would expand post-construction stormwater control requirements across the country. The Division has been involved in regular updates on the progress of these regulations along with other states. Once draft rules are released, the state will develop comments on the potential impacts in NC. EPA has also released proposed rules to require electronic application submittal and report submittal under various federal programs, including the NPDES stormwater programs. These changes will potentially require extensive efforts on the state level to come into compliance. It will also require the regulated community to adjust to electronic submittal. It is likely that over time these changes will result in cost savings, but the initial efforts to make electronic procedures available will take resources on the state level.

As directed by SL 2012-143, the Division has worked with various sources to evaluate the regulatory needs in North Carolina, including review of the efforts in other states. Later in 2013, the Division plans to take proposed stormwater rules to the Environmental Management Commission (EMC) for their consideration and approval to proceed to public hearing as the first step in the rules review process so that rules can be adopted by the EMC by the October 1, 2014 statutory deadline.

#### **Technical Assistance and Outreach**

The Division continues to work to provide technical assistance and outreach in all of its stormwater management program areas. A few major areas of technical assistance/outreach are noted here:

 Staff continues to maintain and regularly update the Stormwater BMP Manual and provide technical assistance on the materials.

- Division staff continues to provide outreach and education through visits to schools, meetings with local governments, various councils of government, exhibits at festivals and fairs, workshops for the regulated community and through the use of our outreach and education Listserv. More information about the Division's stormwater awareness outreach and education efforts can be found at: <a href="http://www.ncstormwater.org">http://www.ncstormwater.org</a>.
- The Division continues to partner with N.C. State University to offer regular stormwater workshop opportunities, including regular BMP Reviewer Certification workshops for local governments. The workshop includes training on stormwater management, regulatory issues and review of BMP design, implementation, maintenance and inspection.