# North Carolina Department of Environmental Quality

Pat McCrory Governor Donald R. van der Vaart Secretary

November 23, 2015

#### **MEMORANDUM**

TO: ENVIRONMENTAL REVIEW COMMISSION

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

FROM: Matthew Dockham, Director of Legislative Affairs

SUBJECT: Annual Sedimentation Program Report

DATE: November 23, 2015

Pursuant to G.S. 113A-67, the Department is required to report annually to the Environmental Review Commission on the implementation of the Sedimentation Pollution Control Act of 1973. 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 <a href="mailto:matthew.dockham@ncdenr.gov">matthew.dockham@ncdenr.gov</a>.

cc: Tom Reeder, Assistant Secretary for Environment, NCDEQ
Tracy Davis, Director, Division of Energy, Mineral, and Land Resources, NCDEQ

Report to the Environmental Review Commission
On the Implementation of the
Sedimentation Pollution Control Act of 1973
By the Department of Environmental Quality
Division of Energy, Mineral, and Land Resources
Land Quality Section

October 1, 2015

#### **Executive Summary**

The Department shall report to the Environmental Review Commission on the implementation of the Sedimentation Pollution Control Act (SPCA) of 1973 on or before 1 October of each year. The Land Quality Section in the Division of Energy, Mineral, and Land Resources is responsible for implementing the SPCA. There are also 53 delegated SPCA programs across the state implemented by either county or municipal governments. The total number of new projects increased slightly from 1,974 in FY 2013-14 to 2,109 in FY 2014-15, and the total number of newly disturbed acres also increased from 21,200 acres in FY 2013-14 to approximately 22,100 acres in FY 2014-15. Sediment inspections dropped slightly from 14,883 inspections in FY 2013-14 to 13,920 inspections in FY 2014-15. The Sediment program of the Land Quality Section has also been selected to pilot the AMANDA based Enterprise Certification Licensing Inspection and Permitting System (ECLIPS), with implementation of the first phase of the project as well as testing and development occurring of the mobile phase throughout fiscal year 2014-2015. Development and testing of the public portal feature of the project is anticipated to be completed during fiscal year 2015-16.

# **Background**

"The sedimentation of streams, lakes and other waters of this State constitute a major pollution problem. Sedimentation occurs from the erosion or depositing of soil and other materials into the waters, principally from construction sites and road maintenance. The continued development of this State will result in an intensification of pollution through sedimentation unless timely and appropriate action is taken. Control of erosion and sedimentation is deemed vital to the public interest and necessary to the public health and welfare, and expenditures of funds for erosion and sedimentation control programs shall be deemed for a public purpose".

-Preamble to the Sedimentation Pollution Control Act of 1973

The Division of Energy, Mineral, and Land Resources, Land Quality Section, in the Department of Environmental Quality administers the SPCA. The Sedimentation Control Commission has also delegated administration of the SPCA to 53 county or municipal governments. These local program delegations do not regulate land-disturbing activities conducted by local, State or United States government or persons with the power of eminent domain (e.g. public utilities), which remain under jurisdiction of the Land Quality Section.

The state sedimentation program also plays a critical role in meeting federal construction stormwater permitting requirements under the Clean Water Act. The United States Environmental Protection Agency (EPA) implements federal permitting requirements for stormwater discharges from active construction

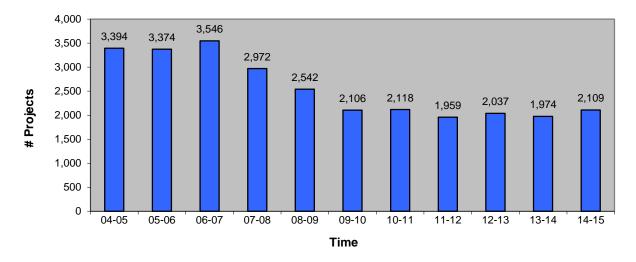
sites, but also has the authority to delegate those permitting responsibilities to the states. In many ways, federal construction stormwater requirements mirror the requirements of the state Sedimentation Pollution Control Act and the intent of the federal program is the same – to prevent sedimentation damage to water bodies.

North Carolina has delegated authority that allows DEQ - rather than EPA - to issue federal construction stormwater permits in the state. Effective August 1, 2013, the Stormwater Permitting Unit of the Division of Water Resources, including 29 appropriated and receipt based positions administering the construction, industrial, municipal and post construction stormwater programs, was transferred to the Division of Energy, Mineral, and Land Resources, Land Quality Section. The Land Quality Section has already incorporated cross-training of central and regional personnel and consolidation of inspection and monitoring forms between the erosion and sedimentation control program and the construction stormwater program so that one point of contact for meeting both programs' permitting, inspection and reporting requirements can be used to communicate compliance with both program's state and federal provisions.

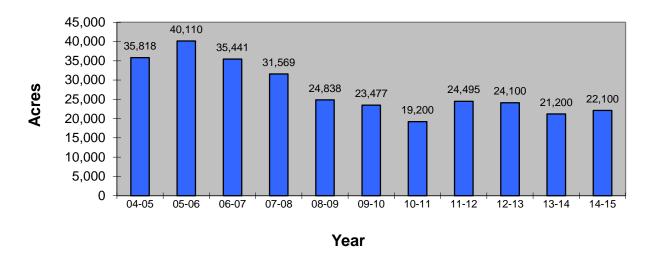
### **Implementation**

The decline in the number of new projects under state jurisdiction has leveled off in recent years with a slight increase to 2,109 new projects in the 2014-15 fiscal year. The actual area of land-disturbance covered by new erosion and sedimentation control plans approved in 2014-15 was approximately 22,100 acres. These totals do not include erosion and sedimentation control plans approved by local government sedimentation programs or land disturbed by the Department of Transportation under its delegated program.

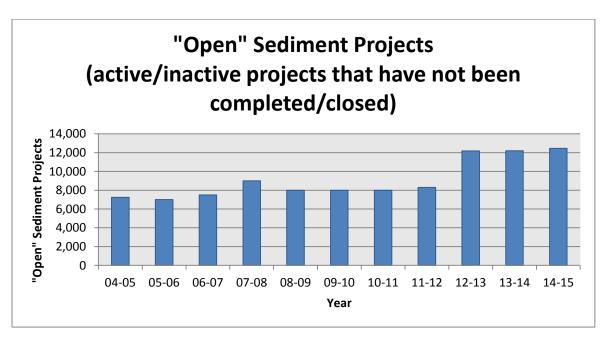
#### **Permitted Sites Per Year**



### **Disturbed Acres Per Year**



The number of open sediment projects requiring inspection by the state program has been estimated at 8,000 projects for several years. Improvements to our database reporting capabilities during fiscal year 2012-13 resulted in a more accurate estimate of 12,181 open projects at that time. This number increased slightly, with approximately 12,451 open projects during fiscal year 2014-15. The total includes all sites that are either under active construction or are inactive and not completed. While the economic downturn slowed new project commencement, it contributed to the consistently high inventory of incomplete projects due to slowdown in project construction or abandonment of a project as a result of foreclosures and bankruptcies.



The number of full time equivalent positions (FTE) in the Land Quality Section for the erosion and sedimentation control program has declined over the past seven fiscal years as follows:

Fiscal Year	Sediment FTE
2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014	65 61 52 44 40 40
2014-2015	34

Since the fee revenue for the program comes from a sedimentation plan review fee for new projects, a downturn in new construction and reduced acreage significantly affects staffing levels. The reduction in new starts, and therefore fee revenue, does not mean a reduction in total workload because of the large number of open project sites that the staff is responsible for inspecting for compliance with the plan requirements, statutes and rules until they are permanently stabilized.

Regional activities for the 2014-15 fiscal year include:

- 2,109 new erosion and sedimentation control plan reviews
- 604 revised erosion and sedimentation control plan reviews
- 13,920 sedimentation site inspections
- 182 notices of violation
- 21 enforcement case referrals

#### **Plan Approval**

The SPCA requires review of a proposed erosion and sedimentation control plan within 30 days for a new plan submittal and within 15 days for a revised plan. As mentioned above, newly disturbed acreage in North Carolina increased slightly last fiscal year. The number of new erosion and sedimentation control plans received was 2,109 (up slightly from 1,974 in FY 2013-14). For the past several years, the total number of new projects has fluctuated slightly but consistently remained around 2,000 plans. In addition, the Division encourages applicants to meet with permit review staff in advance of the initial plan submittal to resolve quality and completeness issues prior to formal submittal in an effort to reduce the overall time for plan review and approval.

The Express Permitting Program for erosion and sedimentation control plans provides for plan review within as little as three working days. During FY 2014-15, 687 Express Permit reviews were conducted. This represents an increase of approximately 17.2% from the 586 express reviews completed in the previous year. The Fayetteville region had the most express reviews, reflecting the numerous Department of Defense projects submitted for express review at Fort Bragg.

# **Inspections**

Regional staff conducted 13,920 inspections last year, a decline of 963 inspections from the previous year. The reports document field observations and compliance or non-compliance with the SPCA. Based upon current staffing levels, open erosion and sedimentation control projects are inspected, on average, once every ten (10) months.

#### **Inspections** 30,000 24.745 # of Inspections 25,000 20,152 19,884 20,000 16,050 16,516 15,806 15,659 15,289 14,883 13,920 13,189 15,000 10,000 5,000 0 04-05 05-06 06-07 07-08 08-09 09-10 10-11 11-12 12-13 13-14 14-15 Year



Erosion and sedimentation at pipe outlet



Bare, Eroding Slopes with Insufficient Measures to Prevent Sedimentation



Stream impacts from sedimentation

#### **Enforcement**

The Division of Energy, Mineral, and Land Resources documents compliance or non-compliance with the SPCA through sedimentation inspection reports. Most violations are resolved by providing an inspection report to the responsible party and requesting correction of the deficiencies. Of the 13,920 inspections conducted during FY 2014-15, 182 (1.3%) resulted in a Notice of Violation (NOV). The NOVs led to 21 requests from the regional offices for additional enforcement action (11.5% of NOVs issued or less than 0.15% of the inspections conducted). Fourteen civil penalties were assessed, twelve of which were initial penalties of \$5,000 or less.

The Attorney General's Office continues to work in state courts and federal bankruptcy court to resolve soil erosion, stream sedimentation and landslides at abandoned residential developments resulting from bankruptcy and foreclosure.

### **New Program Efforts**

The DEMLR Land Quality Section is currently in the process of implementing a new online database for the Sediment program. The Sediment program was one of three statewide programs to be selected to pilot the AMANDA based Enterprise Certification Licensing Inspection and Permitting System (ECLIPS). This innovative case management system is web-based and has the capability to handle application submission, plan review, issuance of approvals or denials, enforcement documents (NOVs, etc.), complaints, and real-time inspection data input. The first phase ("Back Office") of this program (for staff only) was implemented in June 2014. This phase allows staff to input application and project data, approvals and disapprovals, complaints, inspections, and notices of violations.

The second phase was the launch, during fiscal year 2014-15, of the AMANDA mobile application in which inspectors are able to enter inspection data into the database via handheld tablets while onsite in the field. Ultimately, it is anticipated that inspectors will be able to email inspection reports directly to the financially responsible party from the project site (depending on cellular coverage) and the database will be updated with the inspection in near real time.

The third phase of the ECLIPS system will be the Web Portal, which is currently in development. This phase will allow the applicant to submit applications electronically – uploading drawings, calculations, and other information into the system, as well as processing fee payment online. The system will also allow the applicant to track the status of their submission throughout the review process. Use of the Web Portal should reduce the amount of hard copy plans submitted to each Regional Office. The portal will also allow the 53 delegated local programs throughout the state to submit their monthly activity reports via the web.

With the implementation of this ECLIPS project, the Sediment Program is taking the first steps toward a more modern permitting and inspection system which is anticipated to bring greater efficiency to the major program components (application processing, plan review, inspections, complaints, and enforcement). It should also provide better customer service to applicants by giving them: 1) greater flexibility in the method of plan submission and fee payments, 2) possible reduction in the costs of

submission, with the decreased need for printing, and 3) a simple method for tracking the status of their applications.

## **Local Programs**

The Sedimentation Control Commission encourages local governments to administer a delegated erosion and sedimentation control program by providing a model ordinance and technical assistance. Once a program is delegated to a local government, the Land Quality Section provides periodic oversight to ensure that the local programs are meeting the standards for the state program. State personnel informally assist and advise the local staff on problematic sites. A formal review of each local program is scheduled at least every two years. The Land Quality Section and the Attorney General's Office review the city or county ordinance to ensure that it is as stringent as state law and rules. The Land Quality regional engineer and sediment specialist and/or their assistants meet with the local program staff during the review. A detailed report is provided back to the local government, noting strengths, deficiencies and corrective actions. A summary report is presented to the Sedimentation Control Commission at its quarterly meetings. The Commission then takes action to continue the delegation, place the program on probation, or give a 30 day notice that the Commission will assume administration and enforcement of the program.

Eight local program reviews were conducted during FY 2014-15. The regional offices also conducted twenty-three informal reviews with local programs last year.

# **Training**

The Division of Energy, Mineral, and Land Resources held four one-day workshops this past year for design professionals, with a total attendance of 334. Representatives from 49 delegated programs participated in the annual workshop for local government erosion and sedimentation control personnel, with a total attendance of 105.