

2021

NCDOT

Erosion and Sedimentation Control Program Annual Report







NCDOT EROSION AND SEDIMENTATION CONTROL PROGRAM

In 1991 the NC Sedimentation Control Commission reviewed the NC Department of Transportation's efforts to comply with the Sedimentation Pollution Control Act of 1973 and the subsequent 1974 NCDOT Delegated Erosion and Sedimentation Agreement.

Based on the review, the 1974 agreement was updated. The revised agreement was submitted to, and approved by the Sedimentation Control Commission on February 25, 1991 and functions as the core of the current NCDOT program.

Within NCDOT, the Roadside Environmental Unit (REU) monitors the delegated authorities. This includes design, review, monitoring and training for all aspects of the Erosion and Sedimentation Control Program. Improvements in technology and NCDOT research have in turn improved design standards and techniques for erosion and sedimentation control.

This annual report outlines and highlights the work implemented and accomplished in 2020-2021. It is important to note that this is an overview of the NCDOT Erosion and Sedimentation Control Program and provides a summarization of the programs overall content.

EXECUTIVE SUMMARY

The executive summary reflects the work accomplished over the past year from July 1, 2020 to June 30, 2021. Project information is based on the total number of projects that were awarded for construction plus the number of projects that were actively under construction during this time period.

EROSION CONTROL PLAN DESIGN / REVIEW JULY 2020 - JUNE 2021

NCDOT is delegated the authority to review and approve erosion and sedimentation control plans for its land disturbing activities. The following is a summary of the projects that required an approved erosion and sedimentation control plan.

Drain at Tura a	Erosion Control Plans	
Project Type	Design / Review	
Contract Construction Projects	77	
NC Turnpike Authority Projects	1	
Division Construction/Bridge/Maintenance Projects	88	
Vertical Construction Projects	0	
Total Plans Designed/Reviewed	166	

COMPLIANCE REVIEWS

JULY 2020 - JUNE 2021

The following is a summary of the compliance reviews that were performed for active land disturbing projects during the period of July 1, 2020 to June 30, 2021. The compliance reviews were conducted by the Roadside Environmental Unit's Field Operations Section across fourteen Highway Divisions.

Project Type	Compliance Reviews	ICA Issued	Projects Receiving ICA	Projects Receiving CICA	NOV Issued By Land Quality
Contract Construction	2,813	6	6	0	0
Projects	2,010	Ū		_	
NC Turnpike Authority Projects	66	0	0	0	0
Maintenance Projects	111	0	0	0	0
Vertical Construction Projects	15	0	0	0	0
Rail Division Projects	13	0	0	0	0
Bridge Maintenance Projects	280	0	0	0	0
Resurfacing Projects	90	0	0	0	0
Total	3,388	6	6	0	0

- Contract Construction Projects: Defined as a project that has been let to a private contractor for any land disturbing
 activity that exceeds one acre. Contract construction projects are advertised and awarded either from Raleigh or
 from the local Division.
- NC Turnpike Projects: The North Carolina Turnpike Authority is now part of NCDOT Division of Highways. Since it was
 originally added to the Department's delegation, it's projects have been tracked separately from Contract
 Construction projects.
- Maintenance Projects: Projects include all land disturbing activities associated with the construction or maintenance of the secondary road system of North Carolina. Work is conducted by state forces or small business contracts.
- Vertical Construction Projects: Projects include the construction of facilities associated with the NC Department of Transportation. The contracts are developed by the General Services Section of NCDOT
- Rail Division Projects: Projects include the construction of railway corridors and bridges associated with NC DOT Rail Division.
- Bridge Maintenance Projects: Projects include small bridge replacement and pipe culvert replacement. Work is conducted by state forces or small business contracts.
- Resurfacing Projects: Projects include the resurfacing of existing roadways which require shoulder reconstruction.

2021 ANNUAL REVIEW

Based on a random selection by DEMLR, the following projects were chosen for review. Projects are reviewed jointly by NCDOT and DEMLR staff to determine the overall program performance.

Division	County	TIP#	Route	Length
1	Northampton	State Forces	Pipe replacement on SR 1541 Burnt Bridges Road	0.1
2	Craven/ Carteret	R-1015	US 70 from North of Pine Grove to North of the Carteret County Line (Havelock By- pass)	10.4
3	New Hanover	U-4751	SR 1409 Military Cutoff Road Extension	4.2
4	Wayne	U-2714	US 117 alternate from US 70 Bypass to SR 1571 in Goldsboro	1.55
5	Wake	I-5700	I-40 and Airport Blvd and Auxiliary Lane on I-40 WB from Airport Blvd to I-540	0.8
6	Robeson		Bridge 239 over Burn Swamp on SR 1515 Union Chapel Road	0.1
7	Guilford	U-2581BA	US 70 from West of SR 3045/SR 2819 to East of SR 2826	1.49
8	Chatham/Lee	B-4968	Bridge 10 over Deep River on US 15-501 and NC 87	0.9
9	Rowan		Bridge 64 over Beaverdam Creek on SR 1952 Godbey Road	0.13
9	Rowan		Bridge 255 over Grants Creek on SR 1503 Grace Church Road	0.1
10	Anson	B-5371	Bridge 234 over Cabbage Branch on SR 1637 Jacks Branch Road	0.1
11	Wilkes	BR-0125	Bridge 663 over East Prong Roaring River on SR 1002 Traphill Road	0.23
11	Wilkes	BR-0124	Bridge 166 over West Prong Roaring River on SR 1745 Shumate Mountain Road	0.12
12	Iredell	I-3819B, U-6039	I-40/I-77 Interchange	4.0
13	Buncombe/ Henderson	I-4700	I-26 from NC 280 to I-40	7.49
14	Clay	A-0011C	NC 69 from the Georgia State Line to US 64 (Hayesville Bypass)	3.8

NON COMPLIANT POLICIES AND PROCEDURES

The Department's delegation agreement with the Sedimentation Control Commission allows for the Department to review sediment and erosion control plans, and to perform compliance inspections for projects under the operational control of the Department. Although the SCC delegates compliance inspection to the Department, it did not grant enforcement authority. Since the Department can not issue a fine to itself, a series of policies and procedures were developed to correct compliance issues with highway and maintenance construction projects. The following summarizes the processes involved to ensure the Department's projects are in compliance.

Daily Project Inspection:

Project personnel inspect and monitor the construction of a project on a daily basis and record daily activities and rainfall amounts. In the event that a compliance issue develops, the project personnel in conjunction with the contractor will address the issue and corrective actions are made. If the corrections are deemed severe by the project engineer then operations on the project are ceased until all the compliance issue is rectified.

Monthly Project Inspection:

Roadside Environmental Field Operations performs a secondary level of compliance inspections on land disturbing projects to determine if the sediment and erosion control plans are implemented accordingly and that the necessary maintenance is occurring. Permit conditions are evaluated and jurisdictional areas inspected for compliance. NPDES documentation is reviewed and noted if any deficiencies are identified. If the compliance inspection identifies a situation that is not being corrected or can be corrected in a timely manner then an ICA (Immediate Correction Action) notice is issued. The ICA alerts NCDOT Management of an issue that needs immediate attention. The project personnel is then charged with correcting the situation as directed by the Chief Engineer. A follow up inspection is then made to determine that the situation was corrected and the steps that were take to prevent a reoccurrence.

The ICA notice is supported by the policies and procedures outlined by the Chief Engineer. The policy outlines the steps that will be taken and the consequences associated with failing to comply. Notification and subsequent reports on projects that have received and ICA are distributed to the Chief Engineer, Division Engineer, Regional DEMLR Engineer, State Sediment Engineer, and the State Roadside Environmental Engineer. A final report is prepared and delivered to the Chief Engineer describing what happened to cause the ICA and what steps were taken by the Division to ensure future compliance.

CERTIFICATION

The Biological & Agricultural Engineering and Soil Science Departments at N.C. State University are partnering with NCDOT to offer an Erosion and Sediment Control/Storm water Certification Program. The certification program provides the required personnel training to ensure compliance with erosion and sediment control/storm water provisions on NCDOT projects.

NCDOT requires all contractors and consultants to have a certified supervisor and foreman to oversee operations on NCDOT projects to ensure compliance with the Sedimentation Pollution Control Act as well as other environmental regulations.

Certification must be renewed every three years.

CERTIFICATION LEVELS

- Level I: Erosion & Sediment Control/Storm water Inspector /Installer
 - Currently Certified 1,155
- Level II: Erosion & Sediment Control/
 Storm water Site Management.
 - Currently Certified 4,829
- Level III: Design of Erosion and Sediment Control Plans

Currently Certified - 611