Local Program Report to the SCC
Wake County, December 10, 2019

On December 10, 2019 personnel from the NCDEQ, Land Quality Section, conducted a review of the Wake County’s Erosion and Sedimentation Control Program. Wake County was last reviewed on 12/4/2013. The County has 9 staff members that currently contribute 9 full time equivalents to the erosion control program. The County requires a sediment and erosion control plan for sites that have a total land disturbance of 1 acre or more. The County also permits single lot developments using a standard single lot development form, in which the owner picks a plan based on common lot layouts with measurements such as silt fence on the low end of site. In the 2018-2019 fiscal year, Wake County reviewed 334 erosion and sedimentation control plans, approved 186, and disapproved 148 strictly based on erosion control designs. Pre-construction meetings are required for every approved project before work can begin. During this pre-con meeting the County will issue the grading permit. Wake County conducted 2730 inspections over this past year, inspecting each site every 30 to 60 days. Due to the large number of active projects the County needs to inspect, they make sure that sites with a high sedimentation risk potential take priority. Site sedimentation risk potential is evaluated by project phase, stream crossings, and site terrain, etc. In order to help get compliance and encourage good erosion control practice, the county inspectors try to perform each inspection jointly with the site supervisor and contractors. The County issued 32 NOVs, and 17 CPAs during the past year. The County states that it can use permit holding as another tool to get sites back into compliance. During inspections, the Wake County inspectors will check self-inspection records and monitor NPDES compliance. Wake County currently has 331 active projects with an acre or more of disturbance. During our review of the program, we reviewed three sets of plans, as well as inspected three job sites.

The following is a summary of the projects that were reviewed:

1. Storage Max.

This project consists of 3.21 acres disturbed acres for commercial development. The file for this project contained the plan, approval letter, inspection reports, calculations, and the FRO form, and a landowner agreement between the FRO and the deed holder. The deed was not in the file but is checked during the plan review using an online database. The County requires an affidavit to be signed if the land owner and FRP are different entities. The plan was received on 2/13/18 and approved on 2/26/18. The approved plan was lacking sequencing for the proposed skimmer basin. This site has received 11 inspections. The last inspection for the site was conducted on 10/28/2019, and was found to be out of compliance for failing to maintain measures and potentially storing a stockpile outside of the limits of disturbance. No NOVs or CPAs have been issued to this site at the time of our review. During our inspection, the site continued to be out of compliance, with a few maintenance items. The stockpile previously in question had been determined to be within the limits of disturbance but lacked any measure for protection. Wake County staff asked the site supervisor to install silt fence around the stockpile. Along the construction entrance was a large muddy area that trucks frequently drove through, tracking mud into the streets. The County inspector asked for the site supervisor to block off this area so trucks would have to
stay on the stone construction entrance. The diversion ditch feeding into the skimmer basin had failed and began to erode. Wake staff asked for the ditch to be re-established and matted. Finally, a silt fence outlet above the skimmer basin outlet needed maintenance. The County inspector stated that the site would receive another out of compliance inspection report.

2. **Wendell Village**

   This project consists of 6.4 disturbed acres for residential and commercial development. The file for this project contained the plan, approval letter, inspection reports, FRO form, and a landowner agreement between the FRO and the deed holder. The deed was checked using an online database. The plan was received on 11/28/18 and was approved on 12/12/18. The approved plan was adequate. The site has had 5 inspections. The most recent inspection was performed on 12/5/2019, during which the site was found to be out of compliance with a deadline of 12/20/2019. The site has not received any NOVs or CPAs at this time. During our inspection, the site was active and continued to be out compliance, but was still within its deadline for correction. Upon arriving at this site, the Wake County inspector saw the contractor had started to breach the skimmer basin in order to drain it. The County Inspector stopped the contractor and had them re-establish the berm. Luckily this was caught before any water was released or sediment was able to get offsite. Additionally, the County noted unprotected inlets, downed or missing silt fence, a missing construction entrance at one of the sites’ access points, and concrete slurry on the ground with no concrete washout on site. The County inspector spoke with the site supervisor and engineer about corrective actions needed. The County inspector discussed with the Regional Office inspector to determine further enforcement steps. They decided the site would receive another out of compliance erosion control inspection as the contractor remained within their previously set deadline and DEMLR would be issuing an NOV for NPDES violations.

3. **Langston Ridge Subdivision**

   This project consists of 71.75 disturbed acres for the residential development and home building. The file for this project contained the plan, approval letter, calculations, inspection reports, and the FRO form. The deed was not in the file but is checked during the plan review using an online database. The plan was received on 1/16/2007 and was approved on 2/7/2007. The approved plan was adequate. The site has been inspected 8 times this year. The site was last inspected on 11/13/2019 and was found out of compliance at the time, with a deadline set for 12/13/2019. The site had been issued an NOV in 2019, but no CPAs have been issued at the time of our review. During our inspection the site was active and was out of compliance as well as had NPDES violations. The County inspector noted a few lots with downed or damaged silt fence, not using construction entrances and mud tracked into the roads, and unprotected inlets. Skimmer basins were well maintained, and no offsite sedimentation was observed. DEMLR staff noted that the back of the concrete washout had been turned into a diversion ditch leading to a silt fence outlet. County staff stated that they would be giving the site another out of compliance inspection as they remained within their previously set deadline. DEMLR staff stated they will be issuing an NOV for NPDES violations.
Positive findings:

During our review we found a number of positive aspects about Wake County’s local erosion control program including:

- Single lot development monitoring. The County has been permitting and monitoring single lot development under an acre to help with the new NCG01 stormwater permit.
- NPDES monitoring. The County is very good about monitoring their sites for NPDES violations and working with the Raleigh Regional Office to get those violations corrected.
- Joint inspections and educational efforts. The County puts a lot of effort into helping promote erosion control knowledge and good practice by conducting joint inspections with site supervisors and contractors, as well as assisting with state-run erosion control workshops.

Issues Noted and Required Actions:

During our review we found that Wake County’s local erosion control program had a few deficiencies including:

- Missing sequencing for skimmer basin and silt bags on plans. G.S. 113A-54(1)(e) and G.S. 113A-57(2) and 15A NCAC 04B.0131(3)

The County shall implement the following changes to correct the deficiencies noted above:

- Make sure all plans have the needed sequencing for any skimmer basins or silt bags proposed on plan.

Additional Recommendations for Improvement (Optional changes):

DEMLR staff has also put together a list of recommendations, or option items, to improve the program:

- Hiring an additional inspector will help increase inspection rates and make workloads more manageable.

Conclusion:

During our review we found that the Wake County is effectively implementing their Locally Delegated Erosion and Sediment Control Program. The approved plans that were reviewed were adequate and inspections are frequent.

Based on the review, staff will recommend “continuing delegation” for Wake County’s Erosion and Sedimentation Control Program.

This report has been prepared based on the review of Wake County’s Local Program conducted on 12/10/2019. This report will be presented to the Sedimentation Control Commission (SCC) on February 20, 2020.