

## **Local Program Report to the SCC Orange County, December 9, 2019**

On December 9, 2019 personnel from the NCDEQ, Land Quality Section, conducted a review of the Orange County's Erosion and Sedimentation Control Program. Orange County was last reviewed on 12/16/2014. The County has 4 staff members that currently contribute 4 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 20,000 sq. ft. or 10,000 sq. ft. inside of a critical watershed. The County also has stricter riparian buffer zones, being able to require a buffer up to 150 ft. In the 2018-2019 fiscal year, Orange County reviewed and approved 84 erosion and sedimentation control plans. The county does not disapprove of plans, but instead gives comments for revision until the plan meets the County and state standards. Plans submittals will likely go under multiple reviews prior to being approved. Pre-construction meetings are required for every approved project before work can begin. The County conducts an average of 1600 site inspections per year, visiting larger sites on a bi-weekly basis and small sites every month. The County issued 9 NOVs, and 0 CPAs, and 7 stop work orders during the past year. Stop work orders are issued nearly every time when a NOV is issued. An exception to this can be in a case where someone was grading without a permit and the county did not discover this until after the work had been completed, in which case there is no work to put a hold on. The County states that they have not had to issue a civil penalty for years, but that they would issue one if a contractor were to ignore their NOV and Stop Work Order. The County states that it can use permit holding as another tool to get sites back into compliance. During inspections the County does not check self-inspection records or any NPDES compliance, as they had been told that they were not allowed. DEMLR staff corrected this, stating that the State highly encourages local programs to monitor NPDES violations on their projects but to recognize that they will need to contact the regional offices for any enforcement action on said violations. The County welcomed this change. Orange County currently has 117 active projects. 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. Ladd Residence.**

This project consists of 3.11 acres disturbed acres for residential 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 10/14/2016 and approved on 11/3/2016. The approved plan was adequate. This site has received 15 inspections. The last inspection for the site was conducted on 11/7/2019, and was found to be in compliance. Prior to receiving their permit, an NOV had been issued to this site for grading without a permit. Because this construction was being done on farm property, the owner thought they were under agricultural exemption and thus did not seek out a permit. The owner was construction a driveway, up to where the new residence would be constructed, but did not have a plan for what home to build at the time. Because the gravel drive way was already completed prior to the County discovering it, an

NOV was sent without a Stop Work Order. No CPAs have been issued to this site at the time of our review. During our inspection, the site continued to be in compliance, but had some maintenance items to prevent future issues. There were some unprotected slopes with rill erosion on the slope leading into the sediment basin as well as evidence of concrete use without a concrete washout on site. DEMLR staff walked through NPDES violations with Orange County staff, including self inspection records. Silt fence, outlets, and the skimmer basin on site were all well maintained.

## **2. Village at Haven stone**

This project consists of 12.7 disturbed acres for residential development. The file for this project contained the plan, approval letter, calculations, 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 5/17/19 and was approved on 6/7/19. The approved application was adequate. The site has had 4 inspections. The most recent inspection was performed on 11/13/2019, during which the site was found to be in compliance. The site has not received any NOV's or CPAs at this time. During our inspection, the site was active and continued to be in compliance and had few maintenance needs. The construction entrance needed a fresh layer of stone, and mud had been tracked into the street. One of the skimmer basins needed maintenance on the baffles. The uphill section of the roadside ditch needed to be seeded and matted or risk sediment running into the street or overwhelming the wattles. Additionally, a small area of temporary straw groundcover did not have any tack down to keep the straw in place. Overall the site was well-maintained and had good groundcover and well-maintained basins and silt fence. All major slopes were seeded and matted and the measures along the lake buffer were well maintained.

## **3. Hillstone Chapel Hill**

This project consists of 7.72 disturbed acres for commercial and residential development. 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 1/13/2017 and was approved on 1/31/2017. The approved plan lacked phasing or detailed sequencing for basin transitions. The site has been inspected 33 times. The site was last inspected on 11/20/2019 and was in compliance at the time. No NOV's or CPAs have been issued to this site at the time of our review. During our inspection the site was active and was out of compliance as well as had numerous NPDES violations. All the construction entrances on site needed maintenance with mud tracked into the roads. The County is recommending a truck washing station as the roads had already been completed. Most inlet protection was well maintained; however, none of the curb drains on the recently opened road had protection. And the liner for the skimmer basin outfall had begun to deteriorate and needed to be replaced. DEMLR staff noted several severe NPDES violations during our inspection including a lack of concrete washout, seeing a concrete truck wash off onto the ground during our inspection, improper storage of hazardous construction materials, and paint buckets dumped onto the berm of the lined skimmer basin outfall. DEMLR staff walked through each of these violations with the County inspectors and site supervisors. Orange County was encouraged to note these violations during inspections and

to contact the regional office if NPDES violations are not resolved. DEMLR staff stated to the site supervisor that an NPDES NOV may be issued for this inspection and will be issued if violations are not corrected before the next county inspection.

### **Positive findings:**

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

- Low Disturbance Threshold compared to state. Monitoring lower levels of disturbance capturing projects that might otherwise not be captured under the state's program.
- Lower land disturbance threshold in high quality watersheds and larger buffer zones than state requirements. In high quality watersheds, the disturbed area threshold for requiring a plan is lower, allowing the county to monitor more construction activities within those areas. Construction projects in these watersheds must also maintain a larger buffer zone than state requirements. Disturbance thresholds and buffer requirements vary based on watershed.
- High inspection rate. The County is getting to all of their large projects on a bi-weekly basis.
- County provides public outreach, and meeting with general contractors for local erosion control education opportunity.

### **Issues Noted and Required Actions:**

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

- Lack of phasing of erosion control plan. G.S. 113A-54(1)(e) and G.S. 113A-57(2) and 15A NCAC 04B.0131(3)
- Not all utilities work kept within limits of disturbance. G.S. 113A-57(3)

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

- Look for detailed phasing plan or design sequence describing basin conversion and measure removal prior to approving of plans. Lack of phasing/planning can result in failure of measures during construction.
- Ensure all work is performed within the limits of disturbance noted on the plan and in the field.

### **Additional Recommendations for Improvement (Optional changes):**

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

- Monitor sites for NPDES violations such as concrete washouts, fuel containment, and construction material and debris handling.
- Look for NPDES self-inspection records on site.
- Use the Regional Office staff to help keep sites in compliance with NPDES, and report any violations to the state that are noted during erosion control inspections.

**Conclusion:**

During our review we found that the Orange 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 Orange County’s Erosion and Sedimentation Control Program.

This report has been prepared based on the review of Orange County’s Local Program conducted on 12/9/2019. This report will be presented to the Sedimentation Control Commission (SCC) on February 20, 2020.