

Local Program Report to the SCC

Chatham County

Chatham County's Local Program was reviewed July 10, 2007. Currently a staff of two contributes one and a half full-time equivalents to erosion control. There are currently 125 active projects that are above an acre. The staff has approved 63 plans this year and disapproved 45. The staff conducted 411 inspections in the past year. Twenty-one notices of violation were issued and one civil penalty was assessed for \$90,000. This penalty had not been appealed at the time of the review. The County works with the Planning Department to hold performance bonds to gain compliance. Bonds will not be returned until everything is built and stabilized.

Five projects were evaluated. The sedimentation and erosion control plans for each of the sites were adequate. The general documentation was good for all files reviewed. Staff has recommended that the County add the question, "Is the site under a notice of violation?" on their inspection report.

Four out of five sites visited were in compliance with the Sedimentation Pollution Control Act. The only site that was found to be out of compliance was a 6-acre residential site. This site is currently under a Notice of Violation for insufficient measures, measures not maintained, lack of groundcover, and plan not followed. Check dams were installed improperly. The check dams lack low points that will eventually allow water to cut around the stone causing the ditch to erode. Several check dams were mixed with #57 stone. Instead of the stone being placed on the face the check dam it was mixed with the larger stone. Silt fence was inappropriately placed among the large stone that lined the side slope above the culvert at the entrance to the site. The silt fence should have been placed at the toe of the slope to help prevent sediment from entering stream. According to Program staff several basins were cleaned out since his last visit. The contractor has acted quickly and starting fixing the problems that Chatham County cited but is clearly not finished. The County is considering assessing a penalty for only the first day of the violation since the contractor is working to correct the problems. The contracting crew was currently grading the shoulder of the road during the inspection.

Staff recommends continued delegation of the program, and that the County modify its inspection form as detailed above.

Durham City/County

The Durham's Local Program was reviewed May 23, 2007. Currently a staff of eight contributes five and a quarter full-time equivalents to erosion control. There are currently 169 active projects that are larger than one acre. The staff has approved 71 projects in the last year. There were eighteen disapprovals. The staff conducted approximately 2,207 inspections in the past year. Three civil penalties were assessed and no stop work orders were issued. Durham will occasionally hold building inspections to gain compliance. They issue Not in Compliance letters for minor violations and issue Notices of Violation for major issues. Durham County is required to assess projects that were issued a Notice of Violation and do not come into compliance by the specified time frame. Durham does not have the ordinance structure to reduce penalties. They can only assess a one lump sum. Before the County can issue the penalty the site must come into

compliance. Another tool Durham will use to bring sites into compliance is by seeking an injunction.

Five projects were evaluated. The sedimentation and erosion control plans for each of the sites were adequate. Plans submitted to Durham County have great construction sequences, good use of basins and skimmers. Good construction details, specifications and supporting calculations were found. Pen and ink changes have been allowed on plans in the field. This was found to be satisfactory for adding sediment fence to a site or moving a measure a few feet. However, DLR recommends that major changes such as installing a sediment basin require a revised plan submittal to Durham for review. Liability issues were discussed in making changes in the field but not requiring a revised plan. Durham County plans to require revised plans in the future when field modifications are made. The documentation contained in each file for the projects reviewed was adequate.

Two out of five sites were in compliance with the Sedimentation Pollution Control Act. The first site found out of compliance was a 6.5-acre residential subdivision. There was sediment loss off the property at the construction entrance. Sediment fence had not been maintained on the site. A diversion ditch should have been installed per approved plan. A transitional check dam is needed as well as a timely completion of the permanent entrance with culvert extensions. It was recommended that an inspection report be filled out to address the issues that were found.

The second site, a 17.7-acre commercial/industrial site, was out of compliance due to a slope that was too steep to retain a vegetative cover and at the time the retaining wall was not under construction. The plan called for a retaining wall consisting of several tiers with benches in between. This area needs to be stabilized immediately. The slopes are too steep to retain sediment. The retaining wall needs to be installed immediately to prevent sediment loss. There was also a breach at the location of the rock dam. Sediment had left the property. LQS discussed the proper use of overlapping materials and spillway shaping to force flow over the reinforced section to prevent further breaching of the measure.

The last site out of compliance was a 35-acre residential site, which was a small portion of a 400-acre development that was submitted to the County for approval. This site was currently under a Notice of Violation and awaiting a civil penalty assessment. The civil penalty cannot be issued until the site is brought into compliance. Baffles and stone forebays were not installed correctly. The spillway on the basin was half the length of the basin instead of being installed correctly per approved plan.

Permits are valid for two years. The permit can be extended for a six-month period. Once the extension ends, the financially responsible party will be charged an additional fee for the portion not finished.

The County requires surety bonds on anything over 5 acres based on the following factors:

- Acreage
- Cost of measures
- Cost of seeding and stabilization

If a site is found starting without a plan, Durham County will require a double permit fee for review.

The County uses an access database to track plans and inspections.

Recommendations to strengthen the County's program are the following:

1. Separate the temporary and permanent groundcover violations on the County inspection report, which are currently both enforced after 21 calendar days. The time period for compliance is different for permanent and temporary groundcover. Permanent groundcover must be planted within 15 working days or 90 calendar days. The County's ordinance and enforcement of the ordinance cannot be less stringent than the State law or rules.
2. Require revised plans on sites where large measures will be installed, where engineering design and calculations are required.
3. Add the following question to their inspection report: Is the site currently under a Notice of Violation?

Staff recommends continued delegation of the program.

City of Rocky Mount

The City of Rocky Mount's Local Program was reviewed May 30, 2007. This was a follow-up review of last year's review on February 9, 2006. Currently a staff of five contributes two full-time equivalents to erosion control. There are currently 29 active projects that larger than one acre. The staff has approved 32 projects in the last year. There were multiple disapprovals per project. The staff conducted approximately 754 inspections in the past year. No civil penalties were assessed and no stop work orders were issued.

Five projects were evaluated and the two projects found out of compliance on February 9, 2006 were looked at in the field. Both sites were found to be completed and adequately stabilized and in compliance with the SPCA. Both sites had excellent ground cover.

The sedimentation and erosion control plans for each of the additional sites reviewed were adequate, however one site had a complex construction sequence that resulted in confusion during implementation. Another plan was adequate but needed additional measures at low points to prevent off-site sedimentation. Diversions should have been specified on the plan to ensure that runoff from disturbed area was directed to a basin. A construction sequence for culvert installation and stream crossing detail were omitted from plan. Rocky Mount has allowed field changes without the submission of an appropriate revised plan. DLR recommends that major changes on a project, such as installing measures requiring design and supporting calculations, to require a revised plan submitted to the City of Rocky Mount for review. The documentation contained in each file for the projects that were reviewed was adequate. Copies of logbook and formal inspection reports should be kept in the file.

Three out of five sites were in compliance with the Sedimentation Pollution Control Act. The first site found out of compliance was an 11.9-acre residential subdivision. The sediment basin found on site had an entrance lower than the outlet of the basin. The construction entrance was not adequately installed. Additional measures are needed to protect the entrance such as check dams and/or a sediment trap. This was confirmed in the field. A sediment trap was added in the field however an appropriate plan to support the design of the basin was not required or submitted. Sediment has accumulated in the street and needs to be removed. A ditch was not installed per the approved plan. Measures such as check dams should be constructed according to the approved details provided in the plan. Additional check dams were needed at low outlet

points. Additional lot disturbance occurred on the site that was not adequately documented by submittal of a revised plan.

The last site out of compliance was a 3.8-acre commercial site. The construction entrance should be installed per the approved plan. It needed replacement. Sediment had been tracked out on road and should be cleaned up. A sediment trap was removed before the site was brought to final grade. The riser for this trap is still in the ground. The perimeter silt fencing is effective, however the retaining wall above the silt fence should have been installed first then backfilled. The construction sequence was not followed.

Recommendations to strengthen the City's program are to conduct a written inspection of each site monthly, and written inspections for all sites that are out of compliance until the site comes into compliance. Since the City is able to inspect their sites on about a daily basis they prefer to use the logbook to record inspections that are in compliance. We agreed to this as long as the City records the following minimal information that should be recorded for all inspections:

- a. Is the site in compliance with the SPCA?
- b. Is the site currently under a Notice of Violation?
- c. What are the violations, if any? Note deficiencies and inconsistencies with the approved plan.
- d. What are the corrective actions to be taken to bring the site into compliance?

A copy of logbook and formal inspections need to be kept in the file.

Previous issues addressed during last year's review appear to have been adequately corrected. The non-compliant sites from last review have been adequately stabilized and are closed. The additional sites reviewed proved that the local program has been working to improve their plan approval, inspection and enforcement processes. The program administration has slightly changed but is making great adjustments to the existing program based on previous recommendations. Plan reviews are adequate. Appropriate measures and requirements for maintenance are being enforced in the field. The City is taking measures to keep sites in compliance with their ordinance and SPCA. The program has improved since last inspection.

Staff recommends continued delegation of the program.

Town of Wake Forest

The Town of Wake Forest's Local Program was reviewed June 25, 2007. Currently a staff of seven contributes four and half full-time equivalents to erosion control. There are currently 142 active projects that are above an acre. The staff has approved 50 projects in the last year. The staff conducted approximately 341 inspections in the past year. Three civil penalties were assessed and no stop work orders have been issued. The Town can hold building permits to gain compliance.

Five projects were evaluated. The sedimentation and erosion control plans for each of the sites were adequate. The Town currently has a dual review process. Plans are reviewed for erosion and sediment control measures first and then the planning department reviews the site plan. The plans are approved together. LQS staff made the Town aware that when a plan is held without action for over 30 days it is approved by default. Mostly the plans had good use of basins and

skimmers. Supporting calculations and details were adequate. The reviewer needs to look more closely at elevations to make sure runoff can be diverted appropriately. The design community needs to use the same terminology throughout the plan when referring to basins, rock dams, and skimmer basins. Interchanging these words throughout the plan can cause problems for those implementing the plan.

The documentation was adequate for most of the files; however, the Town had recently stopped issuing letters of approval. Two files did not contain the letters of approval. Once the Town conducted the preconstruction meeting, a land disturbance permit was issued to the financially responsible party. This is where the Town discussed their three-part inspection process, the NPDES permit, seeding regulations, and key areas that needed to be addressed before the developer can receive a certificate of compliance and can start grading the site.

Two out of the five sites inspected were in compliance with the Sedimentation Pollution Control Act. The first site that was found to be out of compliance was a 9.6-acre commercial subdivision. There were problems with basin installation, resulting in sedimentation of the riparian buffer zone.

The second site out of compliance was a 14-acre residential site. Measures were not installed per approved plan. Most of the curb and gutter inlets were not protected from sediment entering the storm drain system, and the inlets that had a measure were not maintained. Sediment has left the property in an area where the two roads may be eventually joined. A basin should be installed to protect the area. The Town has received complaints from the property owner that lives below this low area. Silt fence had been installed at this low point across an area receiving a concentrated flow during rain events. The site needs to be seeded immediately to prevent the further loss of sediment and inlet protection should be installed per approved plan.

The last site out of compliance was a 9.7-acre residential site. Since last September, this site has been issued four notices of violation. Offsite sediment has occurred into the greenway. Gullies and rills have occurred in most areas on site. The ground cover has not taken. The site needs to be reseeded, strawed and tacked. Silt fence has been installed in across an area of concentrated flow. A revised plan is needed to address the problem. It is recommended that the Town issue a notice of violation. This site was assessed a \$3,000 penalty in November.

The Town of Wake Forest has divided their inspection process into three key parts. The first is the Initial Inspection where only the installation of initial measures/perimeter measures is allowed before grading. This has to be inspected and a certificate of compliance has to be issued before grading can start.

The second part of the inspection process is the monthly inspections. There is at least one formal monthly inspection. The local program has the ability to see every project at least once a week. In the interim the local program uses logbooks to document progress and site conditions. Any inspection that results in the issuance of a Notice of Violation is documented in writing on the Town's inspection report form.

The last part of the inspection process is a formal closeout inspection. This is an onsite inspection with the developer/financially responsible party to walk through the project and determine the items that need to be completed to close out the project. This includes making sure all areas are seeded and the appropriate measures are removed once stabilization has been achieved. The certificate of completion is not issued until all temporary measures are removed and the site is sufficiently stabilized.

The Town needs to require formal inspections not only on visits that lead to an Notice of Violation, but also until the site is brought into compliance ending with a formal inspection report indicating the site/project is in compliance and complete. Currently, the inspection form does not state whether the site/project is under a NOV when stepping on site or whether the site/project is in compliance with the SPCA. The current three-yes/no questions on the inspection report should be answered. The three questions were 1) Have measures been installed per plan? 2) Has sedimentation damage occurred? 3) Potential NPDES violation. The yes/no questions were not answered on most of the inspection reports reviewed, which made the report essentially look like a blank inspection report.

Since the Town uses three inspection reports it is recommended that the Town include on the initial report the following question: Is the site in compliance with the SPCA?

On the monthly report, it is recommended that the Town include the following two questions:

- 1) Is the site currently under a Notice of Violation?
- 2) Is the site in compliance with the SPCA?

The following questions should be answered on all logbook inspections:

- 1) Is the site currently under a Notice of Violation?
- 2) Is the site in compliance with the SPCA?
- 3) What are the violations, if any?
- 4) What corrective actions need to be taken to bring the site back into compliance?

Inspection reports need to be kept in the project file, especially the inspection reports related to Notices of Violation. One site was issued four Notices of Violation. Only one corresponding inspection report was found in the file that related to the latest notice.

The Town is also requesting specific measures to be installed. This will pose a serious problem if the measure does not work and the financially responsible party is involved in a third party lawsuit. The town has been requested by LQS to state that a measure is needed and for the financially responsible party to be responsible for any measures that need to be added to the plans. The Town of Wake Forest when requesting additional measures will request a revised plan to be reviewed and approved before allowing the installation of the measure.

The Town is also having problems with Town Commissioners and media showing up on sites when compliance inspections are being conducted. We have told the Town that media and their Commission members need to get permission from the landowner before stepping foot on the property.

Staff recommends continued delegation of the program with routine interaction with the Raleigh Regional Office, modification to the inspection reports as detailed above, written inspection reports for sites found out of compliance, and the continuation of issuing letters of approval on all sites submitted for review.