

Tool: Enhance Sediment and Erosion (S&E) Control Programs County-Wide

Leverage existing staff and resources to better enforce current regulations and modify existing regulations to prevent stream quality impacts associated with sediment from construction activities.

What is a potential Task Force recommendation for implementation of this tool at the conclusion of this process?

Task Force voting results and discussions with Stormwater Managers responsible for implementing S&E programs in the County were used to develop recommended changes to existing sediment and erosion control regulations and enforcement procedures. The following sections summarize the recommendations related to S&E standards, enforcement procedures and education.

Standards

1. Task Force members recommended that smaller lots (i.e. single family lots) should be regulated under the S&E program. In lieu of requiring a permit for these sites, however, it is recommended that all S&E programs in the County implement a requirement that any lot smaller than one acre have installed a silt fence and construction entrance.
2. While existing standards may be adequate to control sedimentation and erosion on most sites, the Task Force recognized that some sites may present a more serious threat to the environment or have a higher potential for erosion based on site conditions. Therefore, it is recommended that a set of criteria be established to determine the risk associated with all permitted sites and that this risk be assessed during the review process. Risk will be determined by such items as the soil conditions, slope of the site, size of disturbance and proximity to environmental resources. The level of risk may trigger more stringent requirements, such as phased construction, limits on mass grading, or increased inspection frequency and fines.

Enforcement

1. It is recommended that all sites requiring a permit continue to be inspected by municipal staff at least once per week (note: 12 of 18 voters recommended an inspection frequency of once per week or greater). More inspections should be required on sites that rank high in risk, as defined above.
2. A work load projection study should be performed to better manage existing staff and inspections. The study should consider the stage of construction when determining inspection time-tables (i.e. more frequent inspections early with less frequent inspections after site is stabilized).

3. Updated maintenance logs will be required on all sites and must be presented at the request of inspectors. The enforcement staff will be directed to more pro-actively request these maintenance logs to ensure that required maintenance of S&E devices is being performed.
4. Task Force members recognized that existing ordinances can be effective in controlling sedimentation and erosion if rigorously enforced. Therefore, a policy to increase the amount and frequency of fines issued should be pursued as a deterrent to S&E ordinance violations. Egregious violations should be fined immediately upon identification. For other violations, an official written warning should be issued for the first violation along with a time-table to perform the necessary repair/maintenance. If the situation is not rectified within the time-table, a Notice of Violation and fine should be issued immediately.
5. For enforcement on single family lots, building inspection staff should be cross trained on S&E and be required to check for the installation of silt fence and construction entrance before a notice to proceed with construction will be issued.

Education

1. Education materials on sediment and erosion control will be provided to the public. The materials will inform the public on the purpose of the program, local requirements, and enforcement procedures to help define an expected level of service for the program.
2. Training programs will be developed and presented to local S&E contractors. The programs will review local standards, maintenance requirements, and best management practices for S&E control.

What problems identified by the Task Force (Objectives) does this tool address?

The Task Force recognized that stricter enforcement of existing rules would provide the most benefit for improving local sediment and erosion control programs. However, minor changes to the exiting rules were also suggested. As proposed in this document, this tool can address nine of the 14 Task Force objectives.

What is the minimum regulatory requirement, if any, for this tool?

North Carolina sediment and erosion control standards require a permit for all construction activity that disturbs more than one acre. Sediment ponds and traps are required to treat runoff from disturbed areas. These devices are generally designed to capture 75% of most soil particles leaving the site.

The State also required a minimum level of maintenance for sediment and erosion control devices. Devices must be inspected at least once weekly or after every rain event of ½ inch or more. Sediment must be removed when accumulation reaches one half of design depth. Per NPDES Phase II rules, a maintenance log must be kept on site for review by inspectors.

How is this tool currently applied within Wake County?

Raleigh, Cary, Holly Springs, Apex and Wake Forest operate their own program while Wake County operates the program in the unincorporated area and the remaining jurisdictions in the County. Five of the 13 jurisdictions require a permit for smaller disturbed areas (ranging from ¼ to ½ acre). In addition, most jurisdictions in the County require silt fence on all single family lots, regardless of size (note: this is not a minimum requirement of the State).

Is there an opportunity for collaboration on the implementation of this tool?

Collaboration on sediment and erosion control regulation and enforcement currently exists within the County. Wake County collaborates with seven municipalities within the County to enforce a uniform sediment and erosion control program.

What is the expected outcome of this potential recommendation?

Reduce the sediment loading to streams through stricter enforcement of existing sediment control regulations and modifications to existing rules.

What information or decisions are necessary to implement this recommendation?

A decision regarding the following items will be necessary to implement this recommendation:

- At current inspection frequency levels, it has been estimated that an inspector could provide enforcement for approximately 60 permits every two weeks if bi-weekly inspections were required. At the current active permit amount (1,660 permits), approximately 28 inspectors would be required to inspect all permits on a bi-weekly basis. Currently, 25 inspectors are employed county-wide. This estimate does not consider the potential for additional inspections related to single family lots.