On April 8, 2021, personnel from the NCDEQ, Land Quality Section, conducted a review of the Iredell County Erosion and Sedimentation Control Program. Iredell County was last reviewed on January 22, 2018. The County reports that 2 staff contribute 2 full time equivalents to the erosion control program. The County requires an erosion and sediment control plan for all projects with a total land disturbance of greater than 1.0 acres or a total land disturbance greater than 0.5 acres in a water supply watershed area. In the last year, from February 2020 to February 2021 inclusive, the County reviewed or re-reviewed 169 plans, approved 154 and disapproved 7 plans. During the same time-period the County reported they conducted 1566 inspections, issued 10 NOVs and 10 CPAs. At the time of the review the County had 276 open projects. The County historically inspects sites monthly, however due to staff turnover and illness the County has significantly reduced their inspection frequency over the last several months. The County requires a preconstruction meeting for all projects. In addition to NOVs, the County can put a hold on intermediate building inspections and other building permits as enforcement tools. During our review of the program, we reviewed three sets of approved plans, as well as inspected three job sites.

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

1. **The Revere at Mooresville**

   This project consists of 30 disturbed acres for residential development. The project file contained the approved plan, letter of approval, FRO Form, calculations, a copy of the property deed and previous inspections. The plan for this project went through 2 review cycles with the revised plan being received on September 12, 2019 and approved on September 15, 2019. The approved plan for this project was adequate. This project started in December of 2019 and was stabilized in January of 2020 until construction began again in December of 2020. Prior to our review this site had received 5 inspections and had not been issued an NOV or CPA. County staff had found this site to be compliant but needing maintenance at the time of its last inspection. This site was still in the land development phase and had active grading on the day of our review. A large basin in the rear of the site was being excavated and storm drainpipes were onsite and ready for installation. A basin had been expanded to the next phases designed size, but baffles had not been adjusted and the riprap dissipater pad for the outlet had not yet been installed. A large clean-water diversion ditch running down the side of the project had not been adequately stabilized, rills were forming, and the bottom of the ditch was eroding away. Large stockpiles had been placed above the diversion and needed to either be removed or stabilized and silt fence installed around the toe of the pile to prevent them from washing into the diversion and the ditch itself needed to be repaired and stabilized before continuing to be used as a clean-water diversion. The riprap dissipater pad at the outlet of this diversion was well designed and maintained. All active basins needed to have accumulated sediment cleaned out to ensure the basins function properly during future rains. Diversion ditches throughout the site did included wattles or rock check dams and the perimeter silt fence and stone outlets appeared to be functioning and properly maintained. It was evident that slopes throughout the site had recently been properly vertically tracked. A rain gauge was located on site however was not functioning...
and the document box was locked so self-inspection records could not be checked. While there were positives to be seen, both County and State staff noted that this site was out of compliance for failure to provide adequate groundcover for the clean-water diversion and stockpiles and failure to maintain measures such as the basins.

2. **Late Apex Storage**

This project consists of 6.1 disturbed acres for commercial development. The project file contained the approved plan, letter of approval, FRO Form, calculations, a copy of the property deed and previous inspections. The plan for this project was received on July 1, 2019 and was approved on July 11, 2019. This project started construction in June 2020 and had received 6 inspections prior to our review. County staff found this site to be compliant but in need of maintenance at the time of its last inspection. This site was approaching completion. The building had been completed and landscaping had begun. Silt fence across the rear of the site was overwhelmed in one area. Off-site sedimentation had occurred in the rear of the site and was beginning to encroach on a stream buffer. A few of the drop inlets along the front of the site had straw and left-over sediment control stone which had fallen in and needed to be cleaned out before the project can be closed. The sediment basin in the rear corner of the site appeared to be functioning properly. The front of the site was being mulched with straw and the area above the parking lot had been seeded and matted. An automated rain gauge and document box was present onsite; however, the document box was locked so self-inspection records could not be checked. The majority of this site was being stabilized and measures functioning properly and being maintained, however, in the rear of the site there was sedimentation beyond the limits of disturbance that will need to be cleaned up and measures repaired. County and State staff both found this site to be out of compliance on the day of our review.

3. **Pine Street Townhomes**

This project consists of 7 disturbed acres for residential development. The project file contained the approved plan, letter of approval, FRO Form, calculations, a copy of the property deed and previous inspections. The plan for this project went through 2 review cycles with the approved plan being received on August 3, 2020 and approved on August 6, 2020. This project began construction in January 2021 and had received 2 inspections prior to our review. The County had found this site to be in compliance at the time of its last inspection. This site was being graded and installing a second basin in the rear of the site on the day of the review. The basin which was already installed needed to be cleaned out and then stabilized, the skimmer was partially buried in mud and was not functioning properly. Minor offsite sedimentation was noted below this basin. The baffles in the second basin appeared to be installed correctly. There was not a rain gauge or document box onsite. County and State staff both found this site to be out of compliance.

**Positive Findings:**

During our review we found a few positive aspects about Iredell County’s local erosion and sediment control program including:
The County requires an Erosion and Sedimentation Control plan for projects of a smaller disturbance threshold when located within a water supply watershed.

All project files contained the appropriate documentation, landowners are being verified and Landowner-Builder agreement letters are being obtained when the FRP and landowner differ.

County staff demonstrated an adequate understanding of the Enforcement and Civil Penalty process. NOVs being issued to first-time violators are being hand delivered with a special signature page attached. All other NOVs are being sent through certified mail.

County is including reference to the NCG01 permit application process in their approval letters and include the DEMLR NCG01 Fact Sheet.

Preconstruction meetings are required by the County for all projects before land disturbance can begin.

Issues Noted:

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

- The number of monthly inspections conducted has dropped since September of 2020. Though, this is due in part to loss of staff and illness. While an additional staff was hired in December 2020, site inspections has not returned to an adequate frequency.
- Self-Inspection records and permit documents are not being reviewed during site inspections.
- Lack of knowledge on whether a stream is considered jurisdictional as well as 404/401 or riparian buffer permit and certification applicability. Staff does require that 404/401 permits obtained or a declaration stating no 404/401 permits are required, be presented at the preconstruction meeting or prior to disturbing land in the subject area on projects where jurisdictional waters are clearly delineated.
- Very few plan disapprovals are being issued; conditional approvals are being issued during plan reviews as “Approvals with Modifications”. These conditions are being placed on documentation that is needed upon plan application but instead are being requested prior to breaking ground and after a letter of certificate of approval has been issued.
- NOV/Penalty assessment document has conflicting language regarding deadline for payments or appeals. One paragraph states a 15-day deadline, while another states a 30-day deadline. Penalties assessed still included “Staff investigative costs” included in the penalty total calculation.

Required Actions:

The County shall implement the following changes to correct the deficiencies noted during our review:

- Regular inspections should be conducted G.S. 113A-61.1(a), and reports generated monthly on all active sites.
- County Staff should be checking for self-inspection records and required permit documentation during site inspections. Self-inspections should be conducted for initial
installation or modification of any erosion and sedimentation control devices and practices described in the approved plan as well as during or after each of the phases of the approved plan. G.S 113A-54.1(e) and 15A NCAC 04B .0131. In addition, weekly and rain-event inspections are required by federal regulations, that are implemented through the NPDES Construction General Permit No. NCG 010000.

- Staff should be verifying the waterbodies listed on the plans when they are received, and ensure they are properly labeled on all plans prior to approval. All applicable State and Federal permits and certifications should be presented to the County prior to land disturbance commencing in subject areas. If land disturbance is allowed to start on other sections of a site, the area not to be disturbed should be clearly marked on the plans and in the field until all applicable 404/401 permits and certifications are in hand.

- The only conditional approval allowed is that of compliance with federal and state water quality laws. G.S. 113A-54.1(a). No other conditional terms may be offered when issuing a letter or certificate of plan approval. Approvals with modifications are not conditioned approvals.

- Staff investigative costs can no longer be included in the penalty total. This consideration in calculating penalty amounts has been removed from Title 15A of the NC Administrative Code, Chapter 04B.

- Update all template letters to reflect the most current references to the North Carolina Administrative Code. Plan approval letters should be updated with the most recent reference to the NCG01 permit process through the State website when required and since preconstruction meetings are now required to be shown on the plans, the last sentence of your approval letters regarding these meetings should be removed. 15A NCAC 04B.0120(d).

Recommendations for improvement:

DEMLR staff has also put together a list of recommendations that would help to improve the program:

- While the current number of staff employed has shown to be adequate in the past, we recommend employing an additional inspector to assist the program in its monitoring and enforcement of your 250-plus projects. The addition of an inspector will help distribute the workload and enable the program to meet the requirements of your growing workload.

- Certain sections within your ordinance are devoid or no longer adhere to the most recent state statutes or state administrative code pertaining to that which constitute your delegation authority for erosion and sedimentation control. Your local ordinance should be updated to meet the changing requirements of the program.

- It is suggested you prepare standard operating procedures or guidance documents for plan intake, plan reviews and site inspections when high turnover of staff is expected or to be used in cases of prolonged absence.
Conclusion:

During our review we found that Iredell County’s Locally Delegated Erosion and Sediment Control Program had a few deficiencies. While Iredell County staff showed its knowledge of the law and the enforcement process and policies, a need for continued training of new staff and technical guidance was evident. Inspection frequency has dropped significantly with the loss of a full time equivalent in September of 2020. This position has since been filled but due to training and illness, inspection frequency has been slow to return to an adequate level. While County staff noted the same deficiencies seen by state staff, county inspectors were not checking for the proper documentation on-site and some issues noted were evident to have been present for some time. This could be attributed to the infrequency of inspections and a still relatively new inspector. The County program has a strong understanding of the requirements of the program administration and the enforcement process but would benefit from additional training and guidance regarding site inspections during a continuing review period.

Based on the review, DEMLR staff will recommend that Iredell County’s Erosion and Sedimentation Control Program “Continue Delegation with Review” for 6 months.

This report has been prepared based on the Review of the Iredell County Local Program conducted on April 8, 2021. This report will be presented on to the Sedimentation Control Commission (SCC) on May 4, 2021.