



Documenting Sediment Issues in Alamance County: An Impact Report



A MESSAGE FROM YOUR HAW RIVERKEEPER

This report documents the need for a locally delegated sediment program, how it would benefit the county and how to start the process.

Report prepared by: Mike Wallace, Water Quality Specialist & Emily Sutton, Haw Riverkeeper

WHAT WE NEED FROM YOU:

Alamance County needs a County Sediment and Erosion Control program. We are asking that the county take steps immediately to prioritize funding a staff position to establish a County program to review Sediment and Erosion control plans, inspect sites, and enforce regulations.

IMPACT SNAPSHOT

22

major sites of preventable pollution, 7 covered in this report

12

number of months some violations went without mitigation

245,587.2

number of acres in Alamance which fall under the DEMLR Winston-Salem office jurisdiction

120

number of hours Haw River Assembly has spent documenting these sediment violations since March 2023

This impact report is a way for us to communicate the issues which need improvement and monitoring, as well as provide strategic insights on how we envision these changes being facilitated in Alamance County.



Photo: 4/28/2023 - Stillhouse Farms - Old Farm Rd / County Home Branch (Stillhouse Branch)
(36.050556 -79.3845)

INTRODUCTION

Haw River Assembly is an environmental non-profit committed to protecting the Haw River watershed and all of its tributaries through Rockingham, Caswell, Guilford, Alamance, Durham, Orange, Wake and Chatham counties.

Sediment pollution has been a major issue in the watershed and continues to worsen as development pressure increases.

Due to lack of enforcement, Alamance County has consistently seen sites without permits or submitted stormwater plans, without basic sediment control measures and with sites releasing sediment into streams throughout the entire construction process.

Haw Riverkeeper, Emily Sutton, and Water Quality Specialist, Mike Wallace, have been working to document sediment violations by collecting water samples and photographing examples of failed sediment control methods. In addition to working with local programs to identify and correct sedimentation issues, Haw River Assembly provides training through workshops for community members to encourage reporting potential violations at sites throughout the watershed. Emily Sutton also serves on the NC Sedimentation Control Commission. This commission reviews and evaluates the efficacy of local sediment programs and their ability to uphold the Sedimentation Pollution Control Act.

Aside from the City of Burlington, Alamance County differs from the majority of the Haw River Watershed in that it does not have a local program for sediment and erosion control. Alamance County has roughly 245,587.2 acres outside the city limits of Burlington, all of which fall to the Winston Salem regional office's jurisdiction for Sediment and Erosion Control. Therefore, jurisdiction falls to our state environmental agencies who are insufficiently funded and staffed to manage the volume of construction and sedimentation issues in North Carolina. As of April 2023, there were 1200 active construction sites and 1500 industrial construction sites. DMLR has 6 staff and prioritizes inspections based on complaints (which mainly come from the Haw River Assembly).

All land-disturbing activities involving an area greater than one acre (except mining, forestry, or agricultural activities) are required by law in the State of North Carolina to operate under an approved erosion control plan. This plan must be obtained before work begins on a site. Although tracts containing less than one acre do not require permits, adequate measures to prevent erosion and contain sediment on site are still required.

SITE 1: Stillhouse Farms - Old Farm Rd (36.050556 -79.3845) County Home Branch (Stillhouse Branch)



Sediment issues at this location were discovered by our field technician while en route to investigate a different area. County Home / Stillhouse Branch was observed from the stream crossing at E. Gilbreath St and Shakori Hills Dr to be discolored with clay and disturbed land sediments. Turbidity at this stream location was 688 NTUs, roughly a mile downstream from the source, which was traced to a phase of the Stillhouse Farms development. Downed silt fencing and overflowing retention ponds were releasing muddy runoff into the stream at multiple locations. Outflow mechanisms were insufficient to filter the volume of water from a rain event and fencing was insufficient to contain runoff. This site was reported on 4/28/23 to DEMLR, who conducted a site inspection the week of 5/2/23. Improvements and adjustments were determined necessary, 30 days given to builders and contractors to comply. Follow-up visit by our staff 30 days after the initial report showed some additional control measures had been employed, but the buffer was still covered with clay and the runoff channel was still draining, albeit to a lesser extent, to County Home Branch unfiltered in drier conditions. NC DEMLR reported on 6/12/23 that recent basin maintenance was performed and that sediments in the buffer contained original soils and without appreciable accumulation from the construction. This runs counter to our observations, and photo/video documentation from April.

SITE 2:

1350, 1360, 1370 Geneva Albright Road,
Graham
(36.03572 -79.36705)
Haw River



Home construction sites on this road were reported to Haw River Assembly by a community member, who had been trying to compel the contractor and builder to remedy these issues for over 12 months with no resolution. These sites were reported to NCDEQ on 4/7/23. The developer originally developed these sites without a sediment and erosion control permit or approved plan, and was finally granted the permit in late March, after selling one of the properties. A notice of violation was issued, but minimal action was taken and the site continued to fill the culvert with sediment, which runs into a channel draining directly to the Haw River. Our staff investigated this site on 4/23/23, finding no significant changes to sediment and erosion controls and the measures that were installed to be insufficient. Turbidity readings from the channel across the street draining from the site were 150+ NTUs. Clay and sediments were spreading from the driveway of one of the properties completely unabated. A return visit by our staff on 5/23/23 found identical conditions regarding sediment controls, some construction progress. NC DEMLR determined only minor sediment issues and disturbance to the ditch line and the channel across the street due to NCDOT work.

SITE 3:

1113 E Gilbreath Rd
(36.05120 -79.37887)
County Home Branch



This site was found while en route to a different location for sediment violations. Silt fencing was down and muddy water and clay sediment were escaping the single home construction site. Drainage formed a channel running downhill and clay from the single home construction site was found over 50 yards away. This site also drains to County Home Branch which meets the Haw River roughly a mile from this site of construction. A return visit on 5/23/23 found the silt fence was not repaired or replaced and the same issues were apparent, even in drier conditions. Adjacent land contained significant excess clay sediment from the site. Due to site size, there was no approved erosion control plan needed. Following contact with NC DEMLR staff, fencing and filtration improvements were made and documentation submitted on 6/9/23.

SITE 4:

Rogers Rd Pond
(36.031734 -79.411345)
Little Alamance Creek



Conditions at this Rogers Rd pond were spotted from the road on 5/5/23. Water was completely orange and opaque, indicating impacts from disturbed sediment upland or upstream. A discharge filtration device for the pond was insufficient for the volume of runoff. A channel had formed or was dug, allowing the pond to drain water with suspended solids into Little Alamance Creek unfiltered. A culvert running under Rogers Rd feeds the other end of the pond. Upstream of this system to the Northeast is a development site with no permissible road or pedestrian access, so we are unable to fully investigate on this date. In June 2023, control measures appeared sufficient and functioning at this site, but large uprooted trees had taken down some silt fencing and disturbed clay. A return visit to Rogers Pond on 5/23/23 found the same conditions. Though the overall pond level was lower with lack of precipitation, it was still draining into Little Alamance Creek. Water from the culvert feeding the pond was 259 NTUs. Inspection by NC DEMLR staff of 4 adjacent projects found no observed sedimentation within any drainage feature. One of these, Roger's Spring, had several feet of disturbed soil/sediment beyond a silt fence due to basin removal. The primary source of sediment in the pond is still undetermined.

SITE 5: Cherry Creek Subdivision, Jimmie Kerr Rd (36.055695, -79.348796) Back Creek



A phase of the Cherry Creek subdivision was investigated by Haw River Assembly staff on 3/14/23. Silt fencing was unable to contain all sediment from the development. Multiple inlets were unprotected and there was not enough gravel to trap mud from vehicles entering and exiting the site. The sediment basin needed some maintenance. NC DEMLR inspected and reported on 6/12/23 that inlet protection was installed, and additional minor maintenance and stabilization were needed. Staff reported no sedimentation was observed beyond the limits of disturbance at the time of their inspection. Nearest impacted blue line stream is Back Creek, with some tributary streams also potentially affected.

SITE 6: Windsor Homes 5252, 5267 Salem Woods Dr. Graham (35.96822 -79.30777) Motes Creek



Windsor Homes at Salem Woods Dr were investigated by Haw River Assembly staff 5/23/23. Multiple home sites in various stages of completion were observed without any identifiable sediment and erosion control measures. Several more development sites were plotted for the same development by the same builder. Subsequent inspection by NC DEMLR found that the homebuilder was required to but did not obtain an approved erosion control plan. Correspondence was issued by 6/12/23, with the report and correspondence publicly available when the homebuilder received their copy. No fines or notices of violation were issued to HRA's knowledge. Nearest blueline stream is Motes Creek.

SITE 7: Winding Creek at The Haw 2838 S Jim Minor Rd, Haw River, (36.02870 -79.31807) Haw Creek



Winding Creek at the Haw subdivision investigated by HRA staff on 5/23/23. There was a lack of any control measures or silt fencing around home construction sites, and existing fencing was down or incomplete in multiple areas. 32 homes are planned for this luxury development, with only a fraction completed. NC DEMLR staff reported after an inspection there were two lots under construction without a silt fence, but no sediment observed beyond the level of development. Unclear if there is an approved erosion control plan or what stage this process is in. Size of development would suggest an approved plan is required. Nearest blueline stream and development namesake is Haw Creek.

WE CAN'T PRESERVE THE HAW RIVER WATERSHED FOR FUTURE GENERATIONS WITHOUT YOUR **PARTICIPATION.**



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Sediment and Erosion Control program.*

We are asking that the county take steps immediately to prioritize funding a staff position to establish a County program to review Sediment and Erosion control plans, inspect sites, and enforce regulations.

Over the course of five months and over 120 hours, we continue to document sediment violations in Alamance County. Though this report highlights seven sites, we have been documenting ongoing issues at 22 sites within the county, many of which have had no inspections conducted.

In order to improve inspection timelines and enforcement, it is necessary for Alamance County to have a locally delegated program.



We need clean water so we can enjoy this...

instead of this...

