



City of Boiling Spring Lakes

9 East Boiling Spring Road
Southport, NC 28461

STAFF REPORT

Agenda Date:

November 24, 2025

Title:

Stormwater Department Status of Work Completed

Department:

Stormwater

Background Information:

The City has created a new stormwater department to implement and mitigate the effects of stormwater flooding in the City limits that has become worse over the last several years due to the increase of building development. The increase in building development impacts the existing roadside drainage ditches/swales, primary drainage ditches and mechanical conveyance systems with additional stormwater from new impervious surfaces. In order to limit flooding due to the increased development, the stormwater department was created to maintain the existing stormwater infrastructure, plan for future impacts from new development, implement strategies to mitigate flooding and provide support to other City Departments with permitting and general master planning. The information below provides a description and photos of work that have been completed since the inception of the department. Currently the team has reshaped and ditched approximately **15,400 lf.** of roadside drainage ditches.

In addition to the ditching, several new culverts have been installed throughout the city, including a large 60 inch HDPE pipe at the intersection of Beech Road and Cherry Road. This road has been closed for awhile due to the large washout from previous storms. Other areas with culvert replacements are Liberty and Kannapolis and W. Boiling Spring Road. As we inspect areas of concern it has become apparent the older culverts that are galvanized metal pipe are deteriorating and causing issues. As we investigate further, pipes that seem problematic will be replaced with new High Density Polyethylene Pipe (HDPE). This material is standard for stormwater systems and has a high corrosion-resistance, durable with long service life.

We are also preparing letters for stormwater easement requests to residents throughout the city that will allow the stormwater team to access critical areas for improving stormwater discharge to

Patricia Lake. The easement will allow the stormwater team to access areas in order to make improvements including clearing overgrown vegetation and grading of land to improve the conveyance of water thru the system.

On going duties include removing overgrown vegetation from many of our primary ditches, checking existing storm pumps and preparing areas that are flood prone prior to major storm events.

Financial Impact:

The financial impact to the City will have cost savings overall when stormwater and flooding have less of an impact to City infrastructure and residential properties.

Recommendation:

No additional recommendations are being considered since last month's report.

Attachments:

The following list below provides a description of the work that has been completing in the last couple months:

Note: The team has reshaped and cleaned approximately 6,500 lf. of drainage ditches to include the following area;

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|-------------------------------|---------------------------------------|
| 1.) 595 lf. North Hills Road | 9.) 647 lf. Liberty Road |
| 2.) 20 lf. Baymeade Road | 10.) 169 lf. Goldsboro Road |
| 3.) 358 lf. Pine Lake Road | 11.) 346 lf. Charlestown Road |
| 4.) 1,096 lf. Fairway Road | 12.) 50 lf. Forest Lake Drive |
| 5.) 1,469 lf. Kannapolis Road | 13.) 213 lf. Redwood Road |
| 6.) 161 lf. Kennedy Circle | 14.) 348 lf. Drayton Road |
| 7.) 310 lf. Filmore Road | 15.) 304 lf. South Shore Drive |
| 8.) 100 lf. Golfview Road | 16.) 314 lf. West Boiling Spring Road |

Total Ditching for October and November (11-19-2025) = 6,500 lf.

PHOTOS



Golf View Ditch Restoration



Pipe Culvert Replacement with flared end section and rip rap protection



Newly reshaped and cleaned
Roadside ditch



Pipe Culvert Replacement with flared end section and rip rap protection



Primary Discharge with Rip Rap
Protection-North Hills Drive



Primary Discharge with Rip Rap
Protection-North Hills Drive



Primary ditch cleaned and groomed
with maintenance path @ Gold View



Primary ditch restoration
Goldsboro Road



Primary ditch restoration
Goldsboro Road



Beech Road Culvert Replacement



Beech Road Culvert Replacement