



# *City of Boiling Spring Lakes*

9 East Boiling Spring Road  
Southport, NC 28461

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## STAFF REPORT

### **Agenda Date:**

August 4, 2026

### **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 has been completed since the inception of the department. Currently the team has reshaped and ditched a total of **29,622 lf.** of roadside drainage ditches. Last year ditching totals were **19,969 lf. (2025)** and this year ditching totals to date are **11,833 lf (2026)**.

In addition to ditching and stormwater maintenance, the team has completed several upgrades to problematic drainage areas throughout the city. On-going upgrades, clearing and maintenance to primary and secondary ditches have been a main focus this month. We have completed several large projects throughout the city addressing the issues reported in our Stormwater Master Plan. Two areas of focus were along North Shore Drive. Work included clearing overgrown vegetation, re-shaping the existing ditch for more efficient flow characteristics and adding rip-rap stability at the inlet and outlet culvert discharges as well as protecting the final ditch discharge point with an additional rip-rap stability apron. Other areas of focus were located in the Charleston Road area that included clearing and regrading/shaping the ditch.

Future work will address more clearing of vegetation and re-shaping of existing primary ditches that handle large flows from the undeveloped areas upstream. In addition to clearing and reshaping ditches, the stormwater team will be replacing aging pipe infrastructure based on the Stormwater Master Plans recommendations.

Finally, the on-going clearing of North Lake is progressing with about 60% of the lake bed mowed. The city has been issued the final certifications for both North Lake Dam and Upper Lake

Dam from NCDEQ Dam Safety. The city is working diligently on removing all the vegetated overgrowth from North Lake and as soon as that is complete, filling will begin. Upper Lake Dam gate on the western side of Route 87 has been closed in order for that lake to start being impounded. Since there was minimal large growth vegetation, it was decided not to mow, amounting to a cost savings for the city.

The attached photos provide a visual of the work that has been described above.

**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 ditching work that has been completing in the last month:

Note: The team has reshaped and cleaned approximately 1,070 lf. of drainage ditches to include the following area;

- 1.) 190 lf. North Shore Drive
- 2.) 495 lf. Charleston Road
- 3.) 102 lf. Filmore Road
- 4.) 65 lf. Springdale Road
- 5.) 228 lf. 221 North Shore Drive

**Total Ditching for May/June (07-22-2026) = 1,070 lf.**

## PHOTOS



North Shore Drive  
Primary Ditch Rehabilitation



North Shore Drive  
Primary Ditch Rehabilitation



North Shore Drive  
Flared End Install w/Rip-Rap Protection



North Shore Drive  
Rip-Rap Channel Protection



North Shore Dr. Project 2  
Ditch Upgrades/Repair



North Shore Dr. Project 2  
Ditch Upgrades/Repair



North Shore Dr. Project 2  
Rip-Rap Channel/Bank Protection



North Shore Dr. Project 2  
Rip-Rap Discharge Apron



North Shore Dr. Project 2  
Rip-Rap Apron



Primary Drainage Ditch Upgrades  
Clearing and Re-Shaping



Primary Ditch Upgrades  
Clearing and Re-Shaping



Primary Ditch Upgrades  
Swale/Ditch Re-Shaping



Primary Ditch Upgrades  
Swale/Ditch Re-Shaping



Filmore Road Ditch Clearing  
and Re-Shaping



Filmore Ditch Upgrades  
Clearing and Re-Shaping



Filmore Ditch Upgrades  
Defined Channel



Filmore Road  
Discharge Outlet Protection