

Toms Creek Handout 2/10/2020

(This handout and related information are available at: <https://www.townofcarrboro.org/1227/Toms-Creek>)

What can I do to be prepared for flood events?

- Use the [My RainReady](#) online tool to assess your property and get recommendations/options tailored to your conditions.
- Investigate if you qualify for FEMA programs, i.e.: The National Flood Insurance Program, Hazard Mitigation Assistance, etc. (<https://www.fema.gov/>)
- Review FEMA's:
 - "Homeowner's Guide to Retrofitting" (https://www.fema.gov/media-library-data/1404148604102-f210b5e43aba0fb393443fe7ae9cd953/FEMA_P-312.pdf)
 - "Reducing Damage from Localized Flooding" (<https://www.fema.gov/media-library-data/20130726-1446-20490-0539/FEMA511-complete.pdf>)
 - "How to Prepare for a Flood" (https://www.fema.gov/media-library-data/1409002852888-3c5d1f64f12df02aa801901cc7c311ca/how_to_prepare_flood_033014_508.pdf)
- Review EPA's "Soak Up the Rain" campaign for information and how-to guides for residents (<https://www.epa.gov/soakuptherain>)
- Know your flood risks (<https://flood.nc.gov/ncflood/>)
- Plan ahead for disasters, see <https://www.ready.gov/> for guidance on preparing your family and home.
- Sign up to receive alerts from Carrboro (<https://townofcarrboro.org/list.aspx>) and Orange County (<https://member.everbridge.net/index/453003085611768#/signup>)
- View stream gauges and sign up to receive alerts on the Flood Inundation Mapping and Alert Network (<https://fiman.nc.gov/>)
- Review the Flood Risk Information System (<https://fris.nc.gov/fris/>)
- USGS Water Alert sign up (<https://maps.waterdata.usgs.gov/mapper/wateralert/>)
- View Town floodplain map (<http://gis.ci.carrboro.nc.us/Carrboro/Floodplain/>)
- View Town flooding event map (<http://gis.ci.carrboro.nc.us/Carrboro/FloodEvents/>)

What can I do to decrease flooding and drainage problems?

There are several things you can do to help prevent or minimize drainage problems. These precautions keep the area open for proper drainage. Please remember to:

- Check the gutters on your house and floodplain and drainage swale around your property. Blockages can cause runoff to pond in your yard, or cause damage to your house.
- Consider property and landscaping alterations that decrease runoff and increase infiltration: rain gardens, rainwater harvesting, permeable hardscaping, soil amendments, restoration of stream buffers, impervious disconnection, etc.
- Rake or remove leaves, branches, roadside litter, weeds or any material that can block drains, swales, and culverts. Vegetative debris is a primary cause of storm drain problems.
- Keep the floodplain on your property free from any materials such as grass clippings, leaf piles, other vegetative debris, tires, toys, yard items, branches, signs, etc. that can be carried by water flows and block culverts.
- Check the path of water flow in the floodplain during a storm and remove any debris. This will help prevent materials from causing blockages. Similarly keep the roadside ditch/swale and any inlets free from obstructions.
- Call Public Works at 919-918-7425 about assistance for issues in the public right of way.

- *Public Works should be notified of any defects in or around the drainage system such as broken concrete, holes in the ground over pipes or around structures, and severe erosion. Keep the area easily accessible in case repairs or maintenance is required.*
- *Do not place sheds or other structures or fill in drainage easements, stream buffers, or floodplains without first getting permission from the Town.*

If you are proposing any improvements on your property, please consider the drainage impacts to neighboring properties. The installation of raised driveways, fences and landscape beds can block the natural flow of runoff, resulting in areas of standing water. If you extend your downspouts, consider the outlet points and the impact it may have on your neighbor's property.

Stormwater Management vs. Floodplain Management

The land next to creeks—floodplains—and the runoff from rain that meets them—stormwater—are hydrologically connected but managed separately under environmental laws. A good first point of contact for stormwater questions and concerns is the Stormwater Utility, and the Planning Department for floodplain management questions and concerns.

What kind of public oversight does the Stormwater Utility have?

In addition to oversight from the Town Council and the Town Manager and Public Works Director, Carrboro has established a [Stormwater Advisory Commission](#) (SWAC) that provides this function.

Staying informed

- *View stormwater updates, information, links, and data on the Town's Stormwater webpages (<https://townofcarrboro.org/287/Stormwater>)*
- *Follow [Stormwater Advisory Commission](#) meetings, currently scheduled for the second Thursday of each month.*
- *The Stormwater Utility is providing a monthly report to the Town Council on the first Tuesday of the month. Check the Council agendas for these reports. <https://www.townofcarrboro.org/248/Town-Council>*

Providing input

- *Report Flooding Events (<https://tocgis.ci.carrboro.nc.us/Carrboro/FloodReport/>)*
- *Apply to become a member of the [Stormwater Advisory Commission](#)*
- *Contact Town's Stormwater Staff at stormwater@townofcarrboro.org or 919-918-7425*

Links to additional information

Rate Structure Study: <http://www.townofcarrboro.org/1138/Draft-Stormwater-Utility-Rate-Structure>

Carrboro Stormwater homepage: <http://www.townofcarrboro.org/287/Stormwater>

Carrboro Stormwater Utility page: <http://www.townofcarrboro.org/1136/Stormwater-Utility>

Stormwater Advisory Commission page: <http://www.townofcarrboro.org/1119/Stormwater-Advisory-Commission>

Report flooding problems: <http://gis.ci.carrboro.nc.us/Carrboro/FloodReport/>

NC Floodplain mapping: <http://fris.nc.gov/fris/Home.aspx?ST=NC>

Carrboro Online GIS: <http://www.townofcarrboro.org/142/Geographic-Information-Systems>

Recent Questions

Question: There has been lots of talk but where is the action to alleviate this ongoing problem in Plantation Acres?

Answer: Since dedicated stormwater revenue was initiated in June, 2018, the Town's stormwater program has taken the following steps.

- 1. Supported/supporting the implementation of a FEMA hazard mitigation grant to elevate two homes on Lorraine St. Construction is actively occurring, and expected to be completed within two months.*
- 2. Following on Hurricane Florence and Tropical Storm Michael, reached out to the neighborhood to identify residents interested in pursuing FEMA hazard mitigation grant funds under a new funding cycle. Two residents responded, and the Stormwater Utility provided support with submitting grant applications to FEMA through the NC Department of Public Safety. These applications are currently under review at the state/federal level.*
- 3. In June, 2019, we held a public meeting to share information about flooding in the upper Toms Creek watershed. The meeting was videotaped and a webpage created to document past, present, and planned work.*
- 4. In September, 2019, the Town contracted with the Center for Neighborhood Technology because of their experience supporting neighborhoods and communities with the types of issues occurring in this neighborhood. Staff worked with CNT in the fall and CNT prepared a neighborhood survey which was disseminated at the end of 2019. The results were presented on February 13th at a public meeting (<http://townofcarrboro.org/CivicAlerts.aspx?AID=1211>). CNT will be providing recommendations in the near future for steps to consider for addressing flooding and drainage concerns. Staff will review these recommendations and then follow up first with the [Stormwater Advisory Commission](#), a group of appointed citizens created to oversee the Town's stormwater program, and then with the Town Council.*
- 5. Following on the 2 tropical storms in late 2018, other storm events, and the wettest year on record, the Stormwater Utility was asked to identify options and then a recommendation for an increase in stormwater fees. This process was navigated in late 2019, including public outreach sessions, and a new rate structure adopted at a public hearing in January 2020, effective with the next property tax billing cycle. This will provide more revenue to support expanded services going forward. The Town's rate structure is in line with rates being charged in neighboring jurisdictions.*

Question: The town is being irresponsible...you have continued to approve developments in the area, including Lloyd Farm, but you have fixed nothing and the flooding happens more quickly and intensely every year. What is being done to bring the Town up to its own code on stormwater management?

Answer: The Town is not out of compliance with the stormwater section of the Town Code (Article 18), but rather is actively pursuing these provisions. The below table summarizes this.

Relevant Stormwater Section(s) of Town Code	Town Actions to Comply with Code
Water quality related (18.1 (a), (d))	Compliance with NPDES permits and Jordan Lake Rules; Bolin Creek watershed restoration activities
Flooding and public health, safety, welfare (18.1 (b))	National Flood Insurance Program participation; enforcement of Land Use Ordinance (Article XVI; Appendix I); Town operations.
Program funding (18.1 (c), (e), (f); 18.5; 18.7)	Established Enterprise Fund (2017); adopted rate structure (2018); amended rate structure (2020)
Stormwater Utility establishment (18.2, 18.4)	Established in 2017
Billing (18.8)	Development and implementation of an agreement with Orange County Property Tax Office in 2018 and completion of 2 billing cycles.
Stormwater Advisory Commission (3-24.15)	The Town has recruited and appointed members to the Commission. Staff have actively worked with Commission member for two years.

The Stormwater Utility has been focused on supporting the community’s resilience to the increasing frequency and intensity of storms since its inception. At the same time, the Utility is substantially constrained in what it can do on this front because of private property rights and other legal and jurisdictional constraints as well as limited capital reserves and capacity at this early juncture in the Utility’s evolution. The Utility can be an important partner in creating more resilient neighborhoods and a more resilient community, but ultimately is not able to do this work alone because of these constraints. Finally, these concerns are in significant part the result of actions taken as part of the original development at least 40 years ago, predating local, state, and federal laws, regulations, ordinances, and technical studies, along with the more recent increase in the frequency and intensity of storm events. One of the fundamental challenges in the neighborhood is that there are a several dozen homes that were built at low elevations near the creek. The mapping of the floodplain subsequent to their construction has confirmed this: <https://fris.nc.gov/fris/Home.aspx?ST=NC>. The solutions to these challenges are not straightforward and solely within the Town’s ability to solve. The Town and the Stormwater program continue to place a priority on moving towards solutions in the upper Toms Creek watershed, and will continue to work in the coming months with the neighborhood and community, state, and federal partners to find answers.