

**Third Fork Creek Stream Restoration Project**  
**Public Information Session**  
**Southwest Regional Library, 3605 Shannon Road, Durham, NC 27707**  
**Tuesday September 23, 2014, 7:00 pm – 8:30 pm**

**Record of Comments**

This record of comments summarizes the key discussion topics from the public information session held on September 23, 2014. First the public comment is paraphrased and then the City response is presented.

Public comment:        *What is the source of sediment deposited along the creek?*

City response:        The source of sediment comes from the land and the stream upstream of the project area. Rainfall dislodges sediment particles through the rainfall-runoff process over paved and unpaved surfaces. Streams contribute sediment either through stream bank erosion or stream bed erosion.

Public comment:        *The temporary fix stabilized the affected area of the trail south of Manford Drive, but then created problems in the transition zone immediately downstream of the fix (that began to erode) – how will you avoid this with the new stream restoration project?*

City response:        The proposed design will return the primary flow to the historic main channel and fill the current degraded and ripped channel. Returning the primary flow to the historic channel will reduce the stress to the channels where the temporary stabilizations were performed. Where the primary flow has already degraded the smaller channels, vegetative and structural stream stabilization measures will be employed to protect the existing stream and bank.

Public comment:        *Why doesn't the overflow tributary down near MLK cause sediment to be accumulated on top of the boardwalk in that area? If project is proposing to replace a section of the trail with boardwalk how long will that boardwalk be?*

City response:        The existing spur boardwalk which connects MLK to the trail does not experience sediment deposition like the adjacent paved trail. This is likely due to the main flow which escapes the Third Fork Creek channel depositing its sediment load over the trail and/or through the vegetation before it gets to the spur boardwalk. Furthermore the spur boardwalk is elevated and water flows beneath. The proposed boardwalk that might replace a portion of the trail would have the height and length determined during the design process to minimize the need for routine maintenance.

Public comment: *How far back are you going to figure out where the historical channels were?*  
City response: There are multiple sources of satellite and/or aerial imagery files. For example Google provides imagery as far back as the early 1990s and these were used to assess the location of the historical main channel. Other sources of information include NRCS historical soil maps and other sources of historic aerial photography dating back to the 1950s.

Public comment: *During high rain events, how do we know the plugged channels won't be re-created?*  
City response: This project is being developed with annual maintenance consideration. We expect to have to perform periodic inspections and occasional maintenance. The designs will consider flow paths and energy in an effort to avoid having the filled channels open up again. The proposed design includes construction of berms that run perpendicular to flood flows and will break up velocities and push flow towards the main channel.

Public comment: *When will you draw the actual channel realignments?*  
City response: During the design process. Final design and construction documents will be posted to the project web page for review and comment (see link at the end of this document).

Public comment: *How long will the trail be closed for the restoration project?*  
City response: This final design will determine if any trail closures are necessary. If closures are necessary, they will be implemented to minimize the amount of time and length of the trail that is closed.

Public comment: *Maintenance along the trail is lacking – fallen trees and other debris tend to clog up underneath the bridges and boardwalks, debris gets flattened against the fences then water can't get through.*  
City response: If there are current concerns about trail debris, call Durham One-Call, they will create a service request. The stream restoration project will also recommend a routine maintenance program for removing debris from the channels.

Public comment: *What is a dense clay plug? Will tree roots be able to penetrate the dense clay plug?*  
City response: A dense clay plug is clay soil that is highly compacted to resist erosion. They will be used alongside typical bank material which will be planted with trees and vegetation. Eventually trees and vegetation will grow in the areas with dense clay plugs.

Public comment: *How flexible are the models as far as the 50-year, 100-year flood? The rainfall statistics are changing due to recent extreme storms – how will this be taken into account?*  
City response: The historic records of long term rainfall are used to perform the flooding model analysis. Any recent weather events might be included in the 50-year and 100-year rainfall amounts published by NOAA.

Public comment: *In reference to the Murphy Express site soon to be developed near the upstream end of the project, what will the City do to make sure it doesn't pollute the creek. Will Murphy Express have ponds like the Lowe's of South Durham?*

City response: The developer's site plan and construction plans have met the water quantity and water quality requirements that were in place at the time of permitting.

Public comment: *Third Fork Creek is listed as one of the most polluted creeks going into Jordan Lake – has the City identified the "bad actors" that are the source of this pollution?*

City response: Since 2002, segments of Third Fork Creek have been designated as impaired on the North Carolina 303(d) List for turbidity, low dissolved oxygen, zinc, copper and mercury (note that all Waters in NC are listed as impaired for mercury). Third Fork Creek drains to Jordan Lake which is impaired for algae (chlorophyll-a). The State's Jordan Lake Rules, which the City implements, provide for a Nutrient Management Strategy to help reduce the nitrogen and phosphorus entering the lake and thus the response of algae. The sources of these pollutants may vary from specific point sources (e.g. a leaky pipe) to broad non-point stormwater sources (e.g. impervious surfaces such as parking lots or atmospheric deposition). Nitrogen and phosphorous can be found in runoff from excess fertilizer on a lawn, unmanaged pet waste, or dumping of grass clipping in the street. Sediment from unstable stream banks and erosion can also be a source of nutrients. Further discussion about water quality in Third Fork Creek can be found in the City of Durham's Third Fork Creek Watershed Management Plan located here: [http://durhamnc.gov/ich/op/pwd/storm/Pages/stormwater\\_thirdfork.aspx](http://durhamnc.gov/ich/op/pwd/storm/Pages/stormwater_thirdfork.aspx)

Public comment: *What's the next step, and how can we provide feedback/help?*

City response: The next steps include survey field work, floodway modeling, analysis, design, and construction document preparation. The primary way to stay informed and provide feedback is to watch the web site noted at the end of this document. There are multiple ways to help our watersheds and in turn stream quality, including the following strategies.

- Put pet waste in the trash can.
- Keep it neat; leaves and grass off the street. Blow or sweep your grass clippings from the street and sidewalk back onto the lawn. Collect fall leaves from the street for composting or yard waste pickup.
- Wash your car at a commercial wash or at home where the water will drain to a grassy area (not the street).
- Let your downspout gutters flow into a grassy area or a garden.
- Replace grass with native plants. Add a rain garden to your yard.
- Collect rainwater for reuse, and be sure to empty your barrels between storms.
- Label storm drains in your neighborhood.
- Join a Creek Week or Big Sweep cleanup.
- Get involved in a local adopt-a-stream or watershed group.
- Call the hotline to report water pollution. 919-560-SWIM

Public comment: *Are you considering doing anything like the Ellerbe Creek green infrastructure projects in the TFC watershed?*

City response: The City is a partner in that grant project that looked from a planning perspective at green infrastructure in a small subwatershed of Ellerbe Creek. We have been installing rain gardens and other green infrastructure projects in other watersheds including Third Fork Creek. We currently have contracts with Ellerbe Creek Watershed Association and Durham Soil and Water Conservation to install rain gardens and cisterns.

Public comment: *An issue further south on the trail, there is a low spot which stays wet after a rain for a long time, just north of Cardinal Drive.*

City response: This area is outside of the current project with the consultant. The City will investigate the area and then consider including this area in the scope of the project.

Project Website: <http://durhamnc.gov/ich/op/pwd/consproj/Pages/SD-2013-03.aspx>