

High Rock Lake Nutrient Rules Engagement Stormwater Technical Advisory Group, Meeting #2

March 1, 2023 / Noon - 3 pm / virtual Zoom

Purpose and Goals for Meeting

For TAG members to...

1. Share updates precipitated by first meeting
2. Gain understanding of nutrient (vs conventional) stormwater control
3. Identify stormwater management options for both New Development and
4. Consider established development

Participants

Kelsie Burgess, Brent Cockrum, Grace Fuchs, Kevin Haynes, Danica Heflin, Kelway Howard, Keith Huff, Scott Leonard, Andy McDaniel, Zack McKenzie, Chris Millis, Ben Parker, Andy Smith, Justin Gray and Darryl Poole.

Facilitation Team: Will Dudenhausen and Laura Swartz, DSC

Division of Water Resources: Joey Hester, Rich Gannon, Trish D'Arconte

Meeting Summary

Overview

- **Review of agenda and introductions-** Laura Swartz and Joey Hester
- **Action Items from 1st Meeting-** Joey Hester
 - Andy McDaniel (Bullet list of changes to stormwater since 06)
 - Andy will load list of changes to sharefile. Andy described a more mature DOT stormwater management program structure with clearer roles. More education and reporting of illicit discharge. Map of stormwater related features in Jordan and Falls. Coming to HRL next. Improved construction stormwater control and erosion control. BMP retrofit program has improved to providing full sets of plans.
 - Joey clarified the number and location of BMP retrofits at 14 per year.
 - Andy described a night and day difference when it comes to pollution prevention.
 - DOT has researched and tracked use of pesticides and program is well established.
 - TMDL program is new since 2006, as is the stormwater research program.
 - Local governments speak to voluntary changes since 2006

- Joey Hester described Davidson County's actions to protect the Yadkin River and its tributaries above and beyond state mandates.
 - Established a watershed district along Yadkin River which protects 90% of Yadkin's tributaries (state required 50%)
 - DEM audit in 2015, elevated floodplain management to higher priority during permitting
 - All flood prone areas are required to meet regulations (which ones?)
 - In 2022, County Commissioners raised minimum density to 40k sq. ft per lot (roughly doubled 2015 allowance) to slow growth and restrict mass grading
 - Scott Leonard clarified that all flood prone areas have to go through his office, as opposed to having the onus on the developer only.
 - Joey Hester added that many needed changes have already taken place.
 - Scott spoke about working with Danica's group, and their role as guardians of HRL, motivated by constituents and fear over further regulations.
 - Rich Gannon asked what the watershed district is about in Davidson?
 - Scott clarified that they have expanded the watershed district to 10 miles out from the nearest ridgeline, and restrictions on commercial and industrial development.
 - Rich asked about density restrictions and Scott clarified that high density is restricted.
 - Danica Heflin via chat:
 - Stormwater SMART Partners in HRL: Collaborative steering committee of local government partners, resources pooled to provide additional stormwater outreach & education, community engagement, and/or mass media (public service announcements on radio, TV, web). Partners include Davidson County, Forsyth County, Clemmons, Kernersville, Lewisville, Lexington, Thomasville, Winston-Salem.
 - Animated stormwater pollution prevention videos
 - Nature Notebooks (libraries, Title 1 schools, Cooperative Extension, Scouts)
 - Media reach in 2021-2022
 - 9-element Watershed Action Plans with local partners and Piedmont Triad Regional Council:-
 - 2011, Lower Abbots Creek Watershed Restoration Plan
 - 2015, Rich Fork Creek 9-Element Checklist
 - 2015, Swearing Creek Watershed Restoration Plan
 - Scott Leonard will share updated stormwater map with Joey
 - Kelsie Burgess updated on High Point improvements, new GIS hire and now up to 4 stormwater specialists. Improved inspections processes.
 - Rich Gannon asked about MS4 start in High Point. Justin Gray will confirm date.
 - Kelsie Burgess and Justin Gray described inspection and enforcement of stormwater regulations.
 - Joey Hester asked in any other communities are using zoning like Davidson.
- **Nutrients vs. Conventional Stormwater-** Rich Gannon [ShareFile - Where Companies Connect](#)

- Review standard state watershed density requirements
- Present Neuse, Tar-Pam, and Falls targets for nutrient requirements
- Version 4.2 of SNAP tool with loading rate targets.
- Grace Fuchs: Graph without any control measures? Rich Gannon: Yes.
- Rich Gannon- Loading rate targets are pre-SNAP tool.
- Andy McDaniel asks for clarification about loading rate targets, Rich clarifies that the strategy could be “don’t make it worse”
- Rich Gannon- Using SNAP to calculate N and P loading
- Best Management Practices in SCM
- Updates to SCM concentrations
- How much do SCMs reduce loading rates?
- Keith Huff: Would infiltration alone get the job done? Rich Gannon: Yes.
- Keith Huff: Good to assure that one SCM would suffice.
- Brent Cockrum: You have to look at it as a whole and collect it all.
- Break
- Rich Gannon: Water quality drivers
 - Lake reduction curves for N and P
 - N and P loading by source
- Rich Gannon: What further steps can we take? Good value to retrofitting old SCMs.
- **Discussion: What kind of things can be done, focusing on new development?**
 - Joey Hester: Lot’s being done, what’s next?
 - Brent Cockrum: Is tetrach report in Sharepoint? Joey to put it there.
 - Brent Cockrum: What is impact of septic systems around the lake?
 - Joey Hester: We have a wastewater TAG that is looking at Septic issues.
 - Danica Heflin: Clemens has awarded 6 million in ARPA funds to stormwater repair
 - Grace Fuchs: If counties pass an ordinance, how is it enforced?
 - Rich Gannon: State regulates the local governments who enforce.
 - Grace Fuchs: Whatever regulations we come up with need to be enforced.
 - Joey Hester: This is a big part of our discussion, to make sure we can do it at the local level.
 - Scott Leonard: We are all short staffed and having trouble hiring, this would require more staff.
 - Andy McDaniel: Are offsets an option?
 - Joey Hester: It is, but we don’t want to create hotspots of unchecked development
 - Andy McDaniel: Developer should have to follow a baseline but could then also pay a fee. The fee would fund further stormwater improvements. Not talking about creating hotspots.
 - Scott Leonard: Maintenance is the hard part for post construction SCM.

Joey Hester: We can add in discussion about fees to next meeting

Decisions made in the meeting

1. This group will meet again virtually from 1 - 3 pm on Tuesday, April 18

What’s Next / Action Items from the meeting

1. Scott Leonard will share map with Joey

2. Kelsie & Justin will check back and share start date for permits for post construction control
3. For the group to consider - are there other communities creating stormwater driven zoning rules like Davidson County?
4. Danica asked - Would be great to know how many "poor/fair" measures (like dry detentions) are out there and what improvement could be expected by converting them to a better method?
5. Joey will share Sharefile access with everyone again, and he will add the TetraTech report to the group folder in Sharefile
6. Topics for discussion at next meeting:
 - a. Brent will discuss instances where nutrient-reducing SCMs (like infiltration and bioretention) may not be allowable because local ordinances require a certain amount of volume detention of stormwater. i.e. instances where nutrient control and volume control
 - b. Andy will open a discussion on how to set a baseline of stormwater treatment (i.e. a "floor") for all developers, beyond which treatment can be achieved via offset payments.
 - c. Trish will explain her experience working with local governments under the Neuse and Tar-Pam rules, as well as lessons for future deployment of stormwater programs in HRL.
7. Topics for discussion at future meeting:
 - a. Existing Development goals, possibilities, constraints, and logistics.
 - b. Trish & Neuse/Tar-Pam Local Governments (if not covered at next meeting)

Key Links

- [Post Meeting Survey](#)
- [Rulemaking Charter](#)
- [DWR: High Rock Lake Nutrient Management Strategy Website](#)
- [Steering Committee TAG Charges](#)
- [Citrix ShareFile Folder](#)
- [DWR PPT from today's meeting](#)
- [Video of today's meeting](#)