

Seacoast Stormwater Coalition Meeting Notes/Minutes

Wednesday, June 14 2017, 1:00 – 3:00 p.m.

Dover Community Services Building, 271 Mast Road, Dover, New Hampshire

Attending:

Gretchen Young, Dover (Chair)

James Houle, UNH Stormwater Center

Barbara McMillan, NHDES

Sally Soule, NHDES

Matt O’Keefe, UNH

Tim Puls, UNH SC

John Starkey, Seabrook

Amy Kizak, SNHPC

Glen Tuttle, UNH

Lyndsay Butler, Wright-Pierce

Paul Vlasich, Exeter

Jessica Hunt, Stantec

Nancy O’Connor, SRPC

Heidi Marshall, CLD Consulting

Dan Camara, Rochester

Owen Friend-Gray, Rochester

Tavis Austin, Stratham

Suzanne Huard, Rollinsford

Jim Hafey, Hampton

Chris Jacobs, Hampton

RH Snow, SWA

Shawn Herrick, UNH GIS

James McCarthy, Portsmouth

Jane Levon, Portsmouth

Taylor Patterson, Portsmouth

Dean Peschel, Peschel Consulting, LLC

Bill Boulanger, Dover

1. UNH Planning Mapping - GIS Outfall Mapping Demonstration/Work Session:

Shawn Herrick, UNH Facilities. Shawn reviewed UNH’s GIS program and how it interfaces with campus utilities. UNH operates as a municipality and has many of same utilities as a town with Durham utilities mixed in and some shared. UNH System includes: 999 catch basins, 262 outfalls identified to start with – defined as any place along system where the stormwater daylight, and 2300 pipe segments. Size, dates, and materials area all schema and they also have catch basin schema to keep track of cleaning. They looked at the Local Government Center model for GIS and then fit it to their needs.

First steps were to delineate subwatersheds moving back from the oyster river – catchments their system emptied to.

Second, after review of language related to outfalls, they decided that an outfall is the last manmade point through which water passes to waters of the U.S. Sometimes that’s within feet of the river, other times there was nothing between the last manmade structure and outfall. This took UNH from 262 to 67 outfalls with about 80% accuracy.

Third, they took out the stormwater system and delineated the catchments based on their outfalls. They went back from the last manmade structure to delineate the catchment area and gave a unique suffix for each catchment to make it easy to query the catchments.

Examples presented:

- Storm drainage information on Quad Way. They were able to determine flow direction – some is based on inverts. UNH staff (Glen Tuttle) helped verify flow direction. It shows interesting aspects of the drainage such as a pipe that appears to dead end and structures that flow to an underground “culvert” that is conveying the stream.
- B-lot parking lot including connected roof drains and floor drains if they are connected to the storm drain system.

Although UNH has their own very robust streamflow data, they learned it didn’t make that much of a difference so they used national hydro data (NHD).

Shawn assumes he can get the data in GIS for impaired waters. The paper maps are explained very well and he can add it from the paper source. It looks like they can get it in GIS format from the DES FTP link.

Discussion/questions included:

Updating impairment data: Shawn believes it will be very easy to link to and access updated impairment data from DES. He can create a unique ID out of the assessment unit ID number and can use that to update and maintain the data.

Information collected and stored for size and type of pipes: If it’s something UNH doesn’t already have, they can query data for unknowns or pull the information off of old plans, rate the infrastructure relative to the confidence they have in the collected data – it’s a standardized PE rating, and grade their own data so that at some point they can investigate.

Using as-builts: Shawn doesn’t trust as-builts. People just change the title and pass the plan back in. They use a utility viewer for UNH which can be used to query specific parts of the system. It should help isolate sections of the system – which is helpful for tracking down problems.

UNH is able to create a PDF booklet of the drainage system/catchments and can go to each one and look at the proximity of stormwater utility to other utilities.

Timing: It probably took 30 hours total to create what you see here. These products were fairly simple to create. It helped that they did not have to map stormwater infrastructure. Shawn did do some inspection to make sure the outfalls were where they were supposed to be. The guys in the field use a tablet to collect data – in real time.

Consistency in prioritizing outfalls: Determining priority is a challenge. What is the group going to use as a high priority outfall? Jamie outlined that there are two cuts: the first coarse cut is to identify outfalls you have jurisdiction over, for example, manmade structures that drain to the river; the next step would be to prioritize – we need to come up with a standardized methodology.

Gretchen Young pointed out that the intent is to look for illicit connections, so it seems like we should start with prioritizing manmade structures. EPA does define outfall other ways.

Jamie added that you can prioritize things like swales as excluded so that we can focus on the high priority ones.

Next steps for UNH: They need to track down what they don't know. Research outfalls with no pipes connected to them. Need to define outfalls and their workflow for tracing down questions, use the GIS network to trace it back to find the source upstream (like for IDDE), and take the 67 outfalls and prioritize them – maybe get down to 12.

Next steps for the Seacoast Stormwater Coalition (SSC): Jamie Houle added that this could be helpful whether you have an active GIS or if you have hand drawn maps. UNH is interested in developing a standard method for investigating these types of things for all of your outfalls. They are writing grants to do this to help communities without GIS to develop maps for communities. To define initial drainage areas. Additionally, UNHSC is seeking funding to develop pollutant hot spot maps – these could be useful to help municipalities prioritize outfalls and to plan stormwater management approaches. They could also take and overlay your drainage outfalls – if you have them. It could be a big step forward if we adopt a similar method. The permit says everything from hand drawn to latest greatest GIS maps are acceptable. Jamie will post the SOP on the SSC blog.

The group clarified that they are not responsible for private drainage and that they should prioritize the down slop of the outfall from a private property (apartments, trailer parks, etc.) discharging to the town's system.

It was agreed to start a subcommittee to start from zero and build on what's been done already.

UNH campus planning produces high quality GIS interns and the RPCs are interested in helping with the mapping.

Mapping Subcommittee Volunteers: April Talon, Durham, John Starkey, Seabrook, Jamie Houle, UNH, Amy Kizak, Southern Regional Planning Commission.

Next Steps: Jamie and Shawn will work out a detailed protocol for how UNH got to where they are currently. Then review that with the subcommittee. Due to schedules this may be later in the summer or fall.

Maps Needed: Rollinsford, Somersworth, Rochester, others?

Methods Needed: Rochester, Seabrook (review what I have), Somersworth

2. **Outreach and Education Minimum Control Measure #1 Work Session:** Barbara McMillan, NHDES

Barbara reminded everyone to provide comments on the NH MS4 blog designed to post meeting information and to show resources grouped by each component of the permit. Everyone will eventually be subscribed to receive notifications of posts.

For the Outreach and Education Matrix, it needs to go to a subcommittee level to scope out how to put it in everyone's NOI. The goal is to develop some shared tools and package them up for use. We can pick

1 -3 items out to put together for easy municipal use. There are people that have “Existing Tools” in the right hand column of the matrix who would be willing to sit in on the committee and help, e.g. Cooperative Extension. We need to remember to have a starting point because we need to measure results.

Education Materials Subcommittee: Gretchen Young, Dover, Barbara McMillan, NHDES, Owen Friend-Gray, Rochester, Exeter?

Next Steps: Barbara will send out a meeting invite and let the SSC know the date and time in case more are interested.

3. General Announcements:

Jamie and Barbara met on June 8 with the Nashua/Manchester Regional Stormwater Coalition. Coalition members agreed that there is a lot to be gained by working together. They are taking a slightly different approach by drilling down with the activities that need to be addressed in the first year of the permit first. There is an opportunity maybe for us to integrate and all get on same page from a strategic and shared resource sense.

Barbara confirmed with EPA that municipalities must use the 2012 303(d) list for permit planning purposes. She will send out the tentative 303(d) list schedule to help for future planning.

Barbara announced the workshop at Newmarket Town Hall on “Stormwater Management in Your Community” workshop about the Southeast Watershed Alliance (SWA) stormwater management regulations on June 28, from 4:00 to 5:30 p.m. These are the regulations that EPA refers to in the new permit.

Sally announced that the Pollution Tracking and Accounting Pilot Project (PTAPP) nonpoint source pollution (NPS) tracking database is ready for launch and encouraged PTAPP municipalities to use the database to track their NPS management activities in order to take credit for their work.

Dick Snow reviewed the SWA list of communities financially committed to participating in the collaboration effort. SWA changed their banking to a TD Bank escrow account. Dick also announced that the due date for commenting on the impaired waters list is June 23. -

4. Next Meeting Date and Agenda: Next Meeting: July 12, 1:00 – 3:00 p.m. at Dover Community Services.