

Lower Raritan Watershed Partnership Meeting Agenda

October 18, 2016 – 9:30-11:00AM

In attendance: Nick Tufaro (Middlesex County Planning), Alex Zakrewsky (Middlesex County Planning), Stan Olszewski (Middlesex County Planning), Kandyce Perry (Jersey Water Works), Chioma Nwankwo (LRWP), Bill Schultz (Raritan Riverkeeper), Susan Edmunds (Highland Park resident), Jeanine Kopec-Zanghy (Middlesex County Planning), Maria Watt (CDM Smith), Bill Cesanek (CDM Smith), Louie Greenwell (Prime Consulting), Chris Harasaki (LRWP), David Hsu (Montclair State University), Bill Shadel (Shadel Consulting), Katee Meckeler (WMA9 Watershed Ambassador), Heather Fenyk (LRWP)

I. Welcome / Introductions – Heather Fenyk, LRWP

Goals for the meeting: To synthesize multiple threads of conversation around stormwater management taking place in the watershed. These include Impervious Cover Remediation (ICR) Green Infrastructure Installations/GI Asset Management, Implementation of MS4s and Stormwater utilities. We will also:

1. Discuss the utility of the Natural Assets Mapping work for stormwater management.
2. Build on the September meeting / session on Green Infrastructure asset management at CDM Smith
3. Discuss the potential for a stormwater utilities pilot in Middlesex County
3. Prepare for November's conversation that will focus on innovation and economic development around Green Infrastructure and manmade infrastructure that mimics GI.

[Note: We had originally planned to discuss brownfields as assets at today's meeting. We will revisit this topic in early 2017.]

II. Recap September Meeting – Kandyce Perry (JerseyWaterWorks), Maria Watt (CDM Smith)

Kandyce Perry (Jersey Waterworks). Jersey Waterworks is a collaborative state wide organization focused on tackling New Jersey's failing water infrastructure through green infrastructure and community outreach. The GI sub-committee has a particular interest in asset management.

Maria Watt (CDM Smith). Maria provided a recap of CDM Smith's work in green infrastructure, which includes developing the "NYC GreenHub" for the City of New York. The NYC GreenHub is an asset management program to track GI projects from site selection to maintenance. It involves tracking over 3000 bio-swales. The site is set to go live at the end of November for clients, however there are no plans to release it to the public yet.

III. Group Discussion RE: Asset Management for Green Infrastructure in the region

Stakeholders agree there is tremendous opportunity for information sharing around GI. Not only with respect to asset management for tracking of GI systems, but Middlesex County (working with Prime) is exploring the feasibility for the application of a stormwater utility in Middlesex County. And the LRWP has initiated research into the feasibility of regional stormwater utilities in New Jersey. This includes development of a DRAFT white paper on the topic. The LRWP is confident that we are in an increasingly receptive environment for stormwater utilities in the state, and would like to advance the idea of piloting a stormwater utility within the watershed, focusing on intra-municipal coordination.

Background: When developer builds a sub-division, for water service and sewer service, both have ways to collect revenue. Stormwater is the “orphan utility.” However, stormwater utilities are often viewed as a tax even though they are really a fee for service (usually) based on impervious surfaces. Fees for service are not tax deductible. Although New Jersey does not prohibit the existence of stormwater utilities, the state also doesn’t explicitly enable their creation. There are areas of cloudiness that could lead to lawsuits. Also: “regional” tends to be led by municipal interests. Whether a stormwater fee can be implemented in New Jersey is still under debate.

Precedent: There was an earlier effort along these lines done for Morris County. There was a high level of interest but politics crushed it before it could get off the ground.

Primary Concerns: 1) In generating a stable sort of revenue. When you are committing to improvements the question is how to pay for them. The group discussed the idea of delivering the pilot effort through a “softer” approach (e.g. grants) then move to a fee structure when people see the benefits. If the fees are low enough, the trick is to have a very definable stormwater improvement plan. 2) Administration is difficult. Will need to leverage an existing billing system. Have as an add-on to existing + have them manage billing and accounting.

Next Steps: To begin to identify what the financial commitments/baseline costs may be. Revenue bonds depend on stable source of revenue. Need to explore possible (confirmed) sources of revenue. Also explore extension of voluntary initiative reductions, for example look for opportunities for the developer to say “I cannot do, but will pay for mitigation elsewhere.” The day-to-day running of utility has costs! Makes sense in terms of keeping costs low for existing development. As a segue to LOS and understanding assets dealing with and how things work. The County will need to work with municipalities to better understand their drainage networks. As part of MS4s municipalities will have to really know what their capital budget should be based on what they currently have. Middlesex County has a mix-match amount of data w/ respect to catch basins, pipes. However, County infrastructure is small compared to municipal holdings.

Additional Comments / Concerns:

One clear option is to look at the idea of getting grants and starting a voluntary effort. But these projects need to be large scale, very visible. Jersey Water Works and others are talking about multi-function parks. This whole conversation will go to FEMA – talking overflow cells that could also be called GI. The large projects, if introduced first, are impressive and may pave the way for the small GI interest.

MS4 mapping is important. The endpoint is about creating discharge permits by outfall – and there are hundreds/thousands that are unknown, unmapped. Through mapping we will have to start identifying problematic outfalls. Water supply piping has not been completed yet! Let alone sewer and stormwater piping. An initial focus of the mapping effort is to work with a few municipalities that want to work with the County.

This discussion aligns with the CRS conversation. Try to reach out to those communities. Activities conducted to support MS4 program will affect CRS rating.

There are 5-6 communities in the LRW interested in CRS rating. Two are actually trying to become eligible certified (Perth Amboy, Woodbridge), South River received a level 6 in 2015. Their big thing was that they had the sequencing correct so that they were eligible and registered before the Sandy buyouts

– removed risk from tax roll by taking at risk properties off the grid. South River is also a likely candidate. Once its off the rolls that is the new inventory, not relevant any more. Removing more than 300 homes off tax rolls in flood prone area. It is a good thing regardless. Monmouth Co started the idea of a user group to share information and work together on initiatives that CRS requires. The big thing is to demystify the process. There is a rational nexus issue with respect to influence on the drainage system. The County has authority to charge for drainage impacts as it relates to new development, a 1x fee for new development. Most municipalities have a system that has deteriorated over time. Now need to find \$ for maintenance and repairing the system? What is the life for this infrastructure? 10 years – a 1x fee doesn't cut it.

GI tends to be something that applies to smaller storms. In Middlesex County, with the amount of pervious surfaces, there is a wonderful opportunity to recharge aquifers. But it has a design to capture 1 inch storms. Flood events happen with much more rainfall. GI is great for improving hydrology, but typically happens on frequent storms. Can't sell flood improvement but implement GI – won't necessarily work. GI absolutely helps, but once it reaches its design capacity the system returns to its usual runoff characteristics.

Conducts cradle to grave analyses. To do soft solutions it costs more than hard, but how does it play out over long term? Finding that GI is an economical thing in the long term.

This segues into NYC GreenHUB – whole idea moves into stormwater utility / stormwater management conversation. Sometimes GI advocates are trying to take the simplest route and come up w/ a lot of errors and need to change things. A lot of places are implementing GI but not doing from a hydrologic model approach. This is an advantage of starting with the LRWP's Natural Asset Mapping exercise. NAM explored what is available, what is there, what areas have multiple assets to pinpoint a starting point. Most places don't look at the whole picture, don't do soil borings.

Next Steps to present to the Jersey Water Works GI Sub-Committee:

Goal: Use a website to monitor GI efforts over their lifespan. And lessons learned over time to improve future GI efforts. Engineers tend to back off from GI because of unfounded concerns re: long term maintenance costs. Hesitant to design anything for their clients. Need outreach, education if we want to move forward. NJFuture has been working a group of developers / homebuilders – looking to engage commercial/mixed use developers. Have agreed to put funding toward developing a GI guide targeted to developers to empower them to feel comfortable / overcome innovation risk. Hoping to launch in April.

There is a good base of volunteers to plug into this. The suggestion is to take a few large ideas that are impressive + do asset monitoring of those. Could GI be helpful in identifying those projects across the state? Committee would rally behind the LRW to pilot. Would be wise to start out with 1-2 projects for the website. Then replicate. Middlesex County has several GI projects – in County parks that might be worthwhile to start with. This is a good way to improve crowd-sourcing. Users would see the projects if County were out there. A few examples: Manalapan Brook project – 3 detention basin retrofits. Also expansion of demo project (vegetated lake buffer), those projects had co impetus. Also restoration projects that parks have done w/ Princeton Hydro. Also Woodbridge effort – coGEN. High visibility project – put spin that this is a GI effort. This is mostly the municipality. Woodbridge is heavy hitter when it comes to future planning. Some local examples. The big things are the build by design post-Sandy efforts.

We will work to identify existing GI in NJ. The GI demonstration showcase is an initiative of NJFuture. They will ID and fund, in the form of consulting service, two projects – one private one public sector. Proposed projects in concept development stage. They need consulting services. Design funding, legal (permit review issues) – types of consulting services are open. Not for actual construction. **We need the list of projects in Middlesex County. From this we will shorten to 3-5, targeted funding sources, also ID repository for the web-site. Need the details.

IV. LRWP Project Updates

- a. Water Quality Monitoring: pathogens report. On very few occasions did we find the water did not meet EPA standards. Bill Cesanek brought our attention to Philly Rivercast.org – predictive algorithm that looks at rainfall, runoff, series of parameters to predict pathogens levels. See high associations w/ rainfall runoff.
- b. Project WADES / Watershed Sculpture Project – December 6, 7-9 PM Gallery Opening
- c. Stream School (macroinvertebrate training) wrapped up on October 14th and 15th – funded by the DEP
- d. LRWP needs help with QAPP development



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