Nutrient Scientific Advisory Board Meeting #41 Minutes

Friday, March 11, 2016
TJCOG- 4307 Emperor Blvd, Suite 110, Durham, NC 27703
9:30 am -12:00 pm

Attendees
Members: Charles Brown (Matt Flynn alternate), John Cox, Jon Duncan (Dr. Lawrence Band alternate), Sally Hoyt (Dr. Bill Hunt alternate), Dr. Bill Hunt, Josh Johnson, Michael Layne, Grady McCallie, Andy McDaniel, David Phlegar, Forrest Westall

Non-Members: Andy Sachs (facilitator), Trish D'Arconte, Amin Davis, Rich Gannon, Jim Hawhee & John Huisman (DWR); Andrew Anderson & Sarah Waickowski (NCSU BAE); Teresa Bobbitt (AWC&K), Justin Gray & Frank Park (Guilford Co.); Alix Matos (Cardno), Brian Jacobson (AECOM), Sushama Pradhan (DHHS), Sandi Wilbur & Michele Woolfolk (Durham)

Agenda Topics

- DWR Measures Review Schedule
- UNRBA Measures Project
    - Bioretention with IWS Design Variants Crediting
    - Level Spreader Filter Strip Crediting

Materials
- Meeting Plan
- DWR Nutrient Credit Development Status
- Nutrient Accounting for Bioretention Design Variants
- Nutrient Accounting for Level Spreader Filter Strips Design Variants

General Updates
Rich Gannon (DWR) provided an update on recent Environmental Review Commission (General Assembly) and Water Quality Committee (Environmental Management Commission) meetings. DEQ's Assistant Secretary for the Environment presented information including how existing nutrient management strategies and associated riparian buffer protections are burdensome to regulated parties and have not been effective at achieving nutrient reductions. A local government (LG) representative commented that LG's are legally vulnerable when their NPDES permits are not updated to reflect legislatively-mandated changes to nutrient strategies. It was suggested that DEQ should proactively change NPDES permit conditions to reflect these changes so that LGs can remain in compliance.

Rich also discussed DWR's In-Situ Strategies Report and Riparian Buffer Protection Program Study. These two items were removed from the March EMC Water Quality Committee agenda; these reports are due to the Environmental Review Commission in June. The In-Situ Strategies Report indicated that these strategies have limited potential for beneficial treatment effects in large reservoirs. DWR also mentioned preliminary results from the October 2015 Jordan Lake Solar Bee monitoring report indicate that the Solar Bees have had no effect on water quality, and DWR will not know the final results until further data is collected.

Rich also introduced DWR's two new nutrient strategy coordinators, Jim Hawhee and Trish D'Arconte. Trish mentioned that Chris Jensen has been reached out to as her replacement on the NSAB Board.

DWR Measures Development Process

Trish D'Arconte (DWR) provided an overview of DWR's nutrient measures crediting process and a status list of load-reducing practices (see attached handout). Rich discussed an updated practices credit guidance for two distinct types of stormwater control measures (SCMs): 1.) a design variant of an existing credited SCM, and 2.) a new practice with design specifications and nutrient credit accounting (see handout). Additionally, he mentioned that nutrient trading with the wastewater sector is acceptable and regionalization of wastewater facilities was cited as an example of trading. Discussion ensued about agricultural practices including: 1.) Rich confirming that agricultural practices are approved by the Watershed Oversight Committee and are not within the scope of the NSAB, and 2.) the UNRBA has been soliciting subject matter experts with development of crediting for agricultural practices and believes that NSAB input would provide valuable feedback regarding these crediting practices. An alternate Board member encouraged DWR to coordinate the development of nutrient crediting for SCMs with DEMLR early in the development process.

<u>UNRBA Measures Project</u>

Alix Matos (Cardno) provided an overview of the UNRBA Nutrient Credit Development Project (see attached handout). This overview consisted of the credit development process, a list of practices for which nutrient credits are being developed and the review process schedule. The remainder of this presentation was devoted to describing crediting for design variants of the Bioretention and Level Spreader Filter Strip practices. Reviewer comments for these practices are due to Alix and Amin via email by Friday March 18th. There was minimal group discussion regarding these specific design variants. However, there was significant discussion about policy, technical and accounting tool development issues associated with overall implementation of nutrient crediting practices.

Policy items of note are as follows:

- The UNRBA has spoken with DEMLR's Stormwater Permitting Unit about using these practices to satisfy New Development Stormwater requirements, and is supportive of the flexibility that design variants offer for meeting regulatory compliance.
- It was noted that DWR regulations are silent regarding what constitutes final approval of these crediting practices.
- Minimum design criteria (MDC) will be put into DEMLR regulatory statute, while the American Public Works Association document that will house DWR's nutrient-reducing SCMs will not require DEQ Director approval.
- A Board member mentioned a DEMLR/DWR memo agreeing that NSW requirements would be met if developers matched post-development runoff volume to pre-development runoff. [*Editor's Note: Memo dated 5/13/14 states "…DEMLR and DWR will allow persons who design new developments using Storm-EZ, and show volume matching, within the Neuse, Tar-Pamlico, Jordan Lake and Falls Lake watersheds to be considered as meeting nutrient export requirements without making offset payments."*]
- A Board member expressed a desire for DWR to distribute municipal load allocations for meeting nutrient reductions associated with the Existing Development (ED) Stormwater requirements of the Jordan Lake Strategy before the next phase of the Rules Readoption process. DWR stated they plan on adding septic loads to the existing load allocations

produced by the 2014 Jordan Watershed Model and resolving other load allocation issues in 2016. Durham is working with a contractor to resolve their outstanding issues.

- DWR stated they intend to complete the Falls-Jordan Lake ED Model Program document in 2017, despite the DEQ Rules Readoption process currently being delayed.

Technical items of note are as follows:

- A Board member mentioned he found it helpful to review DEMLRs MDC when reviewing these crediting documents.
- Dr. Bill Hunt will get back to the group about how users should determine the Hydrologic Soil Group (HSG) for urban soils. He also mentioned users should enter HSG 'D' for Bioretention cells with a liner.

Tool Development items of note are as follows:

- Jordan Falls Stormwater Accounting Tool (JSFAT):
    - DWR staff mentioned that users should enter Bioretention as the *Other Custom BMP* option since the *Custom Bioretention with IWS* option is not working correctly.
    - A Board member recommended that the specific version of the Jordan Falls Stormwater Accounting Tool (JFSAT) should be explicitly stated in the crediting document.
    - Dr. Bill Hunt mentioned NCSU BAE will be hosting HyperTool workshops in late April or early May.
- A Board member expressed support for merging accounting tools. DWR reiterated that they are currently considering the feasibility of merging the JFSAT and StormEZ, a stormwater runoff volume calculator.
- An alternate Board member mentioned the use of stormwater accounting tools are not needed when implementing standard *(non-nutrient)* SCMs. A counter point was made that developers are willing to invest more resources into innovative stormwater practices because of limited space in urban areas.

Wrap Up

The City of Durham's Algal Turf Scrubber (ATS) pilot study has shown promising potential for reducing nutrients in a cost-effectiveness manner. A Board member stated that the City may extend the monitoring period to evaluate seasonal effects, there have been quality assurance/control issues with the laboratory analysis and a Chesapeake Bay expert panel has been assembled to further study ATS technology. John Cox confirmed that he intends to stop working full-time for the City in July, but would like to work part-time for the City afterwards.

Lastly, the UNRBA expressed thanks for DWR being willing to provide an additional $20,000 to fund their additional work on their Nutrient Credit Development Project.

Future Meeting Dates

- Possible meeting in April. DWR will email an update soon.
- Unless specifically rescheduled, the first Friday of each month, 9:30 - 12:00 at TJCOG.