Nutrient Scientific Advisory Board Meeting #44 Minutes

Friday, August 5, 2016
TJCOG- 4307 Emperor Blvd, Suite 110, Durham, NC 27703
9:30 am -12:00 pm

Attendees
Members: Charles Brown (Matt Flynn alternate), Josh Johnson, Brian Jacobson (NCDOT Alternate); Andy McDaniel, Sally Hoyt (Dr. Bill Hunt alternate), Dr. Bill Hunt, Grady McCallie, Forrest Westall, Sandi Wilbur (Durham), Allison Weakley (Chapel Hill).

Non-Members: Andy Sachs (facilitator); Rich Gannon, Jim Hawhee, John Huisman, Trish D'Arconte (DWR); Tom Davis (Orange County); Alix Matos (Cardno); Bo Howes (TLC); Teresa Bobbitt (AWC&K); Charles Brown (Cary); Liz Weisbrot (Raleigh); Sujit Ekka (AECOM); Keith Larick (NC Farm Bureau); Michelle Woolfolk (Durham); Don O'Toole (Durham); John Cox (Citizen); Frank Park (Guilford County); Rhan Sutton (CONTECH); Michael Orbon (Wake County); Diana Hales (Chatham County); Wendi Hartup (Town of Kernersville); Mike Schlegel (TJCOG)

Agenda Topics
- Nutrient Management Regulatory Framework Legislation
- Land Conservation for Nutrient Reduction Credit
- Jordan Falls Stormwater Accounting Tool Revisions & Nutrient Measures Update

Materials
- Meeting Plan
- Session Law 2016-94 - Nutrient Strategy Language
- Land Conservation Credit Review Letter
- Practice Credit Status Table

General Updates
Sandi Wilbur and Allison Weakley were introduced to the group as candidates to fill two vacant seats on the NSAB. The seats were previously held by John Cox (Durham) who is now retired and Trish D'Arconte (Chapel Hill) who now works for the Division. The Division plans to submit a request to the Secretary to approve both candidates following the October meeting.

Nutrient Management Regulatory Framework
John Huisman (DWR) presented an overview of the Session Law 2016-94 that included a summary of recently passed Session Law 2016-94 which calls for an evaluation of the Falls and Jordan nutrient management strategies and separates these rules from the rest of the periodic rules readoption process and establishes their own rulemaking timelines. This new legislation also calls on the University of North Carolina at Chapel Hill to oversee a study of the Jordan and Falls strategies that includes an assessment of the costs and benefits of nutrient strategies in other states. The Department of Environmental Quality is tasked with developing individual reports on lake treatment technologies, the nutrient offset program, and the need for state-specific values for stormwater best management practices. The EMC is charged with considering the findings of these studies, convening a stakeholder working group, and initiating the rule readoption process in 2019.

In addition to answer questions and providing further clarifications, four specific questions were presented to the board for their feedback. 1) Were there any differences in interpretation of the session law? 2) Does the board have any recommendation to share for the UNC study? 3) Do board members representing local governments have any input to share on the value they see in services offered from private nutrient banks and the Division of Mitigation Services? 4) Does the board see value in having state-specific values for stormwater BMPs and are they interested in providing a recommendation as a body?

Questions & Comments

- Division clarified that there is a disconnect between some of the dates in the session law and when other actions need to take place. For example, the UNC study for Falls will not be completed until 2021 but the EMC is charged with starting the rule readoption process in 2019.

- Division staff also indicated that they will be seeking additional clarification from the Departments legal counsel on the session laws impact on the implementation of the current rules. Since all of the current rules are in effect it is not clear if the language was intended to delay further implementation or not (except for in Jordan where it explicitly states that implementation of the new development and existing development rules by local governments is prohibited).

- Several board members inquired as to how the roles of the UNC study differed from the charge of the NSAB. Division staff explained that the session law calling for the formation of the NSAB charged them with advising on implementation of existing development rule requirements. The UNC study will be more broad and evaluate and make recommendations on all aspects of the nutrient strategy. Not just existing development.

- A board member shared that contractors are looking at the use of phosphorus locking technology in Durham. They may be interested in the provision in the Session Law regarding if the Department is interested in partnering on such a test project site under the in-situ provision of the session law. DWR clarified that with the Department has indicated that they are not planning to pursue a test site for in-situ treatment at this time.

- A board member inquired about how the Division will provide support or guidance to local governments who are approached by developers wanting to use Chesapeake Bay Program credits for BMPs as allowed under this session law. Division staff shared that it is not clear why someone would propose using Chesapeake Bay values for practices as the state's numbers are based on more local information and are typically provide more credit. DWR staff and board members speculated that the goal of this provision was to add more options by allowing for the use of practices used in the Chesapeake Bay for which NC has not yet developed credit.

- Comment was made by a board member that the session law prevents local governments in the Jordan watershed from implementing new development requirements which will result

in shifting the liability of these loads from the private developer to the local government under the existing development rule (which is also indefinitely postponed by the session law language).

- A board member shared that with regard to the UNC study the current thinking is that UNC will need to hire a contractor since the language prevents UNC from charging indirect costs for the work. It is not clear at this time if UNC will in fact be hiring a consultant or using the "Collaboratory" funded through a separate section of the session law.

- Comment was made by board member that any modeling work done through the UNC study should be coordinated with the Divisions Modeling Unit.

- A board member shared feedback on the value they see in the Division of Mitigation Services (DMS). The program has been of value to local governments to ensure that credits were available for nutrient offsets for new development projects since sometime private banks run out of credits and would otherwise halt the availability of nutrient offsets for new development if the DMS program was not available to them.

Land Conservation for Nutrient Reduction Credit

Forrest Westall (UNRBA) first provided the UNRBA's view on why land conservation should be allowed as a means to generate nutrient reduction credit. The proposal considered would allow nutrient credit associated with a conservation easement to be calculated as the annual difference between the average annual loading rate allowed under the new development rules and the observed loading rate in undisturbed forest, resulting in a credit range between 0.4 and 1.2 lb/ac/yr. He explained that this would be an opportunity to incentivize the practice and that it is not a technical debate but a public policy issue. He also made the point that the reduction efficiencies of traditional stormwater BMPs can vary and diminish over time. In contrast, conservation is a passive practice that doesn't need upkeep and maintenance like engineered stormwater controls.

Jim Hawhee (DWR) summarized the Division's response that conservation easements (with no additional restoration) are not eligible for nutrient reduction credit under the current nutrient strategy rules. The Division does see the value in land conservation for many reasons including water quality protection, though not restoration. Conservation easements alone do not result in quantifiable load reductions from pre-existing conditions; their purpose is typically to maintain the character of the landscape and not to improve it. Jim provided conceptual models demonstrating the difference between an avoided future load, which the UNRBA proposal is based on, and a load actually reduced from baseline values, which is 0 for a conservation easement. Finally, he also noted the logical impossibility of proving these avoided loads. At the parcel scale the terms of the easement frustrate proof of a load avoided, and at the watershed scale conservation easements most likely redirect development pressure rather than limit it.

In response to the public policy considerations raised, Jim expressed staff's view that providing a nutrient reduction credit where no baseline reductions occur must come at the expense of other

load-reducing practices and ultimately water quality improvements in our impaired lakes. He expressed concerns about the integrity of the nutrient accounting system being developed. Finally, he raised concerns about limits on executive power to reinterpret the nutrient strategy rules and he discussed the legal standard by which such a decision would be evaluated.

Despite the decision not to offer nutrient credit for conservation easements, the department actively encourages and seeks to credit restoration activities on conserved land. The Division also still seeks to develop a credit for land reforestation. Finally, the Division is open to considering how forest preservation can be credited under an adjusted rule framework, though that might require evaluation and modeling of future land use scenarios. The recently funded UNC study may provide an avenue for that approach.

<u>Question & Comments</u>

- A board member asked for clarification on what was being asked of the board on this topic? Staff explained that the purpose of presentations was to provide an opportunity for the board to hear both perspectives of the proposal so they could better understand the issues and the rationale for DWR's decision to not award credit for the practice at this time.

- Concern was raised about clearing and grading a land and then seeking credit for reforesting it. This concern noted. DWR believes the baseline condition would need to be determined (was it already cleared in the baseline year?) to determine if restoration would be eligible for credit.

- A board member asked how would you know you're displacing an impact? Is it really a closed universe? Perhaps this should be brought into the rulemaking stakeholder process and talked about it then. Forrest responded that high priority areas may be considered by some as a closed universe, but also pointed to model uncertainty as an overall consideration when thinking about a closed system.

- A board member commented that the "interim" period of development in the Jordan Existing Development Rule is a big grey cloud. Just getting back to baseline levels of loading will be a challenge. Anything that can be done to incentives offsetting new development is a win in the watershed for the loading rates.

- Suggestion was made by a board member that perhaps there is another way to look at establishing credit for conservation that should be explored further. Current thinking assumes loading from forested land is constant, but a forest changes over time as it ages and goes through forest succession. With this comes changes in nutrient loading as the forest matures and takes up more nutrients. Maybe there is a way to determine a reduction credit taking that into account.

- No formal recommendation was made on the practice by the board. The UNRBA plans to finalize the practice document and explore their options for moving the practice forward.

Jordan Falls Stormwater Accounting Tool Revisions & Nutrient Measures Update
Trish D'Arconte (DWR) provided a presentation on the updated Jordan-Falls Stormwater Nutrient Accounting Tool in addition to providing a handout on the current status of individual nutrient credit measures under development.

A number of updates have been made to the Jordan-Falls Stormwater Nutrient Accounting Tool to add to its capabilities. These include things like recording information common to local government planning, determining delivery factors, buy down thresholds, and using an export format easily imported into databases. There were also a number of bugs and errors in the tool that have been addressed like fixing errors in catchment routing calculations and import / export functioning. Updates have also made the tool more user friendly like making it easier to paste data into the tool, warnings for land use area mismatch, and catchment routing checks for data entry errors, and a better overall summary sheet print layout. There will also be an updated user manual to go with the tool.

Trish also highlighted a few planned updates to the tool currently being worked on including a new suite of SCMs and updated EMCs that are currently being revised using new data. The tool will also be updated to with revised under/oversizing BMP capabilities using volume partitioning on recent NCSU study and additional new data.

Planned formal release of the updated tool is slated for late fall 2016. It will be coordinated with the DMELR SCM Crediting Document. Formal engineering review of the tool will be done by DEMLR and NCSU BAE in September.

<u>Questions & Comments</u>

- Rich commented that Trish has done an outstanding job addressing a number of issues with the tool resulting in a much improved product including adding significant functionality to the tool and streamlining the code to make future revisions much easier.

- A board member requested that a change log be provided once all the revisions to the tool are complete so others will have a reference for what has been changed since previous versions of the tool.

- It was pointed out that the UNRBA will be looking to consult with DWR on the updated tool as some of the accounting products the UNRBA is working on will utilize the tools outputs will need to be completed before December.

Wrap Up
After general comments were provided by the NSAB and DWR staff a brief dscussion was held concerning moving the next meeting date to September 9th to avoid the Labor Day Weekend. The board will be notified by email about the final meeting date. The meeting was the adjourned.

[Editor's note: Following the meeting DWR staff subsequently decided to move the next meeting date to September 9th. The board and interested parties were then notified of the new date via email.]

Future Meeting Dates

- Unless specifically rescheduled, the first Friday of each month, 9:30 - 12:00 at TJCOG.