Nutrient Scientific Advisory Board Meeting #31 Minutes

Friday, November 8, 2013
TJCOG- 4307 Emperor Blvd, Suite 110, Durham, NC 27703
9:30 am -12:00 pm

Attendees
Members: John Cox (& Michelle Woolfolk, alt), Trish D'Arconte, Andy McDaniel (& Brian Jacobson, alt), Josh Johnson, Peter Raabe (Grady McCallie's alt), Forrest Westall, Larry Band, David Phlegar, Charles Brown (Matt Flynn's alternate), Michael Layne

Non-Members: Andy Sachs (facilitator), Jason Robinson (DWR), Rich Gannon (DWR), Adugna Kebede (DWR), Cy Stober (PTRC), Heather Benson & Sarah Bruce(TJCCOG), Haywood Phthisic (LNBA), Melinda Clark & Steve Bristow (Wake Co), Tom Davis (Orange Co), Sandra Wilbur & Donald O'Toole (Durham), Sally Hoyt (UNC), Trevor Clements (TetraTech)

Agenda Topics
- Jordan Watershed Model Update
  - Presentation (TetraTech)
  - Use of Results and Peer Review (DWR)
- 205J Project Summary (PTRC, NSAB Subcommittee and DWR)
- Brief Updates
  - Jordan Rule Revision Update (DWR)
  - EPA Contractor Support Measures Toolbox (DWR)

Materials
- November Meeting Plan
- August Minutes
- TetraTech's Final Jordan Watershed Model Report (10/25/13) (linked below)

Convene
The meeting participants introduced themselves. The Board then approved the August meeting minutes. DWR asked that Trevor Clements from TetraTech review the section of the minutes that discusses the watershed model for accuracy.

Jordan Watershed Model Update
Trevor Clements of TetraTech gave a presentation that can be found on TJCOG's webpage.

TJCOG's Jordan Watershed Model webpage:
http://www.tjcog.org/jordan-jurisdictional-allocation-model-development.aspx

TetraTech's Model Report:
http://www.tjcog.org/Data/Sites/1/media/regional-planning/water-resources/docs/jordan_watershed_model_report_10-25-13_deliverable.pdf

PTRC's Presentation:
http://www.tjcog.org/Data/Sites/1/media/regional-planning/water-resources/docs/tt-jordan-watershed-project_nsab_11-8-13-pres.pdf

Trevor then provided clarifications per the following questions from Board members:

- Who did TetraTech work with to fix the errors that were found in the LSPC model?
    - TetraTech worked with the EPA's Center for Exposure Assessment Models (CEAM) and their contractor to address the errors.
    - A new version of the revised model was developed and titled accordingly.
- What time periods are represented by the "baseline period" and "existing period"?
    - The "baseline period" goes through 2001 and was developed from 1999 land use data. The "existing period" represents the time period from 2001 to 2010, and uses 2010 land use data. TetraTech suggested that the model be rerun again in 2017 to estimate additional existing loads for development from 2010 until 2017, when local governments are required to implement their Jordan New Development Stormwater Programs. This date will be different for local governments that voluntarily implement their new development programs earlier than the required date *[editor's note: see below for further discussion]*.
- Why does the model show nutrient net P deliveries over 100% in some instances?
    - Tt hypothesizes that's due to legacy sediment loads being pushed out of reservoirs during high flows.

Jason Robinson of DWR gave a brief overview of how the results of the model will be used and the process for the upcoming independent review:

- The model will be used to assign existing development baseline load allocations to each local government and state or federal entity represented in the model in this manner: the model's delivered N and P load estimates to each arm of the lake from each party's ED lands will be expressed as percentages of total NPS N and P loads at each lake arm, and those percentages will then be applied to the baseline NPS loads stated for each lake arm in the Jordan Purpose and Scope Rule (15A NCAC 02B .0262).
- To estimate load increases from interim (post-baseline, pre-new development rule) development for each party, we don't see how the model can be used directly for several reasons. At this point we're thinking that the J/F Tool may be the best option, applied to all interim development with the resulting loads reduced by a greenfield loading rate as described in the model program. Obviously this will require parties to gather up what data they have on interim development.
- DWR and TJCOG are in the process of establishing two independent reviews of the new watershed model. One will be a contract with one of the parties identified by the model subcommittee, and the other will be a watershed modeling expert with EPA Region IV. We've drafted review objectives to enable an effective process. In addition to these two reviews, DOT is also contracting its own review of the model.
- The Board then had the following discussion about using the results of the reviews:
    - Will EPA provide a model report?
        - We are in the process of working out the details.
    - The review contract needs more dates: when the review ends, when Tt does revisions, etc.
        - It's projected that the review will take two months, and TetraTech will then have 4 months to respond and make revisions to the model (TJCOG). This will be included in the objectives provided to the contractor.
        - DOT hopes for their review to be finished in February (DOT).

- TetraTech will need the review results before estimating how long the revisions may take if additional funds will be necessary to complete the work (Tt).
    - Depending on the cost, it will be decided if additional funding should be sought or if the objectives should be revised to reflect the existing funds (DWR).
- There was a lengthy discussion about how the results of the model, particularly how Table 5-16 in the report will be used to develop load reduction numbers for the affected parties. Alternatives to using the J/F Tool were identified that involved use of model results. DWR will evaluate the issue and bring options/recommendations back to a later Board meeting.

205J Projects Summary

Cy Stober of PTRC delivered a presentation on the final technical report of the Nutrient Load Reducing Measures 205j project. TetraTech assembled available data to characterize the nutrient reduction performances and associated variations for six new measures. The presentation can be found here:
http://portal.ncdenr.org/c/document_library/get_file?uuid=26bbbdae-fa58-4f8f-9b8f-95f78c5a2610&groupId=38364

Jason Robinson of DWR talked briefly about the other completed 205j project, which was an update to the Jordan/Falls Stormwater Accounting Tool: Stormwater Solutions and Services was contracted to improve the original accounting tool that was developed by NCSU's Biological and Agricultural Engineering Department. Two trainings for the tool were held at the Butner Town Hall on October 14th. Participants were asked to submit any questions or comments on the tool to DWR. A December 14th deadline for comments was set via a later email to participants. The training videos for the tool, developed by the contractor, have been converted into YouTube videos for easier viewing. DWR will consider any comments submitted on the Tool, make revisions, and develop a guidance document to be released with the final product in the upcoming year.

Brief Updates

Jason Robinson of DWR explained that a set of revised Jordan Rules were recently adopted by the Environmental Management Commission at their November 14th meeting. The Rules had been revised by DWR staff to incorporate changes mandated by six Session Laws that were introduced between 2009 and 2012. The rules will now need to go before the Rules Review Commission for their approval and are then required by the session laws to return to the General Assembly for review of homework *[editor's note: RRC staff later informed DWR that only one of the revised rules was required to go before the RRC]*.

Rich Gannon of DWR told the Board that EPA headquarters has tentatively agreed to provide some amount of technical assistance through a work order with TetraTech to assemble science and recommendations on additional nutrient-reducing measures, coordinated with the UNRBA contract.

Forrest Westall of the UNRBA gave a brief update on their developing contract with Cardno Entrix that will investigate additional nutrient-reducing measures: 12 of the 14 affected parties in Falls watershed have contributed funds for this project, including Raleigh providing half of LG funds.

Future Meeting Dates

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