Below are the main points/action items I noted from the December 3, 2013 Model Work Session:

Upcoming Model Work Session Schedule
- ***Provide written comments on the 12/04 AQUATOX model to DEQ by COB, December 11***
- Next meeting is December 19, 2013 at 10 a.m. (Thursday)

Decision Points (all of these decisions are "final" pending need to further reevaluate)
  o No new decisions points this week.

Action Item Updates
- Timeline and Model Calibration
    A. Attached in this package is the draft –final and corrected "2013_1204_ATX_LBR_Linked_ExistingConditions_DDS" AQUATOX model and input files.
    B. DEQ is also submiting the revised model package addressing calibration/accuracy issues to Jonathan Clough and Dick Park for their review along with questions from the modeling group brought up during today's meeting.
    C. The upcoming tentative schedule is:
        - Everyone is expected to provide comments to DEQ on the current model, input files, by COB December 11.
        - Jonathan Clough and Dick Park also to review the model and provide feedback by the December 11 date or as soon as practicable thereafter.
        - December 11 -19 DEQ to revise the model as appropriate.
        - December 19 – Model Work Session to discuss and finalize model set-up and calibration
    D. Questions/comments/concerns raised during the meeting:

    Tom
    1. Concerned that modeled periphyton may be overinflated in the lower reaches of the river, which also seems to correspond with phytoplankton values that appear rather higher in the lower reaches than observed data would suggest.
    Robbin
    1. Periphyton prediction appears closer in the upper half of the river but overpredicting in the lower segments: is it possible/appropriate to have two sets of biological rates (one for upper end, and one for lower end)?
    Ben
    1. What is driving the "spikiness" of the high nutrient diatoms (e.g. light limitation, etc)?
    2. What is the annual pattern for periphyton?
        a. Darcy addressed referencing the 2007 data and Dick Park's report.
    3. How to improve nutrient predictions in the upper reaches of the model?
    4. Periphyton blue-green light limitation and other variables?
        i. Darcy addressed that this will be corrected in the 12/04 model version.
    Michael
    1. Do we need to double check groundwater (function of nitrate overprediction)?
    2. Conway Gulch dates and data are misaligned for chlorophyll.

3. Segment 11 TSS data points are out of chronological order.
    a. Darcy agrees and will make adjustments made in the subsequent version.

Jack

1. The river is really 3 systems: 1) upper reservoir-influenced, 2) WWTF and urban influenced, and 3) Ag influenced

Troy

1. Ask Dick and Jonathan to review the N and P mass balance in the model to ensure it is functioning correctly (e.g. the MB Test output seemed to vary in each segment, except segment 13 where it remained constant)?

As always, please let me know what I missed or misinterpreted and thanks for your participation today! Cheers,
-Troy

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