

## Meeting Summary for the April 15, 2014 Model-Techno-Policy Workgroup:

### Discussion Items

- Workgroup objectives – apply the AQUATOX model toward developing TP targets and allocations to meet the periphyton target in the two impaired assessment units of the lower Boise River (Middleton to Indian Creek and Indian Creek to the Mouth).
- Documentation
  - Meeting summaries and decision points will be sent to group after each meeting and posted on the DEQ LBR WAG webpage
  - Model Revisions and documentation will be sent to group as completed and posted on the FTP site accessible via the DEQ LBR WAG webpage
  - QA/QC identified model data errata – 1) Eagle and Eckert pH data had been transposed and 2) USGS and City of Boise pH data at Glenwood had not been fully applied. Correcting these resulted in very similar, but slightly improved model performance:
    - Periphyton AME slightly improved:
      - 0203\_DDS daily AME = 52.6; rolling 15-day AME = 61.5
      - 0414\_TGS daily AME = 52.4; rolling 15-day AME = 59.5
    - Updated Model “2014\_0414\_ATX\_LBR\_Linked\_EC pH fix\_TGS.als”
    - Updated Import Spreadsheet “2014\_0414\_ATX\_LBR\_Linked\_EC pH fix\_TGS.als”
  - The Model Report will be updated, corrected, and posted, as appropriate, for this and subsequent data corrections (this is not a re-calibration). The Model Report will remain draft until concurrent completion of the TMDL in order to ensure all analyses in the report are consistent with the model findings and application in to the TMDL.
- Other environmental stressors of consideration that may influence development of the TP targets and allocations relative to the periphyton target...
  - Flow
  - Management of the river system
  - Habitat alteration
  - Point and nonpoint sources
  - Other
- As part of the weight of evidence approach, we also need to examine and identify influence of
  - Multiple lines evidence
  - Historical Conditions
  - Critical Conditions
- Refine the mean periphyton biomass target  $\leq 150 \text{ mg/m}^2$  for modeling purposes and simulations
  - Duration – proposed seasons to meet the target
    - Jan-Apr, May-Sept, Oct-Dec
    - Dec-Feb, Mar-May, June-Aug, Sept-Nov
    - Dec-Feb, Mar-Apr, May-Sept, Oct-Nov
  - Magnitude
    - Daily periphyton biomass  $\leq 150 \text{ mg/m}^2$  for  $\geq 50\%$  of days each season
    - Mean daily periphyton biomass  $\leq 150 \text{ mg/m}^2$  for each season
    - Upper bound – may or may not be necessary depending on the scenario results

- Frequency
  - Not to exceed periphyton target criteria more than 1 in 3 years
  - Through Monte Carlo application and or utilizing X years of previous flow data
- Location
  - Target applied on an assessment unit basis
  - Need to develop a weighting methodology to convert segments to AUs
    - AU 005\_06b begins within segment 9 and extends into segment 10
    - AU 005\_06 begins within segment 10 and extends through segment 13
- Scenarios to evaluate periphyton target and TP allocations
  - TP < 0.07 mg/L May-Sept
    - Need to develop approach for converting OP to TP
    - Emulate USGS mass balance results (e.g. 0.3, 0.07, 0.07)
  - TSS < 37% for completed TMDL
    - Identify application time frame, etc.
  - Considerable discussion about applying timelines to meet the target (e.g. NPDES will be assumed 10-year compliance period; what about nonpoint sources?)
    - Troy – Willing to identify potential timelines for nonpoint sources, recognizing:
      - 1) nonpoint sources are encouraged but not obligated to meet timelines established in TMDL, and will depend on available funding and willing partners,
      - 2) does not want timelines to depend on predictive forecasting for valley conditions (e.g. population growth, ag-urban conversion)
- Other
  - Michael – questions about the definitions/rationale for Projected vs. Design Capacity language
    - Troy – TMDL to look at river in current conditions along with design capacity of NPDES-permitted facilities. The term “Projected” was used in draft TMDL based on comments from EPA.

#### To do's for April 30 Meeting

- Everyone
  - Evaluate potential seasons in which to apply periphyton target. Provide recommendations and rationale behind them.
- Troy and Michael
  - Discuss Projected vs. Design Capacity language and approach for TMDL and modeling analyses.
  - Develop a weighting methodology to convert model results from:
    - Segments 9 and 10 to AU 005\_6b
    - Segments 10 through 13 to AU 005\_6
  - Develop methodology to convert OP to TP for modeling scenarios
    - Looking at BOD and other factors in conversion
- Robbin
  - Contact Tonya Dombrowski (ODEQ) to discuss exceedance criteria, rationale, and application in the SR-HC TMDL

**Next Workgroup Meeting**

Wednesday, April 30

10 a.m. to Noon

DEQ Boise Regional Office

Phone: 208-373-0101 Bridge 4

Login remotely via web at:

<https://www.rooms.hp.com/attend/default.aspx?key=EP4PUKEU9E>