April 2, Model Work Session #1 Summary

Participants: 11 total
Ben Cope (EPA), Chris Mebane & Alex Etheridge (USGS), Troy Smith & Josh Schultz (IDEQ); Tom Dupuis and Michael Kasch (HDR); Lee Van de Bogart (Caldwell), Matt Greg (B&C), Robbin/Kate (Boise)

Key Points:

1. IDEQ has selected AQUATOX as the TMDL tool to translate the instream periphyton Chla target (150 g/m2) to a TP concentration

2. IDEQ will be holding weekly modeling meetings (Tuesday 10 am – 12 pm) at least initially. IDEQ will "own" the model but is looking for help building it from the stakeholders (e.g. WAG, munis, USGS, EPA....)

3. AQUATOX Model

    o   For initial review, the group use the 4-segment LBR model recently updated by Dr. Richard Park. The segments are unlinked and will be used to reflect current conditions.
        ▪   Model will be refined, as necessary, based on the new data (flow, periphyton, USGS wq data…), calibration, appropriate number and length of segments (segments need to be similar top to bottom; critical segments important to TMDL, e.g. the usgs mass balance model showed summer uptake of 50 ug/l in the Middleton - Caldwell reach…)

    o   IDEQ will start developing model report/documentation (e.g. problem statement; document data inputs, boundary conditions, calibration, calibration adjustments…)

4. For the April 9 meeting:
    o   Summarize and evaluate the physical parameters and values in the 4-segment model (All; Kate Harris will do parameter table)
    o   Compile historical (pre-2012) and new (2012) USGS periphyton and pebble count data (Troy Smith & Alex Etheridge)
    o   Creating a map of the system identifying sampling locations, inputs, diversions, photos… for the 4 model segments (Troy Smith)
    o   Gather and provide recent hydrograph data at key locations (Troy Smith)
    o   Assess/modify the spreadsheets created by Ben Nydegger from 2008 LBR AQUATOX runs as data entry tool (Tom Dupuis & Michael Kasch).
    o   Identify FTP or other file sharing site/resource (Troy Smith).