Hi Everyone,

Below are the main points/action items I noted from the April 23 Model Work Session:

Next Model Work Session

Tuesday, April 3010 am – noon

DEQ State Office, Conference Room D

Go To Meeting: https://global.gotomeeting.com/join/689127197

Meeting ID: 689-127-197

Conference call: 1-208-373-0101 and choose Port 4

Decision Points

• **Previous** AQUATOX setup and calibration decisions being carried forward:

- 1. AQUATOX as a 9-segment linked model, to be refined as appropriate (on 4/23/13 Dick Park further recommended linking segments in order to accurately model the impact of phytoplankton transport from upstream).
- 2. Modeling period will be January 1, 2012 to April 30, 2013.
 - Jan 1 April 30, 2012, which will be subsequently modeled again for 2013, may be evaluated as an "initial spin-up period," depending on model performance.
- 3. Animals will not be included in the model set up and calibration.
- 4. Initial conditions should represent existing conditions to the extent possible and practicable.
- New AQUATOX setup and calibration decisions during April 23 meeting:
 - 1. Based on Dick Park's advice and preliminary "test case" presented during the meeting, the periphytic growth parameters modeled will include:
 - Periphytic High and Low Nutrient Diatoms
 - Periphytic greens
 - Potentially include Cladophora and Periphytic Cyanobacteria depending on model performance and goodness-of-fit
 - 2. The previous 13-segment model set-up will be used as the basis to most efficiently maintain, aggregate, and split segments to develop the appropriate 9-segment version.
 - 3. At this time, the tributaries will be treated as inputs to each segment, and not individual segments. However, questions about how to address potential phytoplankton inputs from these sources will need to be further addressed.
 - 4. Based on 1997 vs. 2011 pebble count data and Dorene MacCoy's opinion about the river conditions, the previously-used pebble count/physical properties for Eckert and Glenwood will be used to represent current conditions. However, Middleton, Caldwell, and Parma reaches have likely changed, probably necessitating a revised assessment.
 - 5. WWTF (and other point source data) will be incorporated into the model even if discharging to LBR tributaries. This will help us to evaluate scenarios with differing point source input levels into the future, regardless of direct discharge location.

- Michael
 - 1. Begin working to convert the 13-segment model to a 9-segment version.
- Gather WWTF and Point-Source Data (to coordinate with Kate), including temperature, pH, ammonia, BOD, TSS, TP, flow, etc. for at least the past few years, or further (e.g. ~1998 if possible).
 - 1. Matt Nampa WWTF
 - 2. Tom/Michael Meridian WWTF
 - 3. Lee Caldwell
 - 4. Kate Boise
 - 5. Troy Middleton, Sorrento, Eagle Fish Hatchery (I'll also check on Caldwell Housing, Eagle, Greenleaf, Kuna, Notus, Star, Wilder...any others I'm missing??)
- Tom
 - 1. Review the pebble count data and confirm how it was previously normalized for the model.
- Dick
 - 1. Said he would also verify how normalizing functions in the model and how it relates to periphyton averaging throughout a segment, etc.
- Kate and Troy
 - 1. Look to develop/implement an assessment protocol for Middleton, Caldwell, and Parma segments to assist with segment normalizing.

Please let me know what I missed or misinterpreted. As always, thanks for your participation today, and in between sessions! Cheers,
-Troy

Troy G. Smith
Watershed Coordinator
DEQ Boise Regional Office
1445 N. Orchard St.
Boise, Idaho 83706
208-373-0434
Troy.Smith@deq.idaho.gov