

Questions/Action Items for AQUATOX Model Calibration

Status

- 13-Segment Model is functional and runs
- Water balance seems not unreasonable but needs to be checked.
- Majority of water data updated with information, following questions remain.

Questions/Action Items

Water Quantity

- COB Lander and West estimated for April 2013 as average of flow 1/1/12 through 4/1/13
 - **Can Kate or someone from City of Boise provide this data for 4/1/13 through 4/30/13?**
- ✓ IDFG Eagle Fish Hatchery uses original Aquatox flow of 32 cfs.
 - ~~DEQ working on compiling point source data~~ Existing data has been collected and provided.
- Fifteenmile Creek flow? Set at constant 100 cfs. Need to review available data for 2012 flows.
 - **Alex's estimation: too high - was 92 cfs in Aug (irrigation season) and 31 cfs in late Oct, 17 cfs in March**
- Middleton WWTF flow? Set at constant 0.8 cfs.
 - **Troy working on compiling point source data**
- Caldwell WWTF flow? Set at constant 12.2 cfs.
 - ~~DEQ working on compiling point source data~~ – Caldwell has provided some data, Troy is requesting additional data, if available.
- Indian Creek flow? Set at constant 25 cfs. Need to review available data for 2012 flows.
 - **Riverside/City of Caldwell flow data available from 11/10/13 through 9/17/13, Troy is requesting data through 4/30/13, if available.**
- Zero unaccounted/groundwater flow into Segment 12, all into Segment 13, don't know if should be split.
 - **Darcy to look at USGS 2012 information for insights on assigning unaccounted flows between Segment 12 and 13.**
 - **Darcy will be utilizing a hydrolab during the LBR data collection on 6/20 and 6/21 which may shed additional light on this.**
- Groundwater inputs for all unaccounted flows. No other estimates used for groundwater, such as Schmidt estimates used previously. Rely on USGS information rather than Schmidt. No change.
 - **Actions needed?**

Water Quality

- Only water quality data see for model simulation period are the following. Are there other data for the period? Where? **All - compare historical values/averages to modeled periods to check for appropriate interpolation between sample points:**
 - 8/21/12
 - 10/29/12
 - 3/4/13
 - Michael asked Kate and Kate replied; have not updated to her response.
- Have not seen water column Chlorophyll a data for the model simulation period. Are data available? Where?
 - Michael asked Kate and Kate replied; have not updated to her response. **Troy will compare this data with the input file and coordinate with Michael.**
- What is zMean input? Text includes the following. Need to update? Need to look at other spreadsheets? (**Darcy et al. is/will be looking at this as part of the calibration exercise**)
 - Uses RAP Depth Discharge 1-98 to 9-02
 - Depth Discharge calibration.xls
 - Probably should look at stage data and build depth discharge spreadsheet.
- Need to update Shade? Have data/basis? Set at zero, maintain for now. **No change.**
 - **Darcy/Troy to see if Mark Shumar (DEQ) can perform basic shade analysis**
- Most to all of the tribis do not have BOD data, need?
 - Michael asked Kate and Kate replied; have not updated to her response. **Calibration will likely help determine the need for this data.**
- ✓ IDFG Eagle Fish Hatchery WQ data?
 - ~~DEQ working on compiling point source data~~ Existing data has been provided.
- Middleton WWTF data? Text includes Data from Basil Tupy, Holliday Engineering
 - **Troy working on compiling point source data**
- Not sure have data for NMD and SMD (N. Midd. Drain and S. Midd. Drain)? **Troy to investigate.**
- Not sure have data for Mason Drain? **Troy to investigate.**
- Not sure have data for Hartley Drain? **Troy to investigate.**
 - Michael asked Kate and Kate replied; have not updated to her response.
- Caldwell WWTF data?
 - **Caldwell has provided some data, Troy is requesting additional data, if available.**
- Unclear what data goes into some of the Segment numbers and why?
 - **How to deal with unnamed/unidentified inputs?**
- ~~Groundwater~~ Unaccounted flows water quality unchanged
 - **Further investigation in calibration process**

Initial Conditions

- Not updated
 - Available for view in AQUATOX