

Barr Lake/Milton Reservoir Watershed Association
 BMW Technical Committee Meeting
 January 26, 2017 9:00am – 11:00am
 Metro Wastewater Reclamation, Denver

Draft Minutes

Board Attendance:

Laurie Rink– FRICO (phone)
 Steve Lundt – Metro
 Shelley Stanley – BDCWA
 Michelle Seubert - CPW

Public Attendance:

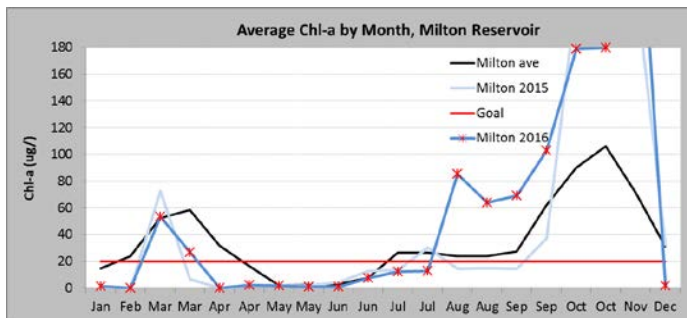
Katie Fendel - LRE
 Elaine Hassinger – TriCounty Health
 Linda Chynoweth – Aurora
 James Dorsch - Metro

2016 Water Quality Summary – Steve walked the committee through data findings for 2016 by analyte starting with chlorophyll a. Upon review, summaries for each analyte will be reported similarly to 2015 and the reports posted to the web page. Below is a summary of findings:

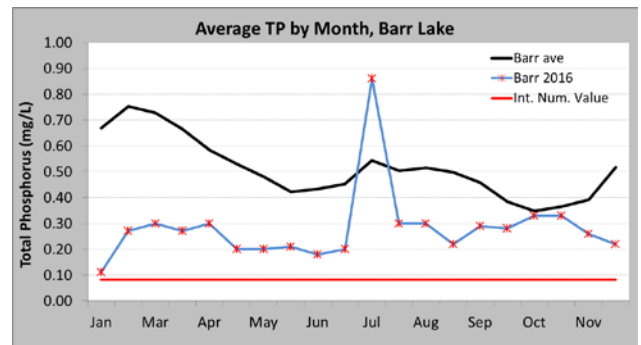
- Chlorophyll showed an unusual pattern in Milton in the Fall (see graph 1). Higher concentrations are believed to be a result of low water level. A reading of 338ppb was recorded in November. The committee had the following suggestions:
 - Conduct outlier test and footnote in report
 - Decide whether to include based on use classification – November is not typically included in recreation season
 - Flag and footnote in report indicating that the data point is not representative
- DO was met in both Barr and Milton in 2016. The committee was appreciative of the data formatting, as it provided an easy way to track water level, DO concentration and days of exceedance simultaneously.
- Barr did not meet the pH standard in 2016. Milton did meet the standard. Elevated pH is evident under the ice indicating presence of algal growth.
- July 12, 2016 TP sample is suspicious, higher than expected (see graph 2)). Same process as outlined under bullet 1 will be followed. Discussion on whether spike was caused by internal loading – i.e. P release from sediments under anoxic conditions. No corresponding chla spike was noted therefore internal loading source is not likely.
- A reading of 1.12ppm TP was observed in Milton in December. Milton was being refilled with water from the S. Platte River at the time.

Steve will update spreadsheet, SP River data, and summaries. Committee to review.

Graph 1



Graph 2



Stormwater Station at Burlington Headgate – Installation of an Event Mean Concentration (EMC) autosampler immediately upstream of the Burlington Headgate is being explored. The concept is to gather pre and post construction data on stormwater water quality originating from the urban corridor. The City and County of Denver is constructing multiple improvements along the S. Platte as well as to areas contributing to the River corridor. Urban Drainage currently maintains a system of EMC stations throughout Denver and Aurora. The system has a long record of data (1990's? to date). Cost estimates are \$20K for instrumentation and installation, \$7.5K annual maintenance, Metro is willing to run samples. **Steve to arrange meeting with Joint Task Force to discuss establishing site, instrumentation, installation, and maintenance.** If approved by the Task Force, the station would belong to Urban Drainage, BMW may decide to donate to maintenance. The USGS gage located at 64th Ave to be used for flow with inflows/outflows between the gage and the monitoring station estimated through modeling or mass balance.

CU-Denver Community Based Project – Dr. Christy Briles approached Steve regarding the possibility of her 13 Master's students performing field work in the watershed. Her students reviewed the Adaptive Management Plan and settled on 3 projects 1) Phosphorus control in source water, 2) Phosphorus in Barr lake sediment (Paleo study), and 3) GIS mapping exercise related to item #1. Students in the sediment group have already taken a 90cm in length core through the ice of Barr Lake. Due to expense, Pb dating or sediment will not be possible. Students may also evaluate core for diatoms or other indicators of relative age. Source water group will be sampling lawns for P. Group will be sampling older lawns, new installs, and Denver Parks which have not used P containing fertilizers for multiple years. The GIS group will be mapping lawn P "hot spots" and mapping where runoff might drain to.

Milton Reservoir Recreational Changes – Haven's Sporting Club is under contract with FRICO for leasing recreational rights at Milton. The Club is considering expanding recreational used to camping, wedding receptions, dog training, water skiing among other uses. There was considerable discussion on who pays for the expanded water quality monitoring. The FRICO lease may indicate that the Club is responsible for determining the adequacy of water quality conditions for their own intended uses. Laurie will find out more from FRICO on contract details once the agreement is finalized.

EPA WQ Criteria HABS Advisories – There is a new HAB water quality criteria for recreational uses that was issued by EPA. There is no way to know how long it will be before the draft criteria are issued in final form. Michelle sampled Barr Lake multiple times last year with the Abraxis kit. At Barr there is a disconnect between its recreational class and the types of recreation that is actually allowed, i.e. there is no swim beach or dog swimming allowed at Barr but canoeing and paddle boarding is allowed. There was discussion on the pros and cons of sampling when it is not required. A 360⁰ camera post has been installed at the boat ramp. Photos can be uploaded to a web site. Good way to get general information regarding lake elevation, color, and seasonal changes. There was discussion regarding carp and how to decrease their numbers. Installation of a seine in the ditch, providing a carp only dumpster on site, and continuing with annual CPW removal were all discussed. Weight of fish and an estimate of P removed is possible with dumpster, smell and cost to empty are a concern.

Next meeting: March 23, 2017