

Barr Lake/Milton Reservoir Watershed Association

Technical Committee Meeting

Thursday, November 21st, 2013 (9:00am – 11:00pm – more or less)

Metro Wastewater Reclamation District, Denver

Draft MINUTES

In attendance:

Steve Lundt – Metro Wastewater

Laurie Rink –FRICO

Barbara Biggs – Metro Wastewater

Shelley Stanley – BDCWA

Jordan Parman – Metro

John Stednick – CSU

Kelly DiNatale – United (phone)

Linda Chynoweth – Aurora (phone)

John Hendrick – Centennial (phone)

Scott Edgar – FRICO

Rick Clark – ECCV

Al Polonsky – Denver Environmental Health

Guests:

Amy Conklin – BMW

- 1. FRICO Flow Management Review (Scott Edgar)** – Scott Edgar presented an overview of the FRICO system using an interactive Google map. The water rights in the system were purchased between 1864 and 2007 with their water year running from Nov 1 to Oct 31. There are times when demand is limiting their system. Barbara Biggs and Scott explained the history of the Hite plant and the Burlington Ditch, including the pumps that can feed the ditch with Metro's effluent. The pumps were operational until the mid-90s when the use of the pumps was altered to prevent effluent from entering the ditch when Thornton was conveying their water in the Burlington Ditch. The pumps were built in the 1970s and needed upgrading but the recent flooding in Sand Creek has completely destroyed the pipeline into the pumps. Discussions are ongoing about what to do with the pumps.

Barbara Biggs explained that the first round of water quality modeling conducted as part of the TMDL included the pumps operating as they had; when sometimes there would be effluent in the Burlington Ditch. The new round of water quality modeling will include the pumps not operating and only water from the South Platte River being carried in the Ditch.

Moving downstream on the system, Scott explained that the Bebee Pipeline empties into the system just before the O'Brien Canal empties into Barr Lake. South Adams County has augmentation wells they use sometimes to put water into the O'Brien.

One of the canals downstream from Barr Lake is the Bebee canal that conveys water to Milton Reservoir. Another ditch comes off the South Platte River and also feeds Milton; the Platte Valley canal. It is about 20 linear miles from either Barr Lake or the river to reach Milton.

It can take between 12 and 36 hours for diversion water to reach Barr Lake with the average being 20 hours. Based on water quality longitudinal studies of the water in the canals, the water quality in the Burlington is pretty consistent, indicating that there aren't many contaminant source to the Burlington Ditch. The water quality in the Platte Valley canal is

much more variable, indicating that there may be nonpoint contaminant sources along that canal. Water in Barr Lake is used predominantly for agricultural uses.

John Stednick commented that Nitrogen loads may decrease before Phosphorus loads, based on the timing of the schedules to increase effluent treatment. If that happens, blue-green algae blooms may increase before they decrease because the blue-green algae can fix Nitrogen from the atmosphere where the green algae can't.

FRICO is open to the concept of in-canal treatment because they are in favor of improving the water quality in Barr Lake. They are concerned that if the alum precipitate migrates into the lake, it will decrease Barr Lake's capacity. Dredging at Barr Lake would be prohibitively expensive.

2. **Modeling Update** – Steve talked with Marcia Greenblatt at Integral and they aren't ready to present their findings yet, but Marcia is moving to Denver area and she will present to us in person in January. She'll meet with Ken Wagner to get his input before then.
3. **In-Canal Treatment Proposal** Steve and Laurie are working on finalizing the contract with ERD to conduct a feasibility study of in-canal treatment. The BMW Board will review, and hopefully, approve the contract on December 10th. Harvey Harper, with ERD, will come out in January for a kick-off meeting. The work should be done next September. The Tuesday Jan 28th Board meeting may be combined with kick-off meeting.
4. **Carp Removal Plan** - Paul Winkle will be coming with his crew in August to conduct the harvest. Steve is beginning to write up plan to describe process. There are some other lakes that can serve as examples.

Steve is also working with limnocorral company to build new corrals in preparation for another summer of experiments. The buffered alum doesn't affect alkalinity in the corrals providing a truer assessment of the pH to TP relationship.

John Slattery from Northglenn contacted Steve about our aeration system. BMW would consider sharing or selling the system to Northglenn.

5. **Information/Education Plan for 2014** – A draft of the plan is in process and will have some technical aspects that this group will need to review.
6. **Next Meeting**
 - a. Tech. Committee: **January 23, 9:00am to 11:00am at Metro**