

**Barr Lake/Milton Reservoir Watershed Association**  
**Technical Committee Meeting**  
**Thursday May 26<sup>th</sup>, 2022 (9:00am – 10:00am)**  
Virtual

**Draft MINUTES**

**In attendance:**

Curt Bauers – FRICO  
Brad Cox – Denver  
John Stednick – FRICO  
Jim Dorsch - Metro  
Bethany Green – Aurora  
Kelly DiNatale – United

Ilana Crankshaw – ECCV

**Guests:**

Amy Conklin – Coordinator  
Samantha Miller - Coordinato

**Approve January Meeting Minutes** – The minutes were approved by acclimation pending confirmation of changes by Curt.

**First, Second and Third Creek Loads** – There is increasing urban development in the area drained by the creeks. As the point sources decrease their loading the relative importance of the smaller loads will increase. CSU has been pioneering building autosamplers really cheaply. Curt wondered about getting access to the Rocky Mountain Arsenal where First Creek is located. John took the average of the last three (3) years to do load calculations. The USGS water quality samples weren't linked to any dates. The flow data came from FRICO's accounting sheets. Site access is problematic. There are lots of locked gates, which would increase the time required when sampling would occur.

We'd need a base flow and stormflows. It's probably worth getting some specific data unless we think the rest of the Denver stormwater data would be enough to extrapolate from. First Creek seems to have the most flow. USGS has a continuous gage on First Creek. South Adams County Water and Sanitation District was interested in calculating Lawn Irrigation Return Flows (LIRFs) from the creeks. **Curt** will reach out to S. Adams to see if they continued to collect data. A few years ago there wasn't any LIRF data on First, Second or Third Creeks.

Curt will look into the possibility of collecting grab samples at First Creek to try to determine base flows. We could try to catch a storm or post-storm event to try to evaluate John's calculation. Steve may be able to grab a few samples as well. Third Creek was easy enough to access. Second Creek has access problems. First Creek has serious access problems. Access from the highway was dangerous. There was a back road access but there was weird debris coming down the creek as well. **Steve** will commit to getting some grab samples and report back to the group.

Steve shared profile data from the lakes he collected yesterday. The lakes are very low, looking similar to July conditions with the water level dropping quickly. The ditch got up to 600 cubic feet per second (cfs) briefly during last weekend's storms. pH is looking good. Dissolved Oxygen (DO) is still above 5 mg/l. Conductivity is pretty high for this time of year. It could be caused by the low water level. Barr is at 74% capacity. pH is lower at Milton.

Kelly talked about United flows. ECCV will probably bring in a few cfs this summer. Normally more water will be brought in, depending on precipitation. Different water rights are in priority and determine how much water makes it into Barr or Milton. Some water will need to come in for fracking and recharge, probably around 4,000 acre-feet (AF) between now and October. A combination of BB Pipeline and O'Brian canals are being collected. What Curt is collecting is from the BB pipeline and Burlington canal as well as First, Second and Third Creeks. It would be good to collect some water quality data from United's inputs. There are about 3,600 AF of storage in some cells near E-470 and 85. They are inputs into the BB pipeline. They would be good to sample. The best place to collect samples would probably be at the pump station. **Kelly** will talk to United to ascertain where the best sampling point might be.

The samples can be analyzed by Metro if Steve collects them. **Steve** will try to collect some samples as soon as the sampling point can be determined. The water in the United ponds is Metro's only input to Barr Lake now that the Burlington pumps are not operational. Last year the input from the BB Pipeline was about 6,000 AF. Right now it's at about 3,500 AF. Metro has some sampling data at 124<sup>th</sup> where they analyze for Phosphorus. It would be nice for BMW Stakeholders to understand how the FRICO, United and other water sources interact with Barr Lake. Maybe we could do that for the Feb. Stakeholders meeting?

**Kelly** will have his staff look at the water quality data in the Data Sharing Network (DSN). Kelly thinks a review of the water quality data could help with recalibrating the watershed model. Kelly and his staff can talk a bit during the watershed tour in June then have a more general presentation in February about water quality and quantity going into Barr and Milton. Someone from FRICO could talk, generally, about water movement into and out of Milton and from the Burlington Headgate down to Milton. Steve has some visual aids he can bring. **June 28<sup>th</sup> will be the day of the watershed tour.**

**Internal Loading Discussion** –Part of the Implementation Plan includes reducing internal loading in the lake. Previous Technical Committees have developed a list of General Management Options within the Lakes and Reservoirs. Steve thinks that we can better refine the amount of internal loading. Since 2014 a lot of biomanipulation has been done with over 9,000 pounds of carp being removed. The committee should keep working on the list of internal loading control options. Ken Wagner evaluated internal loading control options and recommended aeration. There may be some gains from in canal treatment in controlling internal loading. The Technical Committee needs to make a recommendation to the board and let them grapple with how to implement solutions.

Nutrient Inactivation is another option worth considering based on Aurora's success at Quincy Reservoir. Denver has implemented some treatment on their lakes as well. Bear Creek may be looking at different treatment options for Bear Creek Lake nutrient inactivation. Dredging is very expensive but with the lakes drying up every summer, there may be some opportunities.

**2021 Water Quality Summary** – Steve has prepared his water quality summaries that he would appreciate input on. **Steve** will send out his documents for review.

### **Next Meeting**

Tech. Committee: July 28, 2022 (Hybrid – virtual and at South Platte Renew)