



BARR MILTON
Watershed Association

**Barr Lake/Milton Reservoir Watershed Association
Tech Committee Meeting
May 25th, 2023, 9:00 – 11:00 am
Virtual Only**

Tech Committee Meeting Minutes

Attendance

Erin Sandos – South Platte Renew (SPR)
Steve Lundt – Metro Wastewater Recovery
Kelly DiNatale – United Water & San.
Chris Newton - ECCV
Curt Bauers – FRICO
Brad Cox – City & County of Denver
Caleb Owen – City of Thornton
John Stednick – FRICO

Guests:

Samantha Miller – BMW Coordinator

Approval of March Meeting Minutes – The March minutes were unanimously approved without edits.

pH study monitoring

- A. Curt and John proposed a new option for continuous monitoring through Colorado Pond & Lake. This option was proposed in order to collect data from a wider temporal range, which would represent daily/hourly fluctuations that aren't currently accounted for.
- There have been some disparities in the data collected between Curt/FRICO and Steve/Metro, likely due to the timing of sampling, which happens at different times between the two entities.
 - Colorado Pond & Lake (supplies fish and does water quality monitoring) - Collected data is uploaded into the Hydroview platform and is accessible by anyone. Data would be collected somewhere midpoint within reservoir via one or possibly two buoy(s); this will act as a more homogeneous unit. The company has a rep in Denver, so deployment, maintenance, and calibration/recalibration should be easy and response time short.
 - The question of whether collecting data during winter/ice-over period is of any value. The current proposal is to contract for a 24-month deployment spread over 3 years.
 - CO Pond & Lake will rent the equipment and then charge us at cost – \$2k/month.
 - There is availability for data visualization through the Hydroview platform; it's user-friendly and you can scroll temporally and choose your data format output. You can also download data offline, which is of interest as backup.
 - There is also the opportunity to put flow data into the system. Hydroview allows for depth to be recorded for measurements, so the question was posed as to why we can't put stage for the lake in it or other measures. This could be an option and we could explore this with them.

- BMW still has the unanswered question of inputting previously collected data. It's unknown if this is possible right now, but is something we'd like to also explore with them.
- The Tech Committee decided to form a subcommittee to work on the proposal and move forward.
- It should be noted that CO Pond & lake is doing similar work for other entities.
- Steve has some continuous data for different seasons via probe; spring was most interesting because of the transition.
 - A. Results have shown that shoreline sampling with a pH probe in the shallow water/sand at shoreline versus 2meters out don't correlate well.
- There is still the question of if we can bring in our grab samples to the platform as well, which is a follow-up from our many conversations about data visualization (Lake Tech is another option, but it's proprietary and it could be redundant and an extra cost, but could be explored later; not included with Hydroview).
 - A. There was a comment to shy away from any proprietary software; software comes and goes and companies lose interest.
- There was a lot of interest in having CO Lake & Pond come to a board meeting so we can preview the software. They're super busy right now, but John can contact them and ask.
- John, Curt, Steve & Chris will form a subcommittee and work with the company to develop a proposal to send to the Tech Committee to review (via email, not a scheduled meeting). The Tech Committee will then schedule a presentation to the board for approving the expenditure sooner rather than later.

Actions:

- **John, Curt, Steve and Chris form subcommittee** – work with CO Lake & Pond to develop a proposal and send to TC to review. Then schedule a presentation to entire board for final approval.

Notification process – spills

- B. There's a lot of inconsistency for who/what is notified for spills. This has been an ongoing discussion and there was a long discussion during the meeting about the best path forward.
 - There was a suggestion to send CDPHE a clear request outlining who needs to be notified for spills, including a contact list that includes all of the major drinking water entities.
 - Suncor is top of the list for incidents, and it was asked if we should focus primarily on their contact list/process.
 - Kelly suggested an in-person meeting with CDPHE where they would bring anyone involved and BMW would bring our email distribution list.
 - Another proposed solution was to talk to both Suncor and CDPHE to see who can help take the BMW stakeholder spill notification list and contact those people for spills specifically.
 - The final conclusion to the discussion was to hold off on creating a notification list for BMW (possibly just our board member list) and table the discussion until further meetings.

Actions:

- **Not assigned/future action (keep on discussion list for future meetings)** - Reach out to CDPHE (find right contact) to express our concerns and ask about options for notification list for spills/downstream users.

Real-time algae monitoring

- C. Chris Newton proposed a sensor buoy for real-time algae monitoring, which includes 6 parameters that are uploaded to a data platform.

- This system creates actionable alerts and uploads real-time data.
- The proposed package includes three maintenance events annually with a 3-yr warranty. One sensor is \$10k (lifetime).
- The sensor does not collect pH data, but could be useful to get breakdown of Chl-A.
- It was decided to include Chris in the subcommittee for CO Pond & Lake to see if we can wrap this sensor in with the other monitoring package.
- The Tech Committee is interested in having these folks demo and present to board.

Actions:

- **Chris** - send out slides to Tech Committee for review, and contact the company to see about a demo for the board/TC.

- D. Data compilation – review methods for compiling flow/nutrient data (e.g. Beebe Canal) to quantify phosphorus loads – **moved to July meeting agenda**
- E. Review in-canal treatment pilot quote – **moved to July meeting agenda**

Actions:

- **Steve** - reach out to them and get an updated quote (existing is 2016)

- F. Site-specific standards discussion – what data/analyses would be required to pursue a S.S. standard for the recently adopted lakes nutrients criteria?

Next Meeting

- Tech. Committee: Thursday, July 27th, 9:00 – 11:00 AM (**tentative in person in Boulder**)
- Review available data for visualization tool
- Review methods for compiling flow data (e.g. Beebe Canal)