

Barr Lake/Milton Reservoir Watershed Association
 BMW Board Retreat
 December 1st, 2020 9:00 am – Noon
 Zoom

Minutes

Board Attendance:

Steve Lundt – Metro
 Dan DeLaughter– South Platte Renew
 Sarah Reeves -SPCURE
 Erin Jenkins – S. P. Renew
 Chris Douglass – ECCV
 Curt Bauers – FRICO
 Brad Cox – Denver
 James Boswell (aka Jessica) – Thornton

Kelly DiNatale – United Water
 Julie Tinetti – Centennial
 Katie Koplitz - Metro

Public Attendance:

Amy Conklin – BMW Coordinator
 Jorge Figueroa – El Laboratorio
 Paul Hellmund – El Laboratorio
 Shane Wright – Lincoln Hills Cares

Amy worked her magic and got the virtual meeting started.

Introductions and Burrito eating – Sadly, no burritos. Everyone introduced themselves.

Implementation Plan (IP) Discussion continued (2nd reading) – Erin updated the group on the latest efforts on the plan. The committee added updated graphs and expanded the comparison of Regulations 81 and 35 to the IP and TMDL. The figures showing the schedules for wastewater treatment plant upgrades was completed as well as a table on stormwater Best Management Practices (BMP). More updates are coming later.

The next steps include completing a few more updates. Steve suggested that the plan be approved today with the understanding that the document will be revised regularly. It can be reviewed each year. There was a thumbs up vote on approving the plan with edits. **Curt** said that John Stednick had some questions he would send to the committee to be included in those final edits.

Water Quality Summary – Steve presented his not quite complete results from 2020. He shared that Barr Lake has changed a lot since he started sampling. The water quality is getting better. He continues to notice that the quantity of water in the lakes is a strong determinant of the water quality. During the summer growing season, no water came into the lakes. Both lakes should start re-filling soon. FRICO will be increasing storage depth behind the dam at Barr Lake by about 7 inches. Milton was at about average depth but got really low due to the ongoing drought. **Steve** will be trying to track the additional loading from the additional water. **Michelle** will follow up with FRICO to determine the impacts to infrastructure in the park.

For the first time since Steve has been monitoring, there was ice on Milton in October. Across the country there is research on temperature regimes and climate change. Both water bodies met temperature standards.

There are some gaps in springtime water quality data due to the coronavirus pandemic shutting down analytical laboratories. The results show that Chlorophyll a (Chlor-a) levels have shifted. There are much higher Chlor a levels in the fall, winter and spring due to blooms of diatom algae. When analyzing the data for Chlor a, Steve prefers to look at the median rather than the

average as it's more reflective of actual measurements. The increased Chlor a levels could be impacting pH and dissolved oxygen (DO) levels. Neither lake would have met Chlor a standards this year if they had been in place.

The pH standard was attained in Barr Lake but not Milton Reservoir. pH is not correlating with Chlor a the way we expected. pH stayed low even when Chlor a was high. Steve suspects that reductions in alkalinity levels are the cause. Alkalinity studies are included as suggested efforts in the IP update. Water quality is getting better and the lakes look different every year.

He included a summary from the stormwater auto sampler. The sampler is being moved onto Metro's property and will take measurements from Burlington Canal. It will be moved back to the South Platte River when bridge construction at the National Western Complex is complete in about another year. The BB pipeline is being used more than usual this year. It is downstream of Metro's discharge and diverts water out of the South Platte River into the Burlington Canal. Use of the BB pipeline directly connects Metro's discharge to water quality in Barr Lake. And eventually Metro pumping will return and do the same thing.

Phosphorus (P) loads from First, Second and Third Creek can be significant if there is a lot of stormwater. This year, there were only five storm events that GEI could use to capture data from our auto sampler.

Budget Discussion continued –

- **Amy and Chris** reported that work to move BMW accounts to a new bank continues. They will keep the Board informed.
- **MSU internship** – MSU has increased the hourly rate for their interns to \$14.77 per hour working towards \$17 per hour, in compliance with the City of Denver's minimum wage requirements. There was a Thumbs Up vote to increase the hourly wage of the MSU interns to \$17/hour. **Amy** will follow up with Tom Cech and Chris to get a new invoice and make sure Jennie is informed.
- Colorado Monitoring Framework (CMF) membership - BMW has been a member of this group since it's inception. They have sent us an **invoice for membership dues of \$5,402.84**. Sarah reported that CMF has worked hard on PFAS and Reg. 85 preparation focusing on agricultural impacts. They will be focusing on Chlor a standards next which may be a big issue in streams at the 2022 hearing. They are working to integrate the science of chlorophyll in streams into the regulatory process. Chlor a levels in streams is dependent on more than nutrients. A subset of lakes will also be included in the 2022 hearing. There is likely to be a lot of overlap with all in-lake Chlor a standards that will be promulgated as part of the 2027 hearing. CMF responds to what the members want and need. What happens in stream standards will trickle into lake standards. Barr and Milton won't be directly impacted until 2027 but the 2022 hearings will influence standards proposed in the 2027 hearings. CMF has been able to respond to members' needs in a timely manner and could be very helpful in building a coalition for the legislative effort to restrict P in lawn fertilizer. The coalition built during the PFAs issue would be a good starting point.

Steve reported that he spoke with the Water Quality Control Division staff and was told that they were unwilling to lead the legislative effort on banning P in fertilizers but would like to assist us with the effort.

There was a Thumbs up vote for BMW to remain a member of CMF.

- Grants –
 - BMW has been approached by El Laboratorio to apply for a **319 grant** for public outreach and education that builds on past BMW efforts. The grant is **due January 4th, 2021**. Amy, Jorge, Shane and Paul presented the components of the grant that include the following components. **Rain Garden** installations at 3 to 9 sites with control sites. The precise number will be determined as the cost estimates are refined. **Stream Restoration** along **First Creek** which drains into the Burlington Canal. CU Denver grad students completed an analysis of stream segments that would be good candidates for stream restoration. A **dog poo awareness campaign** building on our poop emoji balloon and (maybe) the dog poo lamp.

The Board discussed some of the complexities of the effort including the conflict with MS4 permit requirements. Since the grant money would come from CDPHE, there is a constraint that none of the efforts overlap with MS4 permit requirements. The work would need to be done on federal land, such as the Rocky Mountain Arsenal National Wildlife Refuge and in unincorporated parts of Adams county that are outside the MS4 permitted area.

The primary goal of the grant effort is to expose underserved youth to career opportunities in the technology, environmental and communications fields. The work can also help BMW build a coalition of partners who can work with BMW on our priorities and the work should reduce P loading in the BMW watershed. After answering a number of questions including those about where the 40% match money would come from and how liability issues would be handled, and thanking the Board for their time and consideration, Jorge, Shane and Paul left the meeting.

The Board continued to discuss the issue extensively, concluding that BMW is intrigued by the work and would like to participate in the instructional and implementation parts of the project but didn't want to administer the grant. BMW would be open to discussing acting as a fiscal agent if El Laboratorio wanted to apply for the grant but BMW does not want to be the applicant. Steve shared the Project Implementation Plan BMW submitted for the 319 grants they received in the early 2000s. He and Sarah remembered the grant administration as dominating the work of the organization. It wasn't something BMW would want to take on again without stronger motivation.

The board expressed a strong consensus that we need more diversity in the water profession and helping expose youth, as this project proposes, is something BMW would be excited to participate in. BMW just doesn't want to do the grant administration. The Board felt confident they could fulfill most of the in-kind requirements including

donating their time to help educate the youth. Amy was authorized to help others work on the grant, for a few hours. While BMW couldn't commit their auto sampler, Steve thought there might be some other options with some of Metro's equipment. In short, the BMW Board is very enthusiastic about the effort and would like to participate if it moves forward, but doesn't want to administer the grant. **Amy** will communicate that to Jorge, Shane and Paul and keep the Board updated on how the effort proceeds.

- Proposals for **Urban Waters grants** (the grant BMW won in 2012) are **due January 28th**. There was a Thumbs up vote for **Amy** to work with the I&E committee on the application and bring the proposal back to the Board at their January 26th meeting.

Load Modeling – As part of the IP and Policy discussion a discussion on an effort to refine the load model/dashboard may be needed. **Erin** present the model at the January 26th meeting.

Can Water Quantity be a tool in Managing Water Quality? – Curt led a discussion on how/if there are opportunities to manage water quantity to protect water quality. **Steve** will contact Integral about progress on the model calibration effort.

Curt explained that the water rights FRICO manages are comparable to money. The water rights owners would be risking large assets if they forgo taking water when it's available to protect water quality. They would be risking that the water would be available later when they needed it. Even forgoing taking water so that infrastructure repairs can be made is very risky.

Steve suggested that in the future if there is real time P data for water at the Burlington headgate, FRICO could open or close the headgate based on P loads. It would be something more like avoiding the first flush after a storm to manage P loading. He made the analogy to an oil spill. They would close the headgate to avoid P loading. It might only be about 30 kg that we're able to avoid but that might be enough in the future, if the loss of the water can be accepted.

Such water management might be possible if there was enough real time monitoring and real time control of the infrastructure. Dan reminded the group that there is a potential for changes to South Platte Renew's treatment regimens based on the water rights and if the river water will be diverted at the Burlington Ditch and go to Barr Lake. Nutrient standards open the possibility for coordinating in the future. The Burlington Canal is diverting about 90% of the time. It's worthwhile to know that FRICO is thinking about water quality. BMW can be the convening forum for figuring out who would be building the options for water quality management, rather than BMW doing the building.

BMW Policy and Tax Return Review – Amy reported that there are no changes to the BMW policies this year. She encouraged all Board member to review the tax return she sent them the link to.

Review of Draft 2021 Board Schedule – Amy will present her best guess on the 2021 Board schedule at the January 26th meeting.

- **Chairs Report**
- **Treasurer’s Report**
 - As of October 31st, the BMW account balance was \$267,452.46.
 - Bank activity is summarized in the table to the right.
- **Technical Committee Report**
- **I & E Committee Report**
- **Coordinator’s Report** – Approval of October 27th 2020 meeting minutes. There was a Thumbs Up approval.

Deposits in October		
Denver Department of Public Health and Environment	\$ 2,000.00	Memberships
Checks that Cleared in October		
506983263 - DiNatale Water		
Consultants	\$ 434.78	modeling, Technical Budget
2139 - A-1 Organics	\$ 19.20	Carp harvesting
2142 - A-1 Organics	\$ 36.20	Carp harvesting
2143 - Amy Conklin, Sept. Coord	\$ 4,489.50	Coordinator
992136 - MSU Foundation	\$ 2,226.00	Internship
992138 - GEI	\$ 574.75	Stormwater Sampling
Checks for signature in November/December		
2149 - MSU Foundation	\$ 2,703.00	Spring 2021 Internship
2150 - Integral	\$ 5,134.95	Invoice 0018937, modeling
2151 - Amy Conklin	\$ 3,636.50	October 2020 coordination
2152 - Colorado Monitoring Framework	\$ 5,402.84	Membership

Next Meetings

- I/E Committee Meeting – **January 5th, 2021 10 am to 11:30, virtual**
- Technical Committee meeting –**TBD, Virtual**
- Board Meeting – **January 26th 2021, 9 am Virtual**
- Stakeholder meeting – **February 23rd, 2021, 9:30**, socially distanced at the Barr Lake Nature Center but probably virtual

BMW 2021 Schedule TBD

BMW Board 2020 ‘Schedule’

- ~~January 28, 2020 – Meeting at South Adams Water and Sanitation District – Thank you JM!~~
- ~~Amy will present an outline for a presentation paper on the BMW OCCT experience. Too many acronyms (TMA). Amy will reach out to DW to get their feedback on the outline.~~
- ~~Erin will present what she’s done with a Data Visualization Tool~~
- ~~February 25, 2020 – Stakeholder meeting – Barr Lake Nature Center – Thank you Michelle~~
- ~~Steve – Water Quality update~~
- ~~Chris – ECCV update~~
- ~~Julie – Centennial update~~
- ~~March 24, 2020 – Metro, Thank you Steve~~
- ~~IP Committee – progress report and brainstorming opportunities and funding~~
- ~~Dan/Erin – Industrial Permit update~~
- ~~April 28, 2020 – Metro, Thank you Steve~~
- ~~GEI or Steve – Stormwater quality update~~
- ~~IP Committee - Update~~

- May 26, 2020 – Metro, Thank you **Steve**
 - Presentation from Lobbyist – **Amy** will work with **Michelle** to get CPW lobbyist to talk to the Board about the legislative process and what would be required for passing P-free fertilizer legislation – **happening in October with Metro lobbyist, Brandy DeLange**
 - ~~Gutter Bin Presentation moved to July~~
- June 23, 2020 – ~~North Denver Cornerstone Collaborative tour~~ – **Amy** will work with **Brad** to set it up
 - ~~Include information on improvements at City Park~~ – **changed to virtual story map**
- July 28, 2020 – Meet at Metro or Greenway Foundation, ~~Thank you Steve or Jeff~~ **virtual**
 - **Steve** – will try to set up a tour of Metro’s P recovery facility
 - **IP Committee** – Update, maybe draft
 - ~~Gutter Bin Presentation~~
- August 25, 2020 – Meet at Metro, Thank you **Steve**
 - **Amy** will invite other watershed groups to attend this meeting and give them lunch. We can ask for an update on activities in Chatfield (including Chatfield Reallocation), Bear Creek (including progress on their TMDL) and Cherry Creek - **Covid ruins everything! Maybe in 2021?**
 - ~~Curt (?) Present on how FRICO plans to operate in regards to the conservation pool at Chatfield FRICO has no arrangement of ‘plans’ to operate differently with Chatfield releases... if they develop a by-pass agreement and physical means of by-pass, that might be different, but there is nothing in the works...~~
 - **IP Committee** – present final draft? – 1st ‘reading’ in October; 2nd ‘reading’ in December
 - Preparation for Annual meeting and BBQ – **review corporate policies. Adopt electronic payment policy amendment to Financial Policy.**
- September 22, 2020 – ~~meet at Barr Lake, try to engage more stakeholders, thank you Michelle Virtual, stupid Covid!~~
 - ~~Michelle~~ will help arrange golf cart tour to area where in canal treatment would be built
 - **Steve** – will present in-canal treatment concept, maybe Harvey Harper can call in – **maybe 2021?**
 - **Amy** – will reach out to WQCD (Meg Parish, Joni Nuttle, Nicole Rowan, Patrick P.)
 - Christina Welch – ~~CSU and colleagues will talk about their work studying effectiveness of agricultural BMPs~~
- October 27, 2020 – Virtual
 - General catch up from whatever we didn’t get to or need to get to.
 - Other topics – PFAs, invite Paul Winkle to talk about Arsenic and fishing **maybe 2021**
- ~~November 24, December 1 2020~~ – Board Retreat

BMW I/E Events for 2021 – coming soon