

**Barr Lake/Milton Reservoir Watershed Association**  
**Technical Committee Meeting**  
**Thursday January 26<sup>th</sup>, 2023 (9:00am – 11:00am)**  
Virtual

## Minutes

### Attendance

Erin Sandos – S. Platte Renew (SPR)  
Brad Cox – City/County of Denver  
Steve Lundt – Metro  
Kelly DiNatale – United Water & San.  
Curt Bauers – FRICO  
Bethany Green – Aurora  
Nicole Laurita – SPR  
Alan Polonsky – City/County of Denver

### Guests:

Samantha Miller – BMW Coordinator  
Craig Wolf – GEI  
Nathan Jahns – GEI

## Microsoft Teams meeting

**Join on your computer, mobile app or room device**

[Click here to join the meeting](#)

Meeting ID: 226 717 803 710

Passcode: Wa72aU

[Download Teams](#) | [Join on the web](#)

**Or call in (audio only)**

[+1 720-739-6719,,934327941#](#) United States, Denver

Phone Conference ID: 934 327 941#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

---

**MS4 Baseline Loading** – City and County of Denver has consulted GEI to quantify their contribution to the TMDL MS4 Wasteload Allocation. The TC discussed the proposed methods used, data availability, and additional considerations needed to complete this analysis.

GEI is seeking to overlay City and County of Denver GIS data layers onto the BMW model and look at the output on the subbasin routine. They would like to partition out the area Denver has under their purview and whatever else is included in the model. The basic review so far makes it look like that's possible, but 12-13 year old data might not all be readily available. The main goal of this discussion is to find out what's available (data, documentation, and if the CFR approach will line up with what was done in the TMDL).

Steve discussed the BMW data, including Ken Wagner's data/model (which came down to "best professional judgement" and could be less preferable for GEI's use). For MS4 specific data, BMW didn't have much flow or water quality data. The question was posed as to how Denver is handling the TMDL 20% reduction requirement between all responsible parties for the MS4 permit. Ideally, Denver would like to break up that load between Denver, Lakewood, and Aurora

(maybe include CDOT, there are also about 21 other MS4s); but, for Denver's permit, Denver has to show 20% reduction in their contribution individually. GEI requested to see the hydrology info/data from a sub-watershed level (nonpoint source category that has MS4s) – Steve said that info should be available by subbasin.

The first step is getting GEI (Craig), the model/data. There was a lot of discussion about the model and the reruns BMW has done, specifically related to the calibration and accuracy. In 2018 the model was rerun and wasn't matching the recent data. It was left and BMW didn't conduct much follow up on it (note that the 2014 report was probably the most recent report with modeling results that BMW is most confident with). The 2003-2004 data and modeling was the version that established the TMDL values, arguably the most accurate run of the model to date. It should be noted that it took 2+ years after delivering this info to the EPA for the TMDLs to be set and established. In 2012 BMW recalibrated with data up to 2009-2010 (more data) and that's been a good report to use because there was more overall data used and it was finetuned more for BMW's specific situation.

There was discussion about involving Ken Wagner again and whether/how to pay for his time. It was agreed that further discussion needs to happen once it's determined what level of engagement he will possibly take on. BMW is open to discussing helping to pay for his time.

The deadline for Denver to deliver this final product is April 1, when they will submit to the state for permit compliance.

**Denver's Task 2** – Denver plans to establish what the baseline flow conditions are in the S. Platte, then subtract that from the stormload component. They are currently just using baseline hydrology and subtracting that out, but want to refine it better and identify how the storm changes the concentration for nutrients in the river. They will be looking for baseline concentrations data collected during base flow conditions (Steve has been collecting that for recent years – Denver requested he send this data). Denver also plans to query all other data available on the S. Platte to ask how the storm loads have changed over time – going back to 1998 with some of the original data they have. Steve suggested reaching out to SPCURE, which has a lot of that data, as well as two USGS reports that may be helpful.

Denver will start on Task 2 around April/May and they will likely have a follow up convo with us about baseline data (Task 2 will primarily focus on what the current conditions are).

There's a disconnect between the fact that we're using data that's over 20 years old, while the watershed has changed so much and there has been a ton of work done to improve storm runoff, (structural, and nonstructural - like street sweeping) in that time. Denver's hope and goal is that all the improvements done can be showcased and will work to Denver's advantage.

It was asked if there is a task/effort to show individual projects that show how much Phosphorus (P) is removed? Could this show reduction in P where reductions are shown on a BMP level? Denver says yes, they'll show the load, then they will have to show structural/nonstructural components that reduce that load, and show how they're put into a plan that will overall reduce their total load by 20%. Denver will also demonstrate their continuous monitoring efforts.

Denver and BMW decided to plan for at least two additional meetings: the March TC meeting (which will be moved earlier in the month to accommodate Denver's April 1 deadline) and the April board meeting, to update the entire board and make sure everything is good to go.

**Actions:**

- **Steve** will send Craig & Nate the data/model and info for both (first & second run of models)
- **Steve** will get files from Integral to send to Denver as well
- **Steve** will share Ken Wagner's contact info with group
- **Erin** will set the next meeting to mid March and will include Ken Wagner

**CDSN Data Availability** – The group discussed who is entering data into the CDSN and at what frequency. Is there additional data needed to populate a visualization tool?

SPR uploads their data every April, but it takes a while for it to become available. In the past, Erin and Steve have entered data manually (pull flow data and DWR/USGS, easy to automate/update). Erin will work on updating the dataset and making sure we have the most recent data and try to identify what other data we might need.

Erin discussed wanting to revamp the data tool/visualization and make it more user friendly. It would be beneficial to identify how this might be used (board members, website, etc. – this will change insights). Perhaps the TC could review this in March or May (likely May). Erin can work on this and make it look a lot nicer. It was identified as a great way to showcase the data.

It was noted that we'll want to consider licensing and cost of maintaining this kind of visualization and updating the data.

**Actions:**

- **Erin** will connect with Steve about autosampler data; and update the Power BI visualizations with DSN data.

**Next Meeting**

Tech. Committee: Thursday, March 30<sup>th</sup>, 9:00 – 11:00 AM – **changing to mid March**