



SP CURE Monitoring Committee Meeting Minutes

Thursday October 12, 2023 – 10:00 a.m.

Meeting Location: Virtual

High Level Take-Aways

- Nicole Laurita presented her progress on the arsenic study. She has been working to correlate area characteristics (soils, vegetation, etc.) with Arsenic concentrations.
- The group decided to move forward with presenting the arsenic evaluation to the Board at the December meeting.

Action Items

- Everyone to send round robin results to Patrick O'Brien when complete.
- Nicole to work on a qualitative comparison of arsenic levels to geology, point source dischargers, land use, and mines – aim to have ready by the January Board meeting.
- Jake is working on finding speaker volunteers from the Board.
- Aluminum sampling MDL levels send to Jordan.
- Nicole to add wells with Arsenic data to analysis.
- Nicole will load data, maps, and models to the SharePoint.
- Nicole to add stormwater and groundwater data points to analysis to investigate.
- Nicole to grab municipal and industrial discharges and identify areas that need additional granularity.

1. Introductions

2. Discuss/Approve October Meeting Minutes

Approved: Discussed Round Robin and Arsenic study progress.

3. Water Quality Workgroup Updates

a. Water Quality Workgroups

Water Quality Forum: AF CURE presented on their work over the past 8 years on evaluating a site-specific standard for nutrients. AF CURE has been developing a nutrient screening level model and evaluating areas for pollution from point and no-point sources. The model has shown that Multimetric Macroinvertebrate Index (MMI) is heavily impacted by the flow regime, conductivity, and nitrate concentrations.

Water Quality Forum: Meeting November 28th

10-Year Roadmap: The group has been developing a schedule for moving forward. The focus has been on ammonia and selenium criteria. The Division is evaluating and comparing

ammonia criteria for mussels across species and states. Ammonia criteria is expected to kick off early next year.

Selenium criteria is currently based on a newer fish tissue-based standard. The criteria are being evaluated for site specific standard needs but are not likely to change yet.

Permits Webinar: Recent meeting discussing upcoming actions with Andrew Sayers-Fay.

The next meeting will discuss the Division's baseline monitoring frequency and the reduced monitoring procedure. The Division is not likely to allow for a reduction in monitoring frequency, even though the number parameters and associated frequencies have increased.

The next webinar will also discuss the chemical evaluation forms required by the state. The Division is pushing for changes to WET testing which would be costly.

Permits Webinar: Meeting October 19th.

Fee Setting Rule: The Division is presenting their budget, and expected losses if there are no changes to the fees. The Division is pushing for the Commission to be the body that accepts the fees and changes.

- b. **Colorado Monitoring Framework:** CMF is currently deciding what task forces to keep going forward with. CMF is also in the process of a fee re-structure. The group is developing their upcoming schedule.
- c. **Other Updates.** There is a Regulation 61 review in the near future. The Division is proposing minor changes, primarily in the terminology, of the definition of an urbanized area, which is setting the population at numbers greater than 50,000 people. The Division is evaluating changing the comment period from 10 to 15 days to ensure that there is still sufficient time to receive public comments.

4. Water Quality Control Commission Hearings

There was a Hearing on CDSN and several DSVs. The DSVs were based out of the La Junta area of the Arkansas basin and are primarily focused on selenium. Pueblo has been making progress on sewer lining to reduce selenium, and there is continued development on the lower Arkansas pipeline which would remove the selenium issue. The EPA noted the progress and approved the continuation of the DSVs.

5. Round Robin! (Sulfate and Ammonia)

Thornton provided samples of free ammonia and sulfate. The group will report results back to Patrick and be sure to include what methods were used and whether the sample is preserved.

6. Discuss Arsenic Analyses Evaluation

Background: permittees are concerned with meeting future low total recoverable arsenic levels. The Division is working to update water quality standards but is waiting on EPA's 304a criteria (still delayed). The Division currently holds a statewide temporary modification for arsenic. SP CURE wants to be prepared to pursue compliance options if they are needed. Use Attainability Analysis requirements include:

- Characterize existing conditions.
- Identify sources and potential causes.
- Characterization of highest attainable use/ rationale for revising the current use.

Initial SP CURE analyses suggests that permittees dilute arsenic levels, but concentrations nevertheless increase longitudinally across the Metro Area. Grouped data indicate that some sites are clear hot spots while others are well-constrained.

SP CURE is striving to further arsenic characterization and source identification and is currently exploring whether the group has the bandwidth to present a technical study at the Division’s 10-year roadmap workgroup. Nicole has volunteered to help move SP CURE’s study forward with her amazing ArcGIS Story Map and Power BI skills. She presented her preliminary findings. She started by pulling in arsenic data from 2012 through 2022 for wells, reservoirs, lakes, and streams. She also created maps for land use, point source dischargers, geology, and mines which she is hoping to correlate with arsenic data.

The group discussed if we could locate any arsenic data in stormwater. Perhaps Brad Cox with City of Denver/BMW can share their data. Brian also thinks DDPHE has data.

Nicole presented on the correlations that she had discovered since the previous meeting. There is a correlation of arsenic concentrations with the high plains aquifer, forest, crops/herbaceous grasslands, deciduous forests, and sediments.

The group asked if there was enough information to evaluate point versus non-point sources in a loading analysis. Nicole will be evaluation if that is possible. This will take into consideration wells with arsenic concentration data in the area.

Nicole noted that there were spikes in concentration in the Big Thompson basin, and some higher concentrations in the middle South Platte around Sterling. Nicole is evaluating the potential of analyzing across basins.

The group asked Nicole to grab and evaluate data from municipal discharges, industrial discharges, sand pits, gravel pits, stormwater, and ground water for additional data. The group wants to determine if there are any additional areas that need further granularity.

7. Check-Ins/New Business

8. Next Meeting Date

- December 14th – Virtual
- January 16th – Combined meeting with Board

Meeting Attendees		
Present	Name	Organization
	Juliana Archuleta	Adams County
X	Claire Likar	City of Aurora
	Nick Tino	Centennial Water and Sanitation District
	Brian Tietze	Denver Dept of Public Health and Environment
	Curt Bauers	FRICO
	Jim Dorsch	Metro Water Recovery
X	Jordan Parman	Metro Water Recovery
X	Patrick O’Brien	City of Thornton
	Caleb Owen	City of Thornton
	Christine Johnston	Xcel Energy

X	Eric Marler	Suncor Energy
	Michael Haxby	South Adams Water and Sanitation District
X	Nicole Laurita	South Platte Water Renewal Partners
X	Jake Kunugi	Coordinator - Brown and Caldwell

Minutes prepared by Jake Kunugi