

**MINUTES
of the
WATER QUALITY COMMITTEE
Beaver Run Resort & Conference Center
Breckenridge, Colorado
October 17, 2019**

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MEMBERS AND ALTERNATES PRESENT

ALASKA	David Schade
ARIZONA	
CALIFORNIA	Jeanine Jones
COLORADO	Pat Pfaltzgraff
IDAHO	
KANSAS	
MONTANA	
NEBRASKA	
NEVADA	
NEW MEXICO	John D'Antonio Greg Ridgley
NORTH DAKOTA	Garland Erbele Jennifer Verleger
OKLAHOMA	Sara Gibson
OREGON	
SOUTH DAKOTA	Kent Woodmansey
TEXAS	Jon Niermann
UTAH	
WASHINGTON	Buck Smith Mary Verner

WYOMING

Chris Brown
Steve Wolff
Kevin Frederick

GUESTS

Ward Scott, Western Governors' Association, Denver, CO
Jordan Bunker, Southern Nevada Water Authority, Las Vegas, NV
Kyle Miller, Arizona Department of Water Resources, Phoenix, AZ
Scott Steinbrecher, Colorado Attorney General's Office, Denver, CO
Alexandra (Alex) Davis, City of Aurora Water Department, Aurora, CO
Micheline Fairbank, Nevada Division of Water Resources, Carson City, NV
Kathy Alexander, Texas Commission on Environmental Quality, Austin, TX
Jennifer Carr, Nevada Department of Environmental Protection, Carson City, NV
Michael Eytel, Colorado River Water Conservation District, Glenwood Springs, CO

WESTFAST

Chris Carlson, USDA Forest Service, Washington, DC
Mike Woodside, U.S. Geological Survey, Nashville, TN
Pat Lambert, U.S. Geological Survey, Salt Lake City, UT
Lauren Leuck, U.S. Army Corps of Engineers, Lakewood, CO
Amy Frantz, U.S. Army Corps of Engineers, Washington, DC
Cherilyn Plaxco, U.S. Army Corps of Engineers, Little Rock, AR
Doug Curtis, U.S. Bureau of Land Management, Washington, DC
Deborah Lawler, U.S. Bureau of Reclamation, Salt Lake City, UT
Steve Wallander, USDA Economic Research Service, Washington, DC
Roger Gorke, U.S. Environmental Protection Agency, Los Angeles, CA (via phone)

STAFF

Tony Willardson
Michelle Bushman
Adel Abdallah
Cheryl Redding

WELCOME AND INTRODUCTIONS

Kent Woodmansey, Chair of the Water Quality Committee, called the meeting to order.

APPROVAL OF MINUTES

The minutes of the meeting held in Leavenworth, Washington on July 17, 2019, had one correction made by Kent Woodmansey. Under the discussion of harmful algal blooms, the state of North Dakota needs to be changed to South Dakota. There was a motion to approve with the correction. Second. The minutes were unanimously approved.

COLORADO WATER QUALITY ISSUES

Pat Pfaltzgraff, Director, Water Quality Control Division (WQCD), Colorado Department of Public Health and Environment, provided a powerpoint presentation on water quality issues in the State of Colorado. The purpose of the WQCD is to protect and restore water quality for public health and the environment in Colorado. He described how the different programs are structured for Clean Water Act and Safe Drinking Water Act State Revolving Funds (SRFs), and groundwater responsibilities. The Division handles SRF applications, makes assessments of future needs, issues grants and loans for infrastructure improvements, inspects facilities and provides compliance/technical assistance and enforcement actions (such as exceeding permit limits), and implements the non-point source programs (much of which deals with mining issues for non-Superfund sites).

The Colorado Department of Natural Resources generally handles water rights issues, but the state's Water Quality Control Act prohibits WQCD from requiring minimum instream flows, or taking any action that would cause or result in material injury to water rights, which are protected under the state's constitution. Regulation No. 82 requires consultation between the State Engineer's Office and the Colorado Water Conservation Board. If an action would cause injury we have to coordinate with the applicant and other commenters to find a resolution.

Colorado's state water plan seeks integration of water quality and water quantity goals. The Division wrote two of the chapters in that plan. The Water Quality Control Commission Strategic Water Quality Goal states that: "By 2050, Colorado's waters will fully support their classified uses, which may include drinking water, agriculture, recreation, aquatic life, and wetlands." We have a ten-year road map for nutrient controls, providing notice about changing permit requirements to facilities so they can plan ahead for capital improvements they will need to make in the future. We have many lagoon systems, and we are working with EPA, Montana, and others in Region 8 to optimize and improve those systems (20-30% reduction in pollutants).

The water plan's quality-quantity integration goal says: "Recognizing the inter-relationships between quality and quantity, strategies designed to meet Colorado's current and future consumptive, recreational, and environmental water needs will incorporate, as a key objective, the protection and restoration of water quality." We have a quality-quantity work group to talk about ways we can work together to improve issues throughout the state, working to protect and restore water quality.

Colorado's Safe Drinking Water Programs changed after the Flint, Michigan water crisis, because we didn't want to end up in the same place. It heightened everyone's awareness. More recently, Newark dealt with issues relating to the lead and copper rules. How does lead get in drinking water? Lead typically enters drinking water through plumbing materials. Lead typically is not present in drinking water sources like groundwater wells or rivers.

The lead and copper rule is a very complex drinking water regulation to implement, and it is confusing to do so effectively. Lead exposure may cause damage to the brain red blood cells, and kidneys, especially in young children and pregnant women. The rule is based on action levels (not a violation), and involves a lot of chemistry and toxicology. Lead has an action level of 0.015 mg/L (15 parts per billion). If exceeded, the system must complete the following actions: public education; source water sampling; additional water quality sampling; corrosion control evaluations; new or modified treatment; and potential removal of lead service lines.

The rule applies to approximately 1,000 drinking water systems in Colorado. Currently, there are 23 systems working on compliance activities. Rural communities have their own drinking water systems, and we have a fleet of engineers providing coaching and compliance assistance to get those lead levels down. Schools, daycare facilities, hospitals, nursing home requirements: rule only applies if they have their own source water; and are encouraged to contact their water provider about reducing their level of risk and what steps they can take to reduce lead exposure. The state has to look at what is optimal corrosion control treatment, which includes three options right now: orthophosphate (nutrients), pH adjustment (common), and silicate (if your chemistry works with that). The Denver Water study showed that ortho phosphate was the most optimum nutrient control. This is a phosphorous, which is unfortunately a nutrient that is already being controlled, and we want to reduce our nutrients, not add to them. EPA can grant a variance under the Lead and Copper Rule, although it is rare. We went through a huge stakeholder process, including both clean water and drinking water, and came up with a variance plan that included a pH adjustment coupled with removing the lead service lines (the source) within 15 years. EPA has not been inclined to grant the variance in light of Flint and Newark, but David Ross has been briefed. Nothing directly addresses this issue in the new rule. It's not the cheapest route to go, will cost Denver around \$5k per line, with 75,000 lines that need to be replaced. The new Lead and Copper rule is complicated, and we would have like to see them go further, to set a lower MCL, but we're looking at that and providing comments back to EPA.

Per and Poly Fluorinated Alkyl Substances (PFAS) are not a regulated drinking water contaminant. PFAS are a family of human-made chemicals much of which was produced by a variety of chemical companies (Dow/DuPont/etc.). The compounds can be found in firefighting foams, coating additives, stain and water proofing products such for carpets and clothing (including the products Goretex and Teflon). For most people, food and personal care products are the primary sources of exposure and nearly all people have measurable levels of PFCs in their blood. PFAS are not a regulated drinking water contaminant. In 2009, EPA health advisories for PFOS and PFOA that was subsequently revised to 70 parts per trillion. Many states have adopted standards, Colorado only has site specific standard. Possible health effects include increases in heart disease, liver disease, or high blood pressure.

In 2013, as part of the EPA's process of evaluating emerging contaminants (UCMR 3), large public water systems were required to monitor for PFCs. Three systems near Colorado Springs detected PFCs: Security, Widefield, and the City of Fountain - some wells have been shut down. It was easy to identify the source because Peterson Air Force Base uses aqueous foam for aircraft crashes and training, and has dirt disposed in a downgradient landfill. The Air Force came through very quickly with CERCLA money to provide filtration for all three towns. The big concern was what to do for an alternate water source and how to treat the PFAS contamination, which persists for a long time. The systems are blending with purchased water from the Fountain Valley Authority and have increased their monitoring. Several small drinking water systems are located in the area, including private wells. CDPHE set a site-specific groundwater standard for this basin at 70ppt. We are working on an inventory of fire departments and other high-risk areas, sampling groundwater and working on alternate water sources and treatment.

Questions:

Buck: How did you go about getting the DOD to help fund the PFAS?

Pat: Tracy White was fierce about reaching out to the AFB, and was able to bring them data. Since I spent time in the Air Force, it helped to know how they operate. The positive relationship between the military base and the local communities also matters, so they were very proactive. Having the data, having them know and understand the data, and they want to do the right thing for the community. They did sampling of the system, and they were very responsible.

There will likely be a lot of lawsuits going forward.

Jennifer Carr: How did you find all of the lead service lines?

Pat: Some of it is just good guess estimation. The homes built before 1983 are suspect, before 1958 highly suspect, so we err on the side of counting them as lead service lines. Denver Water does not own the lead service line. Homeowners own the line, so much of this is being done voluntarily, probably in part because its being paid for.

Jeanine: Since you mentioned small water systems, is there funding available outside the small system SRFs?

Pat: Somewhat. We cannot do grants and loans for profits like an HOA or private systems.

MULIT-AGENCY COORDINATION ON HARMFUL ALGAL BLOOMS IN NEVADA

Jennifer Carr, Deputy Administrator, Nevada Division of Environmental Protection (NDEP), gave an overview of the harmful algal blooms (HABs) that have recently occurred in the State of Nevada. "*Be Algae Aware*" handout was circulated. Guidance document is in the briefing materials (Tab O), but has been updated since then.

First real HAB issues started in March 2015 with a microcystis bloom in Lake Mead. The National Park Service and water purveyors got involved in managing the problem. The NPS issued a swimming advisory for the entire lake, although it did not close the beaches. It was the first drinking water impact in Nevada history. The toxins from the HAB aren't visible and can persist even when the algae itself goes away. In November 2015, which is an atypical time of year for HABs, we had reports of a mysterious fish kill. It turned out to be golden algae, which suffocates the fish.

There was talk of draining the Lake Mead reservoir and starting over again. We initially had a program that was reactionary, and we were talking about algae types beyond what was on EPA's radar and outside EPA's guidance, and dealing with deaths of fish, cattle, and dogs. We started to get a better handle on HABs, developing materials to address the problem, raising awareness. We haven't codified anything into rules—we're just using the guidance documents—but so far no one has pushed back on this.

In August 2018, the Chimney Reservoir had high levels (10,825 µg/L) of a goopy, latex-paint-like microcystins/nodularins. People called the NDEP spill hotline because of the unusual texture. We have staff on hand to microscopically identify the algae, with outside labs for verification and quantification. "Danger Keep Out" messages were posted, since this area is used for livestock and sees some recreational use. We started reaching out to other entities to coordinate efforts, including the Nevada Department of Agriculture, the state veterinarian, the Nevada Department of Health and Human Services, Nevada State Parks, and the Nevada Department of Wildlife. We continued to make observations with our sister agencies, but constant sampling wasn't feasible, so we did not do further sampling until we knew that the algae had subsided and we could check to see whether the toxin levels had dropped. Warning signs were pulled down once the end of the event was confirmed.

Also in August 2018, Swan Lake in the Lemmon Valley had euglena sanguinea. It is traditionally a dry playa/terminal lake. It is surrounded by development, and two wastewater treatment plants that flow into the lake, which has created a wetland and bird preserve valued by the surrounding community. Recent flooding has affected people's homes, and now the algae blooms have created a significant problem. This particular HAB was a red colored bloom, due to the anthsaztin that protects chloroplasts from bright sunlight.

Because of these issues in 2018, we worked with the other agencies to develop signage with contact information and warning systems. We created a working group to address these problems in 2018, and we met again in 2019 to try to get ahead of any new HABs so we could be coordinated in our response efforts. We did have another algal bloom in August 2019, microcystins/nodularins in the Squaw Creek Reservoir. Since this was near the Burning Man Festival, we kept the signs posted to discourage people from bathing in it, since a visual assessment was not a good indicator of whether the toxins had diminished. At one point the values dropped below the threshold, but the water was still green, and the toxins started going back up.

We asked our staff to consider innovations that would make this easier to monitor, and they came up with an app that allows them to input field data on the go. They can snap a picture and enter some details about the weather and water, etc.

We were able to secure some funding from an EPA Region 9 grant, and we put together a workplan for science related to HABs. We picked three reservoirs and intended to take data points in 2019 during blooms so we could better understand the reasons for the occurrences. Those three reservoirs didn't have any blooms. We amended the plan to do a deeper dive into the Squaw Creek Reservoir. It's a two-year grant that expires at the end of FY2020, and depending on the usefulness of any results from our study, we're happy to share that information.

Questions:

Adel: Can satellite imagery be used to detect the HABs?

Jennifer Carr: Our waterbodies are mostly too small. We're looking at whether the satellite data has enough resolution to be useful to Nevada, because that detection works better for larger reservoirs.

Pat Pfaltzgraff: Question about how Nevada does their signage, whether it's limited to state waters, and how they manage the locations for signage around the whole water body.

Jennifer Carr: Lake Mead is a bi-state water with NPS jurisdiction. We chose to put the advisory signs where most people would enter the water, such as marinas. Lake Tahoe doesn't get this kind of algae. For the most part, our reservoirs are fishing reservoirs, so we also post fish consumption issues at access points. For now we're still kind of winging it.

Pat Pfaltzgraff: A lot of it is a judgment call. The public freaks out when you post that they cannot recreate. But they freak out more if their dog gets sick, or their child gets sick, etc.

Jennifer Carr: We have also had offers from other parts of our region (in WA/OR?) to provide lab assistance if we didn't want to pay a lab we've been using in Florida.

Pat Pfaltzgraff: Our region would have, but our state lab got certified.

Mike Woodside: On your signage, there are several phone numbers. Would you add QCR codes?

Jennifer Carr: There are various numbers for each department and so they are different. I don't know how you develop those codes so they actually work, but that's a good idea.

WGA/WSWC CLEAN WATER ACT § 401 UPDATE AND DISCUSSION

Ward Scott, Policy Advisor, Western Governors' Association (WGA) provided an update on Clean Water Act Section 401 activities and EPA's proposed rule to change the regulation.

WGA's 401 certification letter commenting on the proposed rule was handed out to members at the meeting, which was just finalized yesterday. The WGA and WSWC with other coalition partners have sent 5 letters on this issue over the past year. The coalition partners have built a lot of chemistry, and their work together over the past year has allowed them to work quite nimbly. 60-days is a short time for comment on a proposed rule. EPA presented two webinars in the Spring and there were hundreds of questions posed on those webinars by states and stakeholders that went unanswered. The proposed rule includes veto authority with no clear path for states to appeal. EPA's public docket already has 4,000 comments as of this morning. The deadline is Oct 21st, which is Monday. It is likely this will be litigated, once finalized.

Michelle Bushman: Tony testified before the Senate last August. EPA's pre-rulemaking docket in May has Tony's written Senate testimony, as well as responses to the Senate Committee's follow up questions, which were based on responses the states provided to our updated 401 survey questions. We did not include the most recent state survey responses, but we did include the state responses from the 2014 survey. WSWC drafted a comment letter on the proposed rule which is under Tab P. We are planning to submit this to EPA by Oct 21st. We have tried to keep the letter as close to our positions as possible.

Chris Brown: In general, the letter under Tab P opposes the rule. Wyoming is not able to support the letter for that reason.

Pat Pfaltzgraff: Colorado will be submitting a letter to EPA. We would not have issues with the WSWC letter. He asked about WGA's draft resolution.

Ward Scott: I cannot speak to that resolution as it is in draft form currently. Generally is about the need for Federal agencies to realize the value of consulting with States. Federalism is a central part of our work.

Pat Pfaltzgraff: I appreciate the language.

Kent Woodmansey: There are many letters circulating. Would it be helpful for Wyoming to state what they would oppose?

Chris: To the extent that materials have already been submitted under the previous docket, there's nothing we can do to change that.

Tony: We would not be able to make Wyoming happy with changes to the letter as long as it explicitly supports state certification authority as it stands. We could put in the letter that states will submit their own comments.

Mary Verner: What usefulness will our letter have at this stage, given the thoroughness of our previous comment?

Ward: There is no guarantee that the info in EPA's pre-proposal docket from May is going to be part of the proposed rule docket now, even though EPA has said they would incorporate it.

Tony: We could just put together a cover letter noting our previous comments and letters sent as part of the coalition, and send our position without further comment, also noting that states will submit their own comments.

Chris: I hadn't contemplated this as an alternative, but I think this might work for Wyoming.

Kent: I would suggest the states share their comment letters with the WSWC. The WSWC can then post them on the website. I'd be interested in seeing what the other states are doing.

WGA REPORT-BIOSECURITY & INVASIVE SPECIES MANAGEMENT INITIATIVE

Ward Scott filled in for Bill Whitacre, who was not able to make it. This was a one-year initiative under Governor David Ige's Chairmanship. Under the initiative, WGA held several workshops and webinars about invasive species. Several conclusions and findings were submitted. Ward said he will put together some notes and share them.

EPA UPDATE

Roger Gorke, U.S. Environmental Protection Agency, reviewed the intent and specific portions of the draft Water Reuse Action Plan, going over a handout that summarized actions. EPA is asking for comments on the draft plan. Section 2.1 is particularly relevant to the states, and 2.9 is important to the Water Policy Subcabinet, particularly David Ross. We want to make sure that EPA is getting the right questions. The point is that we hope everyone is talking together and everyone can build on what each other is doing. We also want to make sure we are really implementing this action plan. We want this plan to help guide water reuse into the future. Roger encouraged folks to find which actions really resonate, and which WSWC members could engage, and commit to working on action items from the plan.

Jennifer: When does the docket close?

Roger: December 16th.

Michelle handed out the WSWC survey questions from 2011, requesting feedback on questions that need to be updated to reflect changes in reuse over the past ten years. Get comments back to Michelle before the end of the year.

Michelle: We will send out the 2011 survey responses broken out by state, so that you can copy and paste old responses if they are still applicable. Should we send these at the same time as the survey questions?

Group: Yes. Send them at the same time.

WOTUS RULE ROUNDTABLE DISCUSSION

Nevada sought input from other states on how they are tackling WOTUS issues with the anticipated scope of the new WOTUS rule and addressing waters of the states.

Jennifer Carr: My director is interested in what the other states are doing. We are covered under a court stay, so we are not subject to the 2015 WOTUS rule to begin with. Nevada is grappling with messaging issues with people not really understanding all the different rules floating around and the shifting sands as things change – people were asking questions about Nevada’s position on the repeal, and the response was that we weren’t subject to it anyway so we aren’t opposed to the repeal and the media released a description of the rule stating that Nevada does not care about our waters. One of the things we’re curious about is the different levels of protection states are looking at right now. Just to set the stage for discussion a little bit, we have our NPDES program, we have a state discharge program, we’ve got a Working in Waterways program that is somewhat connected to our 401 certification program, but we do not have a state-based 404 program. Our situation is quite similar to the comments Colorado made about the resources it would take to set up a state 404 program. We do have a definition of pollutant that includes sand and dredge material, which could be used to stop related activities. Another issue with the press was USGS data indicating 85% of Nevada’s rivers are ephemeral. That comes from the NHD data set that draws a line everywhere that two little [?] sites come together and then calls it an ephemeral stream, even though it might barely trickle even during a rain storm, which is not the same as our water bodies that have names. We’re struggling to know where were going to land. Any insights on where you might be going with ephemeral protection based on what you already have in your state, or regulatory/statutory gaps that have to be addressed, would be appreciated.

Pat Pfaltzgraff: If WOTUS takes ephemerals off the list, we do define ephemeral streams and we do have state authority in Colorado to regulate ephemeral streams, but we don’t have a program to do that. Another issue, which Kent or someone wanted to make sure we included in our WSWC comments, which we did, was that how we get money under the PPA (CWA 106?) is defined by the amount of Waters of the United States you have in your state. If that amount of WOTUS water bodies changes along with this rule, that may mean 85% of Nevada’s PPA is going away. And then how are you going to fund your programs? It may drive many states to develop their own 404 delegation. Taking over more CWA programs, expanding them, developing some kind of ability to do an equivalent NEPA analysis, because you won’t have FWS there to give you the biology input, for example. So it’s a lot of resources for the state to look at. We’ll have to see what the rule is. I think the release of the final rule has been pushed back until early next year. We’re standing by on that.

Kent Woodmansey: We have the same issue with CWA §404. There’s no way South Dakota can fund that, so I think it will just go away for any waters of the state. Our WOTUS is so broad it covers everything in our state. We haven’t had to deal with the press asking us anything. I’m sure it’s going to get litigated again, so I think implementation is several years out.

Tony: How many of the 404 permits in the states are nationwide permits? If the 404 program does go away, will it make any difference? How many of those permits are pro-forma anyway?

Pat Pfaltzgraff: That is sort of the point for us. Anyone who wants to expand or open a mine has to meet statewide water quality standards under the 404 permit approved by the Corps and the state under its 401 authority. If it goes away, meaning the Corps isn't issuing a 404 permit because it's no longer a water of the U.S., then it becomes a water of the state, but then I don't have authority to issue approval. In our state that means mining shuts down, and that will upset people. And I think there's going to be other issues like that.

AURORA QUALITY QUANTITY NEXUS AND SOURCE WATER PROTECTION

Alex Davis, Deputy Director Water Resources, Aurora Water gave a presentation on protecting source waters and the nexus between quality and quantity of waters. Aurora is the third largest community in Colorado and is young. Denver Water drew a line and said they would no longer grow and would not serve the community of Aurora, which meant finding another source of water. We have a large complex system with over 300 water rights, with numerous sources of both groundwater and surface water.

The drought of 2002 in Colorado really opened people's eyes. Aurora was down to 25% of their stored water. Wildfires added to the problem – the Heyman fire burned around a lot of infrastructure. The forest health became very important. Strontia Springs is shared by both Aurora and Denver Water. Post-fire loading of sediment into the rivers and streams and then into the reservoir is a huge issue. There have been more wildfires that have caused many challenges with watershed protection. We partner with a lot of groups, and the Forest Service is a major partner. There is a lot of duplication of effort going on, so we're trying to determine how to avoid the duplicity.

The projects are very complicated due to the number of stakeholders and it is very labor intensive to restore forest health, etc. We've supported legislation getting a dedicated source of funding for the Forest Service efforts, which is really important for prevention and restoration, since most funds are used for fighting fires. Collaboration is huge as none of us can afford the fixes by ourselves. We have spent about \$1 million over the past 5 years.

Garland: We had some significant fires in the Black Hills when I was in South Dakota, and the BLM and Forest Service were seeing increased runoff and increased yield as a result of fires. Are you aware of any work like that being done in Colorado?

Alex: I don't know if that has been specifically quantified. I think our understanding is that the runoff comes off faster and more damaging – bigger burst of water all at once, carrying more sediment, and not attenuated for flow drawn out during the season the way it was when the trees were there.

SUNSETTING POSITIONS FOR SPRING 2020 MEETING

Position No. 404 - clean and drinking water state revolving funds and state and tribal assistance grants.

OTHER MATTERS

There being no other matters, the meeting was adjourned.