

**MINUTES
of the
WATER QUALITY COMMITTEE
DoubleTree by Hilton
West Fargo, North Dakota
July 25, 2024**

Table of Contents

Welcome and Introductions	4
Approval of Minutes	4
Proposed/Sunsetting Position	4
North Dakota Water Quality Issues	5
Lengthening NPDES Permit Terms.....	6
Mapping Wetland.....	7
CWA Human Health Criteria.....	9
PFAS and the Woodbury Water Treatment Project.....	10
Draft FY2024-2025 Committee Work Plan.....	12
Staff Updates.....	12
Sunsetting Position for Fall 2024 Meetings.....	13
Other Matters	13

**MINUTES
of the
WATER QUALITY COMMITTEE
DoubleTree by Hilton
West Fargo, North Dakota
July 25, 2024**

MEMBERS AND ALTERNATES PRESENT *(via zoom)*

ALASKA	Christina Carpenter <i>Tom Barrett</i>
ARIZONA	<i>Trevor Baggione</i>
CALIFORNIA	Joaquin Esquivel Jeanine Jones
COLORADO	Jojo La <i>Lauren Ris</i>
IDAHO	Jerry Rigby John Simpson
KANSAS	Earl Lewis Tom Stiles Connie Owen <i>Matt Unruh</i>
MONTANA	Anna Pakenham Stevenson <i>Jay Weiner</i>
NEBRASKA	Justin Lavene Tom Riley
NEVADA	Jennifer Carr Cathy Erskine Melissa Flatley
NEW MEXICO	<i>John Rhoderick</i> <i>Tanya Trujillo</i>
NORTH DAKOTA	Andrea Travnicek
OKLAHOMA	Sara Gibson

OREGON	Racquel Rancier
SOUTH DAKOTA	Nakaila Steen
TEXAS	Jon Niermann
UTAH	Sarah Shechter Todd Stonely <i>Candice Hasenyager</i>
WASHINGTON	<i>Ria Bearns</i> Leslie Connelly
WYOMING	Chris Brown Jennifer Zygmunt <i>Jeff Cowley</i>

GUESTS

Eric Dodds, AE2S
Jen Verleger, State of South Dakota
Brian Clark, U.S. Geological Survey
Charles Scaife, U.S. Department of Energy
Erica Gaddis, SWCA Environmental Consultants
Andrew Hadsell, SWCA Environmental Consultants
Hannah Singleton, Southern Nevada Water Authority
Jim Rizk, Texas Commission on Environmental Quality
Aubrey Bettencourt, Netafim - Orbia Precision Agriculture
Yaping Chi, North Dakota Department of Water Resources
Alexa Davis, North Dakota Department of Water Resources
Abby Ebach, North Dakota Department of Water Resources
Aaron Carranza, North Dakota Department of Water Resources
Cammie Wright, North Dakota Department of Water Resources
Peter Wax, North Dakota Department of Environmental Quality
Kathy Alexander, Texas Commission on Environmental Quality
George Russell, Oklahoma Department of Environmental Quality
Dehvyne Ashmore, Nebraska Department of Natural Resources
Amy Winkelman, North Dakota Department of Water Resources
George Russell, Oklahoma Department of Environmental Quality
Mark Mayer, South Dakota Dept. of Agriculture and Natural Resources
Trevor Watson, Montana Department of Natural Resources and Conservation
Kathleen Ronning-Schimetz, North Dakota Department of Environmental Quality

WESTFAST

Michael Eberle, USDA Forest Service
Heather Hofman, Natural Resources Conservation Service
Stephanie Granger, National Aeronautics and Space Administration
Madeline Franklin, U.S. Bureau of Reclamation (WestFAST Liaison)

STAFF

Tony Willardson
Michelle Bushman
Elysse Campbell
Ryan James

WELCOME AND INTRODUCTIONS

Jennifer Zygmunt, Committee Chair, welcomed members and guests.

APPROVAL OF MINUTES

Zygmunt called for a motion to approve the minutes from the Spring meetings held in Washington, D.C. on March 14. A motion was offered, seconded, and the minutes were unanimously approved.

PROPOSED/SUNSETTING POSITIONS

Jennifer Zygmunt shared some background on the drafting process for the proposed position on State Nutrient Reduction Strategies. Following the Committee's discussion in DC, Jennifer, Tom Stiles from Kansas, John Mackey from Utah, and JoJo La from Colorado met and wordsmithed the resolution. The resolution was then forwarded to the Committee for comments and further feedback. The Executive Committee made some additional edits.

Tom Stiles explained that this originated as a series of statements from ACWA, which he presented at the DC meetings March. Tom said the position promotes States' different approaches to managing nutrients. He noted that EPA Region 7 is in the process of creating a story map of State approaches to nutrients. Region 7 will be on the agenda for the Water Quality Committee meeting in Lawrence Kansas, at which time members will have the opportunity to give input on how they will be represented in the story map.

Jennifer Carr asked about the second BE IT FURTHER RESOLVED clause, indicating that "the Western States Water Council supports the ability of each State to implement.... appropriate

documentation and public outreach." She asked about the reasoning and pointed out that there is interest in trying to get States to standardize public outreach. Jennifer Zygmunt responded that there had been some back and forth discussions on that provision. She said one of the main issues is ensuring that EPA allows States the opportunity to influence representation and accuracy when it makes efforts like the national story map. It was previously part of the resolved clause, but the subcommittees decided to move it to the third whereas clause. Jennifer Carr said the language was acceptable. Tom said part of the reasoning was to enable and encourage States to tell their story so that they would be accurately represented to EPA. Zygmunt called or a motion to forward the position to the Full Council. A motion was offered, seconded and unanimously approved.

Jennifer presented Position #469, Water Transfers and NPDES Discharge permits. No edits were proposed to the resolution and no discussion was offered. The committee voted to recommend the position, without amendment, to the Full Council.

NORTH DAKOTA WATER QUALITY ISSUES

Peter Wax, a scientist with the North Dakota Department of Environmental Quality, gave an overview of water quality issues in North Dakota. He emphasized the critical role of communication in addressing water quality issues. He highlighted the need for effective information flow between scientists, management, and the public. He explained that often the public becomes aware of an issue, and scientists conduct research and provide solutions, but management fails to act upon the findings, and ultimately, the public relies on unreliable sources for information.

Peter described the three main regions of the state: the Red River Valley, the glaciated plains, and the unglaciated portion of the state. The Red River Valley, located in the eastern part of the state, is a glacial lake bottom and is home to a third of North Dakota's population. He noted that stream connectedness is a major concern in this region. The glaciated plains, encompassing much of central and northern North Dakota, are characterized by 3.2 million wetlands. These wetlands are highly productive ecosystems and play a crucial role in supporting various species, especially waterfowl. In this area the biggest water quality issues are sulfates, nutrients, and harmful algal blooms. Water quality issues in the unglaciated portion in the southwestern part of the state stem from energy development, where brine spills are the most significant threat to water quality. He explained that while crude oil spills can be readily seen, captured, and burned or attenuated by the ecosystem, but brine is difficult to see and contain, and quickly percolates into groundwater. Brine is predominantly made of sodium chloride with a saturation of 120-150,000 milligrams per meter, significantly saltier than ocean water at 19,000 mg/m. In the State of North Dakota, the average barrel of oil is accompanied by 18 barrels of brine. He again underscored the need to effectively communicate water quality issues to the public. He pointed out the challenge of conveying the seriousness of the issue amidst varying public perceptions, as some dismiss the problem and others express extreme concern. He said the truth is usually somewhere in between, but it takes an aggressive response to communicate that effectively.

Jojo La inquired about the state's efforts to address nutrient management. Peter outlined the state's CWA §319 program, which is their sole tool for dealing with nutrients (other than nutrient management plans for feed lot permits) and includes voluntary nutrient management programs.

LENGTHENING NPDES PERMIT TERMS

Mark Mayer, Director, Office of Water, South Dakota Department of Agriculture and Natural Resources introduced a proposal to draft a position statement in support of increasing the maximum length of National Pollution Discharge Elimination System (NPDES) permit terms from five to “up to ten years.” He noted that the current five-year limit is mandated by the 1972 Clean Water Act and most states have delegated NPDES authority. Since 1972, the effort required to implement the permitting process has increased significantly, increasing the workload and leading to a permit backlog. He said other programs like RCRA, Solid Waste, and Water Pollution Control permits already have ten-year terms. He noted challenges in recruiting and retaining staff amidst the strain of constant backlog. He pointed to other demands on limited state resources such as EPA’s focus on environmental justice and climate change. South Dakota has a robust permitting process requiring a lot of internal review, facility reviews, and public commenting periods, which takes on average between 3 to 18 months. He said out of ~2500 permits, their department has a backlog of about 36%. Mark suggested that extending the permit term to ten years could significantly reduce permit backlogs and potentially save three full-time equivalent (FTEs) for the department. He cited South Dakota’s CAFO program, which already operates on a ten-year permit cycle, as a successful example. To address concerns about permittees feeling entitled to a ten-year term, Mark emphasized that using the phrase “up to 10 years” would maintain flexibility. He talked about ongoing stakeholder engagement efforts, noting that the proposal was under review by the ECOS Water Committee and that he planned to seek support from ACWA.

Tom Stiles raised a question about the Creating Confidence in Clean Water Permitting Act (H.R. 7023, included in the briefing materials) which included provisions to extend NPDES permits but encountered opposition from the Office of Management and Budget (OMB). Michelle Bushman and Elysse Campbell clarified that the OMB’s opposition might be attributed to other controversial provisions within the bill, but that it was not clear from their language what they objected to. Jennifer Carr questioned the benefits of a ten-year permit for the permittee compared to the permit being administratively continued. Mark responded that the 10-year renewal period would allow managers to work on renewals in year eight rather than administratively continuing them. Carr also questioned whether agencies would need to adjust the fee schedule to ensure program sustainability with a longer permit cycle. Leslie Connelly and Mark confirmed that their states are already on an annual fee schedule. Joaquin Esquivel inquired about potential threats to water quality which may need to be responded to, sooner than the 10-year expiration, and whether that was being considered. Mark emphasized the importance of the flexible “up to 10 years” language and to retain States’ ability to reopen permits as needed. Tom Stiles noted two potential impacts: (1) increased scrutiny from the EPA and (2) the impact on states with “no more stringent than” language. Mark emphasized the need for carefully crafted language to ensure flexibility. Trevor Baggiore questioned the long-term benefits of the proposal, suggesting that resources might be reassigned elsewhere. Trevor also noted that many States rely on the renewal process as a trigger for incorporating new standards that may be promulgated, which happens as often as three years.

Mayer concluded by formally presenting a draft resolution proposing an amendment to the Clean Water Act to change NPDES permits to an “up to 10-year” term. He requested the committee review the draft and strive for a consensus on the language. Jennifer Zygmunt proposed forming a

subcommittee. Subcommittee members include: Mark Mayer, Joaquin Esquivel, Trevor Baggioire, Jennifer Carr, and Leslie Connelly. Jennifer Zygmunt suggested the subcommittee revise the draft resolution and present their findings at a future meeting. The committee also committed to monitoring ECOS and ACWA's progress on similar resolutions.

MAPPING WETLANDS

Russ Kaiser, Acting Director, Oceans, Wetlands, and Communities Division, EPA provided an update on EPA's amendment to the 2023 WOTUS rule in response to *Sackett v. EPA*. On August 29, 2023, the EPA and Army issued a final rule to amend the definition to be consistent with the Supreme Court decision. Due to ongoing litigation, the agencies are implementing the amended 2023 rule in 23 states, the District of Columbia, and U.S. territories, but are applying the pre-2015 regulatory regime, as informed by the Sackett decision, in the remaining 27 states. Kaiser explained that on September 27, 2023, the agencies signed approved jurisdictional determination (AJD) coordination memos, which included a process for elevating certain draft AJDs to headquarters for review. The goal of this process was to ensure consistency in AJDs across the different regulatory regimes. The coordination process was extended for an additional nine months on June 25, 2024, with an expiration date of March 27, 2025. To date, nine policy memos have been finalized and posted publicly on the EPA and Army websites. These memos address the following: (1) identifying and characterizing stream reach and flow characteristics; (2) evaluating ponds as tributaries; (3) determining when certain connections can and cannot meet the continuous surface connection requirement for adjacent wetlands; (4) evaluating wetlands divided by artificial structures as a single wetland; (5) determining if specific subsurface storm drains can serve as a continuous surface connection for adjacent wetlands. Kaiser stated that the agencies have requested field staff to use these memos as references for making jurisdictional determinations, especially when encountering similar fact patterns in AJDs.

Jennifer Carr inquired about how the agencies were communicating the existence of these memos. She had not received notification through any listservs, emails, or even EPA Region Nine email subscription. Kaiser responded that the memos are currently posted on the EPA and Army websites, and that the agencies are exploring additional methods for disseminating information about new memos. Jennifer Zygmunt asked if states had been engaged in developing the memos. Kaiser explained that this process is typically handled internally within the federal government, particularly the Army Corps of Engineers, as it pertains to the §404 permit process. He clarified that the EPA has final authority over jurisdiction, due to the *Civiletti* opinion. The two agencies have been coordinating on challenging cases. Jojo La suggested distributing a list of the memos to the committee for wider distribution. Kaiser agreed to send the web link to Michelle Bushman.

Alex Porteous, National Coordinator, Watershed Restoration and Protection Tracking, EPA then presented on the Advanced Water Mapping and Analytics (AWMA) Initiative, a collaborative effort between the EPA and its federal partners to improve national mapping and modeling capacity for water bodies, including wetlands. Porteous shared a story map developed by the interagency working group to illustrate the AWMA Initiative goals and progress. He used the example of a lake in North Dakota to demonstrate the dynamic nature of wetland surface area, emphasizing the challenges in managing wetlands. Porteous outlined the key goals of the AWMA initiative

including: (1) developing the Nation's Framework Surface Water dataset, comprising the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI); (2) making datasets interoperable for a more comprehensive understanding of water resources; (3) leveraging USGS elevation data to enhance resolution and understanding of topography; (4) integrating the NWI, NHD, and elevation data to create a more comprehensive water story, particularly for wetlands.

Porteous emphasized the ecological significance of wetlands, noting that despite covering only 5% of the contiguous U.S. land area, they support half of all threatened and endangered species. He demonstrated how integrating different data sets could provide a clearer picture of wetland extent, features, and functions. Porteous discussed the importance of connectivity in understanding and modeling water resources. He highlighted the work of the EPA's Office of Research and Development in using the NHD, NWI, and other datasets to develop GIS-based models that predict future wetland occurrence and assess connectivity. He also highlighted the role of the Water Quality Portal, a joint EPA and USGS portal that integrates data from a wide range of organizations, including federal, state, tribal, and local agencies, as well as private industry, universities, and NGOs. Porteous concluded by summarizing the critical investments needed for the success of AWMA, including: (1) supporting the USGS 3D Hydrography Program (3DHP) and the National Wetlands Inventory; (2) enhancing the implementation of the 3DHP information infrastructure; (3) leveraging artificial intelligence and remote sensing; (4) developing next-generation modeling capabilities. He proposed a phased implementation approach, starting with regional-scale projects that could be expanded based on initial successes.

Jennifer Zygmunt commented that she was previously unaware of the AWMA story map and expressed appreciation for the overview. She suggested further exploration of this resource. Aaron Vollmer asked about the availability of state-level data sets. Porteous acknowledged the importance of incorporating data from state and local organizations, emphasizing that these entities often possess valuable information. He highlighted the success of this approach with the Water Quality Portal and emphasized that indexing state water data to the National Hydrography is crucial. Zygmunt pointed out that reaching out to the State and local levels for organizational data is critical to next steps. She said that State and local agencies often have the best data and want to get involved with how their data is represented.

Tom Riley mentioned that Nebraska has statewide LiDAR coverage and questioned how these resources could be integrated into AWMA. Porteous responded that the USGS has made significant progress in capturing LiDAR data for the 3DHP, with over 90% coverage achieved. He stated that the USGS is nearing completion of its LiDAR coverage, which will be essential for the 3D Elevation Program.

Jennifer Zygmunt reiterated the importance of state-level data and encouraged collaboration between the council, states, and the AWMA initiative. She suggested that working through the council or directly with states could facilitate data sharing and integration.

CWA HUMAN HEALTH CRITERIA

Jennifer Zygmunt noted an increase in EPA oversight and pressure regarding state human health criteria, with recent examples in Alaska and Washington. Christina Carpenter, Deputy Commissioner for the Alaska Department of Environmental Conservation (DEC), explained that human health criteria (HHC) define the maximum concentration of a pollutant in water that is not expected to cause adverse health effects. Alaska adopted EPA's 1992 national toxics rule values for HHC in 2003 and has been working to update these values. Alaska DEC partnered with the Alaska Department of Fish and Game's Division of Subsistence, which is authorized to research, collect data, report and educate on findings, and determine appropriate application of findings. The partnership formed a technical working group with other stakeholders and experts to examine Alaska-specific factors influencing fish consumption rates. The data analysis revealed significant regional variations in fish consumption rates. Alaska currently uses a fish consumption rate of 6.5 grams per day established in 1992. Some regions were more represented in the data set than others. Ethnic composition of participants varied significantly across the state as well. For example, in South Central Alaska (Anchorage, Kenai) about 35.3% of the population is indigenous. Western and Northern Alaska can be up to 98% indigenous. The technical working group put out a couple of reports from 2018-2019. Based on these findings, the working group proposed incorporating freshwater fish, marine invertebrates, salmon, halibut, and herring into the updated fish consumption rate. Marine mammals were excluded due to their regional consumption variability and the availability of alternative methods to address pollutants in their diets. The data also indicated that salmon comprises a substantial portion of the Alaskan diet, representing between 22% to 88% of fish consumption

Christina compared Alaska's findings to national recommendations. The national general population recommendation for fish consumption, updated in 2014, stands at 22 grams per day. EPA's 2000 methodology recommended the 90th percentile of 143 grams per day as a subsistence rate. Alaska's findings closely align with this national subsistence rate. Since the technical working group concluded its efforts, Alaska has been developing and presenting various HHC scenarios to stakeholders, including the mining, oil and gas industries, and wastewater facilities. In February 2023, Alaska conducted a public scoping project in February 2023 to gather input on potential rule changes outside of a formal public comment period. Christina said: "It's a fantastic way to get input from the public without being in that formal public comment period." Alaska has also engaged in multiple interactions with EPA concerning areas of concern, information sources, and potential challenges. All correspondence is publicly available on the department's website.

Christina also discussed EPA's June 5th determination that Alaska's existing HHC fail to protect the state's designated uses. EPA stipulated that Alaska must take action to update its criteria within 6 to 12 months, or EPA will intervene. EPA also initiated tribal consultation on the matter. She said that Alaska anticipated this determination and that the state intends to meet the deadline. She emphasized that there's no evidence of Alaskans experiencing adverse health impacts from current HHC levels. In developing its approach, Alaska has considered litigation and issues arising in other states, along with relevant tribal rulemaking by EPA. The current focus is on addressing compliance considerations and ensuring that proposed rulemaking allows permitted industries to comply adequately and reasonably.

Leslie Connelly, Washington State Department of Ecology, provided an overview of her state's experiences with EPA regarding their HHC. She said Washington began updating its HHC in 2009, prompted by the governor's initiative to engage with the state's 29 treaty tribes to establish fish consumption rates reflective of their diets, particularly salmon consumption. At the time, Washington was using the federal rate of 6.5 grams per day, which equates to roughly six ounces per month, a significantly lower amount compared to studies indicating tribal consumption rates of 300 to 400 grams per day. These discussions, coupled with legal pressure from environmental and sport fishing communities, led Washington to propose a fish consumption rate of 175 grams per day in 2016. EPA rejected this proposal and put forward its own rule. The governor, committed to state leadership on this issue, revised the risk level while maintaining the 175 grams per day consumption rate. Subsequently, EPA partially approved Washington's HHC and established its own Washington Toxics Rule, incorporating more stringent criteria for certain parameters. In 2019, EPA reversed its partial disapproval of the 2016 HHC, acknowledging infringement on Washington's authority to make risk-based decisions. This resulted in full approval of Washington's 2016 criteria in 2020. However, EPA withdrew this approval in 2022, reinstating its own Washington-specific rule, termed the "Restoring Protective Human Health Criteria in Washington."

Consequently, Washington currently operates under two sets of rules: the federal rule adopted by EPA in 2022, and the state rule approved in 2016. The federal rule governs Clean Water Act actions, while Washington applies its state criteria for parameters not covered by the federal rule. Leslie summarized that Washington's HHC has consistently been intertwined with tribal treaty rights, originating from harvest discussions where the state and tribes agreed on a 50/50 harvest split. This agreement necessitated a reevaluation of the fish consumption rate to reflect the substantial levels of fish consumption among both tribal communities and sport anglers. She said that Washington is somewhat settled at this point, although a lawsuit from the business industry challenges EPA's latest reversal, alleging non-compliance with the Endangered Species Act. Leslie noted the ongoing complexities of this issue, referring to a recent article in the State Line newsletter that highlights the prolonged struggle to adjust consumption rates.

Jennifer expressed gratitude to both Christina and Leslie for their overviews and acknowledged the significant effort required for states to update and revise their standards. She encouraged participants to contact her or Michelle if further dialogue is required at the Kansas meeting, potentially with EPA representatives present.

PFAS AND THE WOODBURY WATER TREATMENT PROJECT

Aaron Vollmer from AE2S provided an overview of the 3M PFAS lawsuit and settlement leading to the Woodbury, MN water treatment project. 3M began producing PFAS in the 1940s and disposed of the contaminants in landfills from the 1950s to 1970s. They continued PFAS production until 2002. This disposal in the Eastern metropolitan area leached into groundwater sources, impacting 14 communities. The leaching event was discovered in 2004, and the state filed a lawsuit against 3M in 2007. The lawsuit directed 3M to remediate the contamination, identify the source, stop the leaching, and investigate further remedial actions. In 2010, the state filed an additional lawsuit against 3M, alleging that they had damaged natural resources and should fund cleanup

efforts. This lawsuit was settled in 2018 for \$850 million, with the agreement that a remediation plan would be completed by 2021.

The 2007 consent order secured an initial contribution of \$40 million from 3M to address the immediate drinking water crisis. This funding provided temporary treatment for municipal drinking water, as well as initiated investigations into mitigating damage to future drinking water systems. The \$40 million was intended for short-term priorities until the 2018 settlement could be implemented for long-term solutions. After 2023, the 2007 consent order will no longer fund drinking water problems; however, once the 2018 settlement projects are complete, any remaining projects will revert to the 2007 consent order for funding.

The 2018 settlement had three priorities: (1) ensuring safe drinking water in the affected Washington County area; (2) enhancing natural resources; and (3) allocating remaining funds to statewide environmental budgets for restoration efforts. Currently, the focus is on ensuring safe drinking water, and priorities two and three will be addressed once priority one is complete. To tackle priority one, a group of co-trustees, consisting of the Department of Natural Resources, the Minnesota Pollution Control Agency, and the Department of Health, was formed in 2018. This group leads the settlement execution and allocates funds to resolve the drinking water crisis. In 2021, they completed the Conceptual Drinking Water Supply study, which outlined a framework of projects to address the water crisis in collaboration with the affected communities.

Woodbury has experienced rapid population growth, and they faced water supply challenges from losing water sources to contamination and the need to accommodate the increasing water demands. Woodbury's water system comprises three well fields and 20 wells, and they had no treatment in place when AE2S started working with them. The water was pumped directly into the system with only chlorine and fluoride added. The Tamarack wellfield showed the most contamination, with the south and east wellfields also impacted. Woodbury aimed for a holistic approach to treatment, ensuring both current and future water quality. AE2S developed a four-step process: (1) a master plan for long-term treatment infrastructure; (2) preliminary engineering and pilot studies to determine the most effective technologies; (3) detailed design; and (4) construction. The master plan was to determine the most effective way to provide the community with long-term solutions to the contamination, account for future flexibility, and address the immediate crisis. It involved: (1) updating water demand targets; (2) capacity objectives and treatment goals; and (3) exploring alternative water supply options like river water. All potential PFAS treatment technologies were considered, along with the possibility of a central water plant or a plant at each wellfield. Ultimately, a single centralized plant was recommended as the best solution, which would collect water from all sources, treat it, and redistribute it back to the community. Of the treatment technologies evaluated, ion exchange and granular activated carbon (GAC) emerged as the leading contenders. Reverse osmosis, while considered, was deemed unfeasible due to wastewater treatment considerations. The chosen approach involved building a central plant, consolidating all water sources, and distributing treated water back into the community.

After the master plan, preliminary engineering involved finalizing treatment technologies and pipeline layouts, conducting pilot studies to evaluate media for PFAS removal, and addressing other treatment considerations for the drinking water plant. The primary engineering challenge was transporting all the water to the central location, requiring 17 miles of piping through a suburban

environment. To expedite the pilot study, which could take 12-18 months for PFAS treatment, it was divided into three phases, allowing design and pilot decisions to occur concurrently. The initial phase involved bench-scale and lab testing to finalize media selection for PFAS removal. Phase three was implemented during the design phase to gather additional information. The pilot facility was a temporary structure capable of treating highly contaminated wells, which would be removed once the final water pipeline became operational.

In designing the water treatment plant, future flexibility was prioritized due to the evolving nature of PFAS contamination and potential advancements in treatment technologies. This flexibility was crucial for accommodating new treatment methods, population growth, and potential new contaminant removal into the future. Space was reserved for an electric pump station, a clearwell and other expansion possibilities to accommodate growing demand or treatment for new contaminants that may arise. The plant's design also considered its location in a residential area, and measures were taken to minimize disturbances to nearby homes. Construction is expected to begin in 2023 and continue through 2025 and 2026, with the goal of completing the entire project by 2028. This timeline includes the development of the state's conceptual drinking water supply plan, followed by pilot studies, and finally the construction phase.

Vollmer noted several lessons learned from the Woodbury project, including that piloting was critical to understand technology and performance, and could take up to 18 months. He said design for PFAS-removal projects should prioritize flexibility to accommodate emerging contaminants and new technologies. Open communication with the community and council was also essential. Cost estimation for such projects proved difficult, necessitating the use of appropriate contingencies to account for unexpected expenses. Vollmer concluded by noting that the five-year timeframe proposed by the federal government for municipal suppliers to address PFAS contamination might not be sufficient.

STAFF UPDATES

Michelle Bushman announced that EPA Office of Mountain, Deserts, and Plains had reached out to request that someone from the Council attend one of their monthly virtual meetings and give a 10-15 minute presentation on abandoned mine cleanup. Michelle requested that any representatives from states in the intermountain west who may have a particular interest in abandoned mines reach out to her, to either volunteer to give the presentation or provide talking points for Council staff to deliver.

FY2024-2025 COMMITTEE WORK PLAN

The FY2024-2025 Committee Work Plan was approved.

SUNSETTING POSITIONS FOR FALL 2024 MEETINGS

Position #471 supporting State CWA Section 401 Certification Authority

Position #477 regarding Abandoned Hardrock Mine Cleanup

OTHER MATTERS

There being no other matters, the Water Quality Committee was adjourned.