The PNCWA Spring Summit features a series of dynamic, interactive half-day workshops hosted by PNCWA committees. Workshops run concurrently, offering attendees the opportunity to customize a schedule that suits them and earn 0.4 CEUs for a single workshop, or up to 1.4 CEUs for the full Summit.

PNCWA Spring Summit Overview Agenda

Wednesday, February 26 **8 AM-12 PM**	**Women of Water Leadership Track** *This workshop develops leadership skills for driving change in the water industry, focusing on collaboration, communication, resilience, and creating opportunities for emerging professionals through interactive exercises and personalized strategies.*
	Energy Planning for Our Energy Future *Learn how Energy Planning can help your organization optimize energy use to meet the challenges of increasing energy costs and pressure to reduce GHGs.*
	How to Plan for and Navigate the Post-LTCP World in the Wake of EPA's Draft Guidance Report *This workshop explores navigating post-LTCP CSO requirements, focusing on EPA's draft guidance, unanswered questions, and collaborative insights from experts and communities to shape future strategies.*
Wednesday, February 26 **1 PM – 5 PM**	**Unlocking Your Potential: A Comprehensive Guide to Your Strengths** *Please join us for an energetic and highly interactive Gallup CliftonStrengths workshop where you will have an opportunity to gain greater understanding of your natural talents and how to use them to their fullest potential in your everyday life.*
	Danes, Dung, and Development *Join us for a terrific tale of turds, technology, and tourist traps while learning how the Danes are tackling climate change head on!*
	From Awareness to Action: How Public Agencies, Non-Profits, and the Private Sector are Addressing 6PPD-q *Speakers from public and private agencies across the Pacific Northwest will present on regulations, research, and implementation of projects to reduce and remove 6PPD-q.*

Thursday, February 27 **8 AM – 12 PM**	**AI in Today's Water Workplace** *This workshop explores AI's growing role in wastewater, covering its applications, ethical considerations, communication, policy creation, and hands-on exercises to enhance industry efficiency.*
	Exploring the Life Cycle of Collection Systems: Planning to Rehabilitation and Everything in Between *Learn about the entire life cycle of collection systems from planning to design, renewal, and maintenance with topics rooted in actual case studies and interactive discussion.*
Thursday, February 27 **1 PM – 3 PM**	**Georgetown Wet Weather Treatment Station Tour** *Join PNCWA for a tour of the innovative King County stormwater treatment facility. Limited to 25 attendees.*

PNCWA

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Women of Water Leadership Track

Wednesday, February 26
8 AM – 12 PM

Workshop Description

Navigating Leadership in the Utility Sector

Across the country, utilities, in close collaboration with a diverse range of stakeholders, are acting as catalysts for change. Addressing sea level rise while managing workforce and procurement processes for efficiencies, to collaborating with stakeholders to create partnerships to address priorities. The main learning objectives are:

- Essential leadership capacities at utilities needed to guide change.
- Navigating through cultural, political, economic and technical dimensions towards a common goal.
- Leadership capacities and experiences that can inform utility staff as well as future professions

Polling Session and Discussion

Fun and interactive time for attendees to see who is in the room and poll on intriguing questions related to the Summit's Leadership Track. Questions will provide opportunity for discussion and engagement under the Women of Water theme "Resilient Voices; Telling our Stories."

WAVE Program Panel

The WAVE Panel will be comprised of past participants in the program and will provide folks with a background on WAVE, share participants' experiences, and provide a deeper understanding of the role played by programs supporting emerging professionals in their career trajectory and professional growth. The panel will also discuss the importance of DEI and creating intentional opportunities for diverse and underserved populations, and how the industry can better support the future generations of professionals. Attendees will gain an understanding of the importance of intentionally supporting diverse populations of students and emerging professionals. They will learn about some of the barriers that currently exist for entry into the water industry, and how they can help to remove these barriers and create space for emerging professionals to sit at the table.

Understanding your Personalized Leadership Style

Effective leadership is at the heart of every successful organization. Understanding your personalized leadership style involves self-awareness of your leadership traits to help identify strengths and areas for development. It also enables better communication, assessment of others' needs, and forging productive relationships. Factors such as personality, life experiences, communication style, and perspective influence your leadership style. The main learning objectives are:

- Examine ten leadership traits that can help leaders better understand their personalized leadership style.
- Reflect on factors such as personality, individual experiences, communication style and values, to embrace one's leadership traits.
- Develop individual goals to further strengthen leadership traits.

Mission Possible: Notes on Multitasking and Muli-Audience Communication

In today's dynamic professional environment, we are constantly bombarded with competing priorities and the need to communicate effectively with diverse audiences. This holds especially true for Audrie's role as the Public Works Director for the City of Sammamish. This presentation will focus on Audrie's practical strategies to navigate these challenges. The main learning objectives are:

- Prioritization Prowess: How to identify what is the right priority, delegate effectively, and maintain focus amidst distractions. Techniques and examples for managing multiple, and often conflicting, priorities.
- Audience Centric Communication: How to tailor your message to resonate with different audiences, including team members, council members, and the public.
- Leading Upward: How to enhance your communication with leadership to promote your professional development.

Leadership Development in Academic Research

Attendees will learn from the experiences of three emerging leaders in the water industry—Annapaola Panico, Abigail Murray, and Jen Hooper—who will share their innovative research and the leadership skills they've developed throughout their careers. The session will explore diverse topics, including advanced water treatment technologies, sustainable infrastructure design, and strategies for addressing equity challenges in the field. Through their stories, participants will gain insights into the technical, collaborative, and leadership skills needed to navigate complex challenges, foster innovation, and excel in their professional journeys.

Learning Objectives

This workshop equips participants with essential leadership skills to drive change in the water industry. Attendees will learn how to navigate complex cultural, political, and economic dynamics

to achieve common goals and will examine key leadership traits to refine their personalized leadership styles. Through hands-on exercises, such as reflective self-assessments and interactive discussions, participants will explore prioritization strategies, effective communication techniques for diverse audiences, and approaches to foster collaboration and resilience. Attendees will also gain actionable insights into creating opportunities for emerging professionals and breaking down barriers to entry into the water sector.

By attending this workshop, participants will develop practical skills to tackle real-world challenges in the water industry, from addressing sea-level rise to managing workforce efficiencies. Leadership traits and strategies will be reinforced through engaging activities, including live polling, group discussions, and exposure to the research and experiences of emerging leaders. Participants will leave with personalized leadership development goals, techniques for effective delegation and audience-centric communication, and a deeper understanding of how to support diverse voices in the field. The interactive format ensures attendees can immediately apply these tools to enhance their professional growth and organizational impact.

Target Audience

This workshop is designed for women in the water industry who are currently in leadership positions or aspire to step into leadership roles. Whether you are an emerging professional eager to shape your career trajectory or a seasoned expert seeking to refine your leadership approach, this workshop offers valuable insights. Attendees will include women from diverse professional backgrounds—spanning the public and private sectors, as well as academia—united by a shared commitment to driving innovation and resilience within the water industry. This event is ideal for those who want to enhance their leadership skills, foster collaboration, and contribute to the growth and inclusivity of the water profession.

Workshop Speakers

Ellen Stewart (Navigating Leadership in the Utility Sector)

- **Contact information**: Seattle Public Utilities Deputy Director, Drainage and Wastewater, Ellen.Stewart@seattle.gov
- Ellen oversees planning, program management, regulatory compliance, operations and maintenance, asset management and source control for the drainage and wastewater line of business. She started with SPU in 2001, as a Source Control Inspector and was most recently the Division Director for the Source Control and Pollution Prevention Division, which includes regulatory compliance functions such as stormwater and wastewater source control, as well as outreach and engagement programs. Ellen has a Bachelor of

Science in Aquatic Resources from the University of Vermont. Her expertise includes ensuring systems and processes are designed for efficiency and innovation, and she enjoys motivating and supporting teams and people to elevate their best work.

Nancy Thai (Polling Session and Discussion)

- **Contact information:** Consor, Nancy.Thai@consoreng.com
- As a public health practitioner centering equity and social justice, Nancy works to engage in conversations that include all voices. She is a relationship-oriented, creative problem-solver striving to implement new strategies and challenge existing structures to ensure we design and build systems that serve all people.

Asa Chavez-Knight, Juliana Andrade, Geneva Schlepp, Ana Haines, and Catherine Tran (WAVE Program Panel)

- **Contact information:**
  - Asa Chavez-Knight (moderator): Seattle Public Utilities, Asa.Chavez-Knight@seattle.gov
  - Juliana Andrade: Brown & Caldwell, jandrade@brwncald.com
  - Geneva Schlepp: HDR, Geneva.Schlepp@hdrinc.com
  - Ana Haines: Hazen & Sawyer, ahaines@hazenandsawyer.com
  - Catherine Tran: Intel, tdthiencat@gmail.com

- Asa Chavez-Knight: Asa Chavez-Knight is a PNW-raised, Latina first-generation graduate & emerging professional. She comes from a low-income background and graduated from Washington State University with a B.S. in Civil Engineering. She is currently working on Water/Wastewater CIP projects such as the Ship Canal Water Quality Project at Seattle Public Utilities. Asa served as the WAVE Program Vice Chair & Chair from 2022-2024 after being a participant in program. She now serves on the PNCWA Board of Directors as the YP Rep.

- Juliana Andrade: Juliana Andrade is an Environmental Engineer at Brown and Caldwell in Seattle. She is a first-generation college graduate, earning her BS in Civil and Environmental Engineering from Seattle University in 2023. Juliana's involvement with PNCWA began when she joined the WAVE cohort that same year, and she has since been part of the leadership team, currently serving as the 2025 WAVE Committee Chair.

- Geneva Schlepp: Geneva Schlepp is a water/wastewater EIT working for HDR in their Bellevue office treatment team. Prior to joining HDR, Geneva earned a Bachelor's and Master of Civil & Environmental Engineering from Washington State University and University of Washington, respectively. PNCWA – and the WAVE program, especially – have been formative in Geneva's development as an emerging professional and provided her with her wastewater community; she currently serves as vice chair of the PNCWA S&YP committee.

- Ana Haines: Ana Haines holds a bachelor's degree in civil engineering and a master's degree in environmental engineering from Virginia Tech. Since graduating in 2023, she has worked as an environmental engineer at Hazen and Sawyer. She was a member of the 2024 WAVE cohort and has continued her involvement as a committee member for the following year.

- Catherine Tran: Catherine works at Intel in Oregon as a night shift engineer supporting manufacturing operations and technology development. They are in search of a fulfilling career that contributes to tackling today's global sustainability challenges and explored the water industry through the WAVE program in 2024 as part of that journey.

Lara Kammereck and Grizelda Sarria (Understanding your Personalized Leadership Style)

- **Contact information**:
  - Lara Kammereck: Carollo, LKammereck@carollo.com
  - Grizelda Sarria: Tetra Tech, grizelda.sarria@tetratech.com
- Lara Kammereck: Lara Kammereck is a senior project manager and senior vice president at Carollo Engineers. A municipal planning specialist with more than 25 years of experience in the field, she assists water and wastewater clients in developing resiliency assessments, comprehensive plans, alternative analyses, and condition assessment evaluations.
- Grizelda Sarria: Grizelda Sarria is a senior project manager and vice president at Tetra Tech. With over 25 years of experience at the planning and design level, she is currently serving as Project and Program Manager for wastewater and CSO clients with multidisciplinary design, external stakeholders management, alternatives analyses, design and construction management support.

Audrei Starsy (Mission Possible: Notes on Multitasking and Muli-Audience Communication)

- **Contact information**: Public Works Director, City of Sammamish, AStarsy@sammamish.us

- Audrie began her career in public service while working on her undergraduate degree from UW and has since worked with multi-disciplinary teams in industrial, commercial, and municipal stormwater management. Today, Audrie is the Public Works Director at the City of Sammamish. The Public Works Department provides support for the community through engineering, planning, inspection, asset management, and maintenance across multiple disciplines: stormwater, traffic engineering, transportation planning, development review, capital projects, maintenance, franchise management, and solid waste management. Her role requires effective communication with varying audiences, innovative solutions and strategic thinking, and prioritizing projects and daily operations with competing objectives.

Annapaola Panico, Abigail Murray, and Jen Hooper (Leadership Development in Academic Research)

- **Contact information**:

- Annapaola Panico: University of Washington, annapa@uw.edu
- Abigail Murray: University of Washington, abbeyfm@uw.edu
- Jen Hooper: University of Washington, hooperjl@cdmsmith.com

- Annapaola Panico: Born in Naples in 2000, Annapaola Panico is a PhD candidate in Environmental Engineering at the University of Washington, aiming to pursue a career in academic research. She studied at the University of Naples Federico II, where she completed both a Bachelor's and a Master's degree in Environmental Engineering, graduating summa cum laude (110/110 with honors). Her Bachelor's thesis, "Water Bathing in Italy," and her Master's thesis, "Implementation of a Treatment Process for Arsenic and Antimony Removal from Landfill Gas Condensate," demonstrate her focus on solving environmental issues. During her studies, she developed skills in a wide range of subjects, including mathematics, physics, sanitary engineering, and the circular economy. In 2022, she gained international experience through an internship at the University of Washington, where she worked with Professor Gregory Korshin on developing a novel process for arsenic and antimony removal from waste waters. This experience prepared her for her current PhD program, where she continues to expand on the same project. Annapaola is skilled in tools such as MATLAB, Python, AutoCAD (2D and 3D), and Microsoft Office. She is fluent in Italian and English (C1 level) and has basic knowledge of Spanish. Her achievements include reaching the national finals of Italy's Mathematics and Chemistry Olympiads during high school, where she also attended advanced courses in statistics. Outside her academic work, she is passionate about skiing and other sports, reflecting her determination and focus in every aspect of her life.

- Abigail Murray: Abbey is a third year Civil Engineering Ph.D. student at the University of Washington focusing on Sustainable Infrastructure Design. Her research interests include flood hazard mitigation through stormwater infrastructure adaptation, decision-making in the infrastructure design process, and justice and equity in the built environment. Currently, she is working on methods for identifying behavioral touchpoints in the stormwater infrastructure design process with related engineering practitioners in the Seattle area. Prior to her graduate education, she earned Bachelors of Science in Civil Engineering and Environmental Engineering from Montana State University. In her free time, she enjoys watching hockey and filling her Goodreads quota.

- Jen Hooper: Jen Hooper is a professional environmental engineer with nearly 15 years of consulting experience. She received a BS from the University of Idaho in Biological Engineering and an MS from Cornell University in Environmental Engineering. She is currently a doctoral student at the University of Washington in Civil and Environmental Engineering. She is also a Senior Engineer at CDM Smith, where she has specialized in research and development of innovative monitoring and treatment technologies for contaminant removal in potable water, wastewater and water reuse.

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Workshop Agenda

Time	Topic	Speaker
08:00-08:15	Welcome and Introductions	Lara Kammereck
08:15-08:45	Navigating Leadership in the Utility Sector	Ellen Stewart
08:45-09:15	Polling Session and Discussion	Nancy Thai
09:15-10:00	WAVE Program Panel Discussion	WAVE Program Panel
10:00-10:15	Break	
10:15-10:45	Understanding your Personalized Leadership Style	Lara Kammereck & Grizelda Sarria
10:45-11:15	Mission Possible: Notes on Multitasking and Muli-Audience Communication	Audrei Starsy
11:15-12:00	Leadership Development in Academic Research	UW Ph.D. Candidates

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Energy Planning for Our Energy Future

Wednesday, February 26
8 AM – 12 PM

Workshop Description

Energy Planning is not a conventional effort embarked upon by most water and wastewater utilities. This workshop will take the experiences and efforts of organizations leading the charge around reducing their energy consumption and GHGs to outline steps others can take to begin their energy planning journey. This workshop will begin by defining what energy planning is and how it fits in with more conventional planning efforts. The workshop will then touch on several case examples on how energy plans were adopted on a community-wide and organizational-wide level to get not only internal, but external (public) stakeholders on board for the necessary investments required to achieve GHG reduction and energy goals set forth by their organizations.

Learning Objectives

After attending this workshop, participants should be able to apply the information presented about energy planning to begin taking steps towards community-wide or organization -wide energy planning that makes efficient use of the resources at wastewater treatment plants in combination with clean energy from the grid.

Target Audience

This workshop will provide valuable information for any wastewater professionals interested in understanding how implement energy planning in their organizations.

Workshop Speakers

Preeti Thimmaraju, PE
Company: Brown and Caldwell
Email: pthimmaraju@brwncald.com
Phone: (714) 689-4809
Biography: Preeti has 8+ years of experience with Brown and Caldwell. She primarily focuses on solids and energy projects throughout California and the west coast. She is passionate about

beneficial utilization of biogas and works on a range of projects from conceptual design through detailed design and construction. Preeti likes to apply creative thinking and technical knowledge to provide Clients a comprehensive picture of their energy landscape and help guide them to meet overall energy goals. Preeti earned her M.S. in Chemical Engineering from University of California, Irvine.

Presentation Title: Strategic Energy Master Planning in a Complex and Dynamic Landscape
Presentation Description: The preparation of energy master plans as a standalone effort or supplemental to the more conventional facility master plans often highlight opportunities to reduce carbon footprint, improve energy resiliency, and reduce overall energy consumption while achieving permit compliances at WWTPs. This presentation will guide audience through the key components of an effective energy master plan and cover a case study implemented at a WWTP in California. The presentation will focus on a strategy and approach for energy master planning that considers facility specific demands, biogas utilization, state and federal level funding opportunities for clean energy, and alignment with climate action plan goals. By adopting a holistic approach, WWTPs can enhance operational resilience, reduce emissions, and reduce risk against energy price fluctuations.

Jon Butt, PE
Company: Mead and Hunt
Email: jon.butt@meadhunt.com
Phone: 414-755-1149
Biography: Based in Milwaukee, WI, Jon is the Midwest and Pacific Northwest Market Leader for Mead & Hunt. Jon has a BS in Chemical Engineering and an MBA. Jon has over 30 years of wastewater experience with primary, secondary, tertiary, and sludge treatment processes. Jon has spent years engineering sustainable solutions providing energy reductions, resource recovery, and treatment optimization. Jon is a frequent presenter at local wastewater conferences and seminars. Jon is a member of WEF.

Presentation Title: Recovered Resource Planning – Beyond Energy
Presentation Description: Discussions about resource recovery typically focus on energy. This presentation focuses on other recoverable resources like nutrients, heat, and water, and the potential energy life-cycle advantages that can be realized from them.

Steve Hubble
Company: City of Boise
Email: shubble@cityofboise.org
Phone: 540-903-1906

Biography: Steve Hubble is the Climate Action, Senior Manager for the City of Boise, Department of Public Works. Steve leads the city's climate, sustainability, energy, water resources, environmental education and geothermal programs and initiatives. Prior to joining the City, Steve worked 13 years for Stafford County, Virginia in various Public Works and Planning roles. Steve has a Bachelor's of Science in Geography from Radford University and a Masters in Public Administration from Virginia Commonwealth University. Steve lives in Boise, with his wife Sarah.

Presentation Title: Boise's Climate Action Roadmap
Presentation Description: This presentation will focus on Boise's climate action and clean electricity transition efforts and the connection of both to the City's water renewal facilities and operations including an analysis of emerging issues in identifying emissions from wastewater facilities.

Matt Noesen, P.E., PMP, and Natalie Gustafson, P.E.
Company: Jacobs
Email: Matt.Noesen@jacobs.com, Natalie.Gustafson@jacobs.com
Phone: 360-314-4532 (Matt), 330-749-5899 (Natalie)
Biography:

- Matt Noesen has over 34 years of experience working in 23 states and on over 100 capital programs. Matt has experience with traditional design-bid-build, GC/CM and progressive Design-Build delivery methods. He also has extensive experience with innovative procurement approaches to accelerate project schedule and enhance Owner control of desired outcomes.
  Matt is passionate about connecting the Water-Energy nexus dots focusing on resource recovery at municipal wastewater treatment facilities. He has been a WEF member since 1990. He received his BS in Electrical Engineering from Carnegie-Mellon University, and MS in Environmental Engineering from the University of California, Berkeley.
- Natalie Gustafson is a wastewater process engineer with Jacobs based out of Bellevue, Washington, and focuses on design and planning of residuals treatment and resource recovery projects. Natalie has worked on projects across the Pacific Northwest, as well as in the Midwest US. Natalie is a professional engineer in Washington and Indiana, with over 7 years of engineering experience. She holds a Bachelor of Science in Environmental and Ecological Engineering from Purdue University.

Presentation Title: Sustainable Energy Management Strategies for Water Resource Recovery Facilities

Presentation Description: Overview of typical energy consumption breakdown at water resource recovery facilities (i.e. pumps, blowers, digestion, solids handling etc.). Facility-wide energy resiliency planning through:

- Energy efficiency measures coupled with renewable energy generations (solar, battery storage, generators, etc.)
- Biogas production optimization and storage
    - Co-digestion of high strength waste, such as food waste, fats, oils and grease, and industrial feedstock.
    - Enhanced digestion approaches (ex: thermophilic digestion, thermal hydrolysis, etc.)
- Heat generation planning, including optimally sizing boilers and / or cogeneration engines
- Case study of using digital tools to assist with energy optimization (Artificial intelligence/machine learning)

Eric Schey
Company: King County Wastewater Treatment Division
Email: eschey@kingcounty.gov
Phone: (206) 263-3784
Biography: Eric received his BS in Civil Engineering from Colorado State University and has 20 years of experience with wastewater infrastructure as a mechanical and civil engineer. Eric is currently employed by King County Wastewater Treatment Division as a member of the Resource Recovery unit as a Senior Sustainability Engineer. In his current role, Eric works with WTD operations staff on ways to reduce water and power use in day-to-day operations and also coordinates with capital project teams to ensure that the County's various sustainability requirements are incorporated in individual projects. Prior to working at King County, Eric worked for a number of consulting firms where he led the design of large infrastructure projects including wastewater conveyance and lift station improvements.

Presentation Title: Prioritizing GHG Reduction Efforts
Presentation Description: With the growing effort by many municipalities and counties to reduce overall greenhouse gas (GHG) emissions, many utilities are grappling with what reduction measures make sense while still keeping rates affordable for customers and maintaining (or even expanding) their existing capacity and level of service. In wastewater in particular, there is a growing list of treatment considerations to address, from nutrients like nitrogen and phosphorus to PFAS and other contaminates of emerging concern (CECs), the potential for higher treatment levels that require increased power consumption and therefore greater GHG emissions also continues to grow. This presentation will cover just a few ways that King Couty Wastewater Treatment Division

has approached efforts to reduce overall GHG emissions in construction and operations while also tacking the demands of population growth and increased levels of treatment.

Workshop Agenda

8:00 – 8:10 am	Welcome and Introductions	Greg Mockos
8:10 - 9:00 am	Strategic Energy Planning and OC San Case Study +Q&A	Preeti Thimmaraju
9:00 - 9:30 am	Recovered Resource Planning + Q&A	Jon Butt
9:30 - 10:00 am	Boise's Climate Action Roadmap + QA	Steve Hubble
10:00 - 10:15 am	Break	
10:15 - 11:00 am	Sustainable Energy Management Strategies for Water Resource Recovery Facilities	Matt Noesen, P.E., PMP, and Natalie Gustafson, P.E.
11:00 - 11:45 am	Prioritizing GHG Reduction Efforts +QA	Eric Schey
11:45-12:00 pm	Wrap-Up and Survey	Greg Mockos

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

How to Plan for and Navigate the Post-LTCP World in the Wake of EPA's Draft Guidance Release

Wednesday, February 26
8 AM – 12 PM

Workshop Description

Planning for and navigating post-LTCP CSO requirements is a challenge many CSO communities will need to navigate in the near future as they wrap up their LCTPs.

There is a very real, critical problem of requiring communities that have already expended significant resources on CSO control projects to devote more of their capital budgets to CSO controls after completing their LTCPs. A substantial number of communities are close to completing the CSOs projects required by their LTCPs. Those projects have resulted in enormous CSO reductions, but some of them might not cause water quality standards to be met. In those cases, communities would need to invest in more CSO controls, which are unlikely to be cost-effective. Having already achieved enormous CSO reductions, these communities will find no more "low-hanging fruit"; they will likely be chasing marginal CSO reductions at high costs. These high costs would come at a time when communities cannot afford them. Many CSO communities are already struggling to keep their rates affordable while also tackling aging infrastructure, adapting to a changing climate, and tackling other pressing water quality issues (*e.g.*, nutrients).

The new draft EPA guidance seeks to address how NPDES permits might provide post-LTCP communities alternatives to making capital investments to chase increasingly marginal water quality gains but leaves some questions unanswered and what flexibility may be built into the new guidance. while raising others.

What is a CSO community nearing the end of LTCP implementation to do? How do you define what it means to comply with your water-quality-based obligations under the CSO Control Policy? How do you protect your investment in your CSO controls and your capital budget from demands for more projects that make little environmental and economic sense?

The workshop will be broken into four phases: (1) overview of the issues at play and concerns raised by EPA's draft guidance, (2) a panel discussion amongst a water lawyer, consultant, and CSO community on how we might all forge ahead, (3) breakout group mock planning sessions for varying hypothetical CSO communities reaching the end of their LTCP plans, and (4) sharing of key takeaways from the breakout groups.

PNCWA Pacific Northwest Clean Water Assoc. 1935

wef Member Association

For this workshop we will include current CSO program managers from Washington and Oregon. Ideally, this will be a venue for a Pacific Northwest summit on CSOs that has been a desire for several years among CSO communities. The workshop will be helpful to both the public sector and consultants working on CSO issues.

Learning Objectives

1. Develop an appreciation of the range of issues at play for CSO communities reaching the end of their LTCPs.
2. Gain a full understanding of EPA's draft guidance, including new ground paved and unanswered questions.
3. Develop critical insights into financial capability, climate change projections specific to the Northwest, and tools for future planning, informed by both a panel discussion and breakout group mock planning sessions.

Target Audience

Pacific Northwest CSO communities; EPA Region 10; EPA Ombudsman

Workshop Speakers

Lisa Biddle, Municipal Branch Chief, US EPA, Office of Water
Lisa Biddle is the Municipal Branch Chief in EPA's Water Permits Division in the Office of Wastewater Management. She has been working on wastewater, stormwater, and related policy issues for almost 20 years, first in the private sector and then in EPA's Office of Water since 2011. Lisa is a licensed professional engineer in Virginia and holds a BS in Civil Engineering from Bucknell University and an MS in Environmental Engineering from UNC, Chapel Hill.

Erika Spanton, Principal, Beveridge & Diamond
Erika maintains a robust mixed practice of litigation, regulatory, and white collar defense work focused on water quality matters. She has deep regulatory expertise with federal and state stormwater, wastewater, spill prevention and countermeasure (SPCC), and Safe Drinking Water Act requirements. This includes assisting clients with environmental audits, compliance assessments, and internal investigations, providing counsel on high-stakes enforcement and compliance matters, foreclosing enforcement escalation, and successfully negotiating penalty reductions.

Additionally, Erika co-leads B&D's Water Practice, and co-founded and leads B&D's Fisheries & Aquaculture industry group.

John Phillips, Parametrix

John has been working in the water industry since 1999 and is the Director of Integrated Watershed Management with Parametrix. He has experience in emergency planning, long range planning, climate change science, climate adaptation, wet weather issues, green infrastructure, and co-benefit analysis. John has an extensive background in climate adaptation and applying climate science to proactive actions. He worked with the University of Washington Climate Impacts Group, scoping specific studies to better understand how science impacts on urban planning and utility planning.

Workshop Agenda

Time	Topic	Speakers
8:00 – 8:15	Introductions	Workshop Chairs
8:15 – 9:15	Background and overview of EPA's draft guidance and the issues at play	Erika Spanton, Beveridge & Diamond
9:15 – 9:30	*Break*	
9:30 – 10:30	Panel discussion amongst a water lawyer, a consultant, a CSO community, and EPA on how we might all forge ahead	Moderator: Josiah Hartom, Government Affairs Committee Chair Panelists: Erika Spanton, Beveridge & Diamond John Phillips, Parametrix Lisa Biddle, US EPA, Office of Water TBD CSO community representative
10:30 – 11:15	Breakout group mock planning sessions for varying hypothetical CSO communities reaching the end of their LTCP plans	All participants
11:15 – 11:30	*Break*	
11:30 – 11:55	Sharing of key takeaways from the breakout groups	John Phillips (facilitator) All participants
11:55 – 12:00	Wrap up	Josiah Hartom

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Unlocking Your Potential: A Comprehensive Guide to Your Strengths
Gallup CliftonStrengths Training

Wednesday, February 26
1 PM – 5 PM

Workshop Description

One key to success is to fully understand how to apply one's greatest talents and strengths in everyday life. A person's talents – those thoughts, feelings, and behaviors that come naturally – are the source of your true potential and power.

This energetic and highly interactive Gallup CliftonStrengths workshop will foster a greater opportunity gain greater understanding of people's talents and how they can use them them in your everyday life.

There are three discussion blocks during the workshop, each with its own set of activities. The blocks include:

1. CliftonStrengths Orientation and connecting strengths identification to the individual
2. Identifying the strengths in others and using that knowledge to successfully build and work within teams.
3. Understanding how to effectively use strengths in the individual's role and professional aspirations.

As part of your registration, individuals will receive a CliftonStrengths assessment code to complete the assessment prior to the workshop. The assessment code will pay for the Top 5 strengths. Individuals can make the choice to unlock the full 34 strengths, at an additional cost to them, should they wish to do so.

During our time we will explore how to develop talents into strengths and uncover how to aim talents at career goals. Ultimately the activities, discussion and discovery, will allow individuals to develop Strengths-based goals.

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Learning Objectives

At the end of the workshop, attendees should be able to:

1. Relay the 4 Domains of CliftonStrengths and one primary attribute of each domain
2. Be able to recite their Top 5 Strengths and share one example of their strengths in action.
3. Have identified at least 1 CliftonStrength that they can use to achieve their professional goals in a team setting.

Target Audience

Individuals of all levels of wastewater industry experience as well as area of focus (e.g., operations, engineering, administration.

Workshop Speaker

Ameerah Palacios

As a Gallup-Certified Strengths Coach, Ameerah Palacios is skilled in helping you find the confidence to lead with your strengths and coaching you to your best. Ameerah has been a Gallup Coach since April 2017 and has led hundreds of leaders, managers and their teams to success through CliftonStrengths goal setting, stakeholder mapping, conflict management and building positive culture.

At HDR, a 100% employee-owned, global professional services firm specializing in architecture, engineering, environmental and construction services, Ameerah is national Senior Strategic Communications Lead focusing on water programs, pursuits and projects that elevate brands and help leaders in government infrastructure solve their most complex challenges through strategic communications, research, change management and advocacy.

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Workshop Agenda

Time:	Item:
1:00-1:15	**Welcome and Introductions**
	• Agenda Overview • Introductions
1:15-2:30	**Finding your Strengths**
	• The Science of Strengths • Theme Overview • First Impressions
Activity	Name it, Claim it, Aim it
2:30-3:45	**Strength in Teams***
	• How to Identify Strengths in Others • Building Partnerships
Activity	With whom do you partner
3:45- 4:45	**Strengths in Action**
	• How to use your strengths in your role • Setting goals from your strengths foundation
Activity	What you do Best Expectations
4:45- 5:00	Wrap-up and Adjourn

PNCWA Pacific Northwest Clean Water Assoc. 1935

wef Member Association

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Danes, Dung, and Development

Wednesday, February 26
1 PM – 5 PM

Workshop Description

Each presentation will include interactive elements, such as polls, handouts, or props, as well as leaving time for questions or discussion. Presentation descriptions:

- **Center for Sustainable Infrastructure (CSI)**
  - CSI organized the tour to Denmark and facilitated the exchange of knowledge between the PNW delegation and the Danish water professionals. During this presentation, Rhys and his colleagues will provide background on their organization and past tours.
- **Overview of Denmark Tour**
  - The CSI tour to Denmark was jam-packed with facility visits and presentations – Frank and Layne will provide an overview of the tour and highlight innovation that we saw at each stop. This presentation will provide a foundation for more in-depth conversions about projects in later presentations.
- **Regulatory Contrasts and Considerations**
  - Some of the sustainability measures that we saw in Denmark would be difficult to implement in the US due to a difference in regulations. Jocelyn and Jennifer will cover some of the potential obstacles facilities in the PNW would face to adapt some of the projects seen in Denmark.
- **Industrial Symbiosis**
  - An overarching theme of the trip was the concept of industrial symbiosis – or how facilities can work together to reduce waste. Dawn and Jessica will discuss the examples of industrial symbiosis we saw in Denmark and potential ways to start industrial symbiosis in the PNW.
- **Application in the PNW**
  - One of the goals of this trip was to exchange knowledge and implement the ideas from the trip here. Jessica and Hannah will present about projects at their facility inspired by the trip and how those projects could be applied at other facilities.
- **Innovative Sustainability at Home**
  - Denmark had fantastic examples of sustainable practices and exciting new processes. However, there is also great innovation in the PNW that is worth highlighting. Dawn will discuss examples of innovative and sustainable processes at WWTPs in the PNW.

- **Sustainability at Your Facility – Facilitated Discussion**
    - After hearing about all these new processes, participants will be invited to discuss ways that their WWTPs could implement new processes or work with other industries. Participants will work in small groups and then share their top two or three ideas with the larger group. Tour attendees will rotate around the groups to assist the discussion and answer any questions.

Learning Objectives

Attendees will learn about several technologies and systems used in Denmark to improve efficiency and sustainability, as well as innovations here in the Pacific Northwest. After learning about these projects, participants will apply that knowledge to their own facilities and discuss ideas of how to implement these projects or other ways to increase their sustainability. Attendees will leave this workshop with an increased index of ideas to improve their water resource recovery facilities.

Target Audience

This workshop is aimed at anyone who wants to learn about sustainability and would be particularly helpful for anyone that has the power to influence process changes at their facility. This workshop would also be helpful to regulators to understand what changes to our current rules could allow for more innovation at WWTPs.

Workshop Speakers

Hannah Thomascall
Spokane County
1004 N Freya St, Spokane WA 99202
(509) 477-7575
hthomascall@spokanecounty.org
Hannah Thomascall has worked at the Spokane County Regional Water Reclamation Facility (SCRWRF) since 2021 and is currently the Water Reclamation Project Manager. Before working at the SCRWRF, she worked in environmental permitting and at an engineering consultant firm. Hannah has a bachelor's degree in Biosystems Engineering from Auburn University.

Frank Dick
City of Vancouver
PO Box 1995, Vancouver WA 98668

(360) 487-7179
Frank.dick@cityofvancouver.us
Frank Dick is the Wastewater Engineering Supervisor for the City of Vancouver, WA and oversees a team delivering capital projects, Industrial Pretreatment Program and regulatory & policy programs. He currently serves as NACWA's co-chair of the Pretreatment and Pollution Prevention Committee and the chair of Oregon ACWA's Biosolids and Water Reuse Committee, where PFAS in the realm regulatory and policy issues affecting Clean Water industries has been top of topic.. He previously spent 14 years at a semiconductor manufacturing facility in the Portland area. Frank has a BS in Chemical Engineering from Washington State University.

Dawn Lesley
Jacobs Sustainability Specialist
1100 NW Circle Boulevard, Suite 300, Corvallis, OR 97330
(541) 852-0575
dawn.lesley@jacobs.com
Dawn Lesley is a professional environmental engineer licensed by the State of Oregon. She has 30 years' experience planning, designing, and improving the sustainability of municipal and industrial wastewater treatment facilities across North America. She holds a bachelor's degree in biology from the University of Chicago and a Master's degree in Bioresource Engineering from Oregon State University.

Jennifer Wigal
State of Oregon Department of Environmental Quality
700 NE Multnomah St. Portland OR 97232
(503) 535-9763
Jennifer.wigal@deq.oregon.gov
Jennifer Wigal is the Water Quality Administrator at the Oregon Department of Environmental Quality where she leads DEQ's water quality program. She has been in that role since January 2022. Prior to that, Jennifer has served in various leadership roles in DEQ's water quality program, most recently serving as Deputy Water Quality Administrator. Jennifer has over 25 years of experience working in water quality regulatory programs at the state and federal level and has been at DEQ for the last 15 years. Prior to her tenure at DEQ, she spent a decade at U.S. EPA Headquarters in Washington, DC, where she built her expertise serving in various water quality programs. Jennifer's roots are in the Pacific Northwest, receiving her B.S. in Civil Engineering from Washington State University and her Masters in Environmental Engineering from Johns Hopkins University.

Jessica Shaw
City of Wenatchee

PO Box 519, Wenatchee WA 98807
(509) 888-3225
jshaw@wenatcheewa.gov
Jessica has worked for the City of Wenatchee since 2002 in the water, sewer, and stormwater utilities. She is currently a Washington State certified Group 4 Water Distribution Manger, Group 3 Wastewater Treatment Plant Operator, and a Cross Connection Control Specialist. She holds a B.S. in chemistry with a minor in mathematics from Pacific Lutheran University.

Matt Noesen

Jacobs Water Resource Recovery
1100 NW Circle Boulevard, Suite 300, Corvallis, OR 97330
(360) 314-4532
Matt.noesen@jacobs.com
Matt has worked in 23 states and on over 100 capital programs. Matt has experience with traditional design-bid-build, GC/CM and progressive Design-Build delivery methods. He also has extensive experience with innovative procurement approaches to accelerate project schedule and enhance Owner control of desired outcomes.
Matt is passionate about connecting the Water-Energy nexus dots focusing on resource recovery at municipal wastewater treatment facilities.
Experience: 34 years.
Education: MS, Environmental Engineering, University of California, Berkeley
BS, Electrical Engineering, Carnegie-Mellon University
Matt has been WEF member since 1990

Layne McWilliams

Parametrix, Treatment Group Lead
PO 2166, Coeur d'Alene, ID 83816
(509) 385-0351
lmcwilliams@parametrix.com
Layne McWilliams started his career on the jobsite of a large wastewater construction project and was involved in the design and construction of water and wastewater infrastructure for 15 years. He's spent most of the last 15 years trying to atone for the energy sins he committed as a designer. As part of that effort, he spends a good deal of time helping water and wastewater systems reduce their energy and emissions footprints. He is a PE with a Mechanical Engineering degree from MIT and a law degree from Lewis & Clark. He lives in Hayden, ID with his wife Margaret, who find themselves, with the exception of two big dogs, recent and somewhat sad "empty nesters." He's also happily the immediate past (NOT) president of PNCWA!

Rhys Roth
Center for Sustainable Infrastructure
120 State Ave NE, #303, Olympia WA 98501
(360) 480-6749
rhys@centerforsi.org

Rhys brings over 30 years of experience working at the intersection of economic opportunity and breakthrough sustainability. He founded and for the past 10 years has directed the Center for Sustainable Infrastructure (CSI). He also co-founded and helped lead for 15 years the nonprofit organization Climate Solutions (1998—2013).

At CSI, Rhys is lead author of several groundbreaking reports, each drawing on consultations with dozens of thought leaders and innovators in water, energy, waste management, and industrial symbiosis. Rhys helped lead nearly a dozen community value planning projects through the CSI Innovation Lab, and spearheads high-impact Knowledge Exchange study tours and partnerships that have inspired and informed over 100 Northwest public and private leaders to serve as champions for clean industry and industrial symbiosis leadership.

Workshop Agenda

1:00-1:10	Welcome and Introductions	Hannah Thomascall
1:10-1:30	CSI organization background	Rhys Roth
1:30-2:00	Overview of Denmark Tour	Frank Dick and Layne McWilliams
2:00-2:30	Regulatory Contrast and Considerations	Jennifer Wigal
2:30-3:00	Industrial Symbiosis	Dawn Lesley and Jessica Shaw
3:00-3:15	Break	
3:15-3:45	Application in the PNW	Hannah Thomascall and Jessica Shaw
3:45-4:15	Innovative Sustainability at Home	Dawn Lesley
4:15-5:00	Sustainability at Your Facility – Facilitated Discussion	Led by Hannah and Frank

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

From Awareness to Action: How Public Agencies, Non-Profits, and the Private Sector are Addressing 6PPD-q

Wednesday, February 26
1 PM – 5 PM

Workshop Description

This workshop will focus on the emerging contaminant, 6PPD-q, and its impact on stormwater management. 6PPD-q is an oxidation product from 6PPD, a chemical in car tires to prevent degradation. In 2020, researchers from the University of Washington-Tacoma, Washington State University, and additional collaborators discovered that 6PPD-q causes pre-spawn mortality in coho salmon. This research has prompted public agencies, non-profits, and the private sector to further investigate ways to reduce and remove 6PPD-q. The workshop includes four presentations that will provide a brief history of 6PPD-q, legislative and regulatory updates, and applications of stormwater research across the Pacific Northwest. The workshop will conclude with a tour of a Herrera's Ship Canal Facility and one of Stewardship Partners' Adopt-a-Downspout locations.

Learning Objectives

During the workshop, attendees will expand their knowledge on latest regulatory guidance and research concerning 6PPD-q in stormwater runoff. Public agencies and a non-profit will present on regulatory guidance and research on 6PPD-q in Washington. Then, public agencies and a private consulting firm will present on their work on reducing and removing 6PPD-q in Washington and Oregon. The workshop will conclude with an interactive component, which will include a guided walking tour of a Herrera's Ship Canal Facility and a Stewardship Partners' Adopt-a-Downspout location.

Target Audience

The targeted audience will include water professionals from academia, public agencies, non-profits, and private consulting firms with an interest in stormwater regulations and research of emerging contaminants.

PNCWA Pacific Northwest Clean Water Assoc. 1935

wef Member Association

Workshop Speakers

Shelby Giltner

- Organization: Washington Department of Ecology
- Mailing Address: 913 Squalicum Way #101, Bellingham, WA 98225
- Phone Number: (360) 746-9182
- Email: shelby.giltner@ecy.wa.gov
- Biography: Shelby Giltner is an Environmental Engineer with the Washington State Department of Ecology, where she is a valued member of the 6PPD Team. Shelby is currently focused on studying the effectiveness of stormwater best management practices (BMPs) to reduce and remove 6PPD-q, a toxic chemical impacting aquatic ecosystems. She holds a B.S. in Biology from the University of Oregon and a M.S. in Environmental Science and Engineering from the Colorado School of Mines. With her expertise in environmental science and engineering, Shelby plays an integral role in advancing stormwater management solutions and protecting the health of Washington's watersheds.
- Presentation Description: In 2020, researchers in the Pacific Northwest identified 6PPD-quinone (6PPD-q) as the chemical cause of urban runoff mortality syndrome in coho salmon. Forming from 6PPD, an antioxidant in tires, 6PPD-q is one of the most toxic chemicals to aquatic life and poses a significant threat to Tribal Treaty Rights. To address this, the Washington State Department of Ecology (Ecology) has secured legislative funding to investigate stormwater best management practices (BMPs) that may reduce or remove 6PPD-q from stormwater and receiving waters. Over twenty projects have been funded to explore the sources, transport, and toxicity of 6PPD and 6PPD-q, assess BMP effectiveness, and develop field sampling and analytical methods. This research aims to fill critical data gaps, inform policies and regulatory actions, and provide implementation support to stormwater permittees.

Madison Rose Bristol

- Organization: Washington Department of Ecology
- Mailing Address: 15700 Dayton Ave. N., Shoreline WA 98133
- Phone Number: (564) 669-4582
- Email: madison.bristol@ecy.wa.gov
- Biography: Madison Rose Bristol represents the Washington Department of Ecology and is the agency's lead water quality planner addressing 6PPD. In their position, they facilitate collaborative efforts between Ecology and Tribal Governments, state and federal agencies, research groups, and local to national interest groups. They hold a Master of Public

Administration, Master of Marine Affairs, B.S. in Environmental Science, and a B.A. in Dance from the University of Washington.

- Presentation Description: Madison will be facilitating an engagement activity for Shelby's presentation described above.

Katie Byrnes

- Organization: Washington Conservation Action
- Mailing Address: 1417 Fourth Avenue, Suite 800, Seattle, WA 98101
- Phone Number: (206) 631-2600
- Email: kbyrnes@waconservationaction.org
- Biography: Katie's work as the Toxics and Stormwater Policy Senior Manager centers on advancing equitable environmental policies that reduce toxics and stormwater impacts on water, wildlife, and people. Her previous work as a Sea Grant Fellow at the Port of Seattle focused on development and implementation of nearshore habitat restoration and enhancement programs in the Duwamish River and Elliott Bay. She holds a Master's degree in Marine and Environmental Affairs and a Graduate Certificate in Climate Science from the University of Washington as well as a bachelor's degree in Environmental Science from Western Washington University. Having grown up in the Pacific Northwest, she feels lucky to work at the intersection of science and environmental justice to build strong policy in Washington.
- Presentation Description: Washington Conservation Action has been involved with 6PPD-q since the first Washington State University/University of Washington publications identifying its critical impacts to the environment. Washington Conservation Action worked with researchers and legislators to set an initial path forward. Today, Washington Conservation Action engages and participates in several workgroups looking to address 6PPD-q and other threats to our environment. The presentation will present informed opinions on what needs to be done and how to contextualize 6PPD into the larger world of toxic runoff from transportation/urban areas.

Carly Greyell

- Organization: King County
- Mailing Address: 201 S Jackson Street, Suite 6300, Seattle, WA 98104
- Phone Number: (206) 477-4703
- Email: carly.greyell@kingcounty.gov
- Biography: Carly has worked with King County since 2013 helping wastewater and stormwater managers with issues related to toxic chemicals in the environment. During this

time, she has worked on projects addressing pathways of priority pollutants, studies on stormwater treatment effectiveness, and strategic planning efforts related to stormwater management and water quality improvements.

- Presentation Description: In this presentation, we will share about some of the tools and studies that are preparing King County to address the harmful chemical from tires called 6PPD-q. King County and Herrera have developed an expert knowledge-based spatial model that classifies road segments by the relative expected amount of 6PPD-q delivered to the stormwater network. The model output is a cumulative score for each road segment across King County based on high-influence factors, including traffic intensity, types of vehicles, and the connectedness to the stormwater network. Output from this spatial model will be combined with additional spatial information, like nearby salmon habitat and known water quality impairments, to prioritize which road segments need treatment first and identify opportunities for multi-benefit projects. The components of this model are easily transferable to areas outside King County and these tools are all open-source and available online for audience members to explore after the presentation.

Tim Clark (Clark)

- Organization: Herrera
- Mailing Address: 107 SE Washington St, Suite 140, Portland, OR 97214
- Phone Number: (971) 361-2238
- Email: tclark@herrerainc.com
- Biography: Timothy Clark (Clark; he/him) is a limnologist and watershed scientist with a passion for enacting positive change for the environment and society. He thrives at the interface of sound science and effective environmental decision-making, cooking up solutions that advance meaningful and sustainable management of water resources.
- Presentation Description: Clark will be co-presenting with Carly Greyell (see presentation description above).

Katie Holzer, Ph.D.

- Organization: City of Gresham
- Mailing Address: 1333 NW Eastman Parkway, Gresham, OR 97030
- Phone Number: 503-618-2377
- Email: Katie.Holzer@GreshamOregon.gov
- Biography: Katie Holzer is a Senior Environmental Specialist with the City of Gresham, Oregon where she runs the environmental monitoring program. Katie has a PhD in ecology

from the University of California, Davis and has been studying urban stormwater pollution for 10 years. She was also the PNCWA 2023 Stormwater Professional of the Year.

- Presentation Description: This presentation will cover the research and coordination that Oregon has been doing on 6PPD-q. It will describe pre-spawn mortality in fish surveys, baseline 6PPD-q screening of steams and stormwater, and new findings on reduction of the chemical with porous pavements. The presentation will also describe the recent regional effort in the Pacific Northwest to organize among state and local agencies and non-profits to coordinate sampling, prioritization, and funding opportunities for best management practices and projects to reduce 6PPD-q in streams and stormwater runoff.

Workshop Agenda

1:00 – 1:10 pm: **Introductions**

1:10 – 1:40 pm: **Shelby Giltner and Madison Rose Bristol** (Washington Department of Ecology) – 6PPD: Stormwater Research, Methods Development, and Emergent Policies

1:40 – 2:10 pm: **Katie Byrnes** (Washington Conservation Action) – The Research and Legislative Path Forward: An Opinion on Addressing the 6PPD-q Challenge

2:10 – 2:20 pm: Break

2:20 – 2:50 pm: **Carly Greyell and Tim Clark** (King County and Herrera) – Where Does the Rubber Meet the Road? A Spatial Screening Model for 6PPD-q

2:50 – 3:20 pm: **Katie Holzer** (City of Gresham) - 6PPD-q in Oregon: Statewide Coordination, Prioritization, and Research on Fish, Streams, Runoff, and Porous Pavements

3:20 – 3:30 pm: Break/Pack up

3:30 – 5:30 pm: **Dylan Ahearn** (Herrera) – Tour of Herrera's Ship Canal Facility and Stewardship Partners' Adopt-a-Downspout location

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

AI in Today's Water Workplace

Thursday, February 27
8 AM – 12 PM

Workshop Description

Artificial Intelligence is becoming increasingly part of our daily lives. From chatbots to smart assistants to customer relationship management, these AI tools and many others can help us be more efficient at work. However, there are concerns with using AI and the vast difference in adopting new processes between private and public entities and professionals with different levels of experience and technical expertise. This workshop aims to help bridge those gaps and provide a foundation for anyone in the wastewater industry to think about when and how to use AI in the workplace. Our diverse panel of speakers will cover the following topics:

- What is AI? – Defining AI for Common Ground
- Use of AI in Communications and Outreach
- Internal Conversations about AI to Avoid Pitfalls – Creating Solid Policy and Cybersecurity
- What to consider when thinking about using AI
    - Equity
    - Contract language
    - Funding/ratepayer expectations/restrictions
    - Ethics
- Opportunities for Daily Use of AI in the Wastewater Industry and the Wave of the Future
    - Examples of current uses
    - Emerging uses
- Active Scenarios- bring your laptop and utilize AI for some specific Wastewater Industry related exercises

Learning Objectives

Learning objectives for this workshop include an understanding of Artificial Intelligence, basic use, ethical considerations, and possible applications in the Wastewater Industry.

Target Audience

The workshop target audience is diverse-wastewater engineers, operators, communication professionals and managers who hope to learn about and harvest the power of Artificial Intelligence to enhance their daily work.

Workshop Speakers

Moderator: Lynsey Burgess
Environmental Sector Lead PRR, 1501 Fourth Ave, Suite 550 Seattle, WA 98191 425-765-6483, lburgess@prbiz.comutreach

Kerri Franklin
Outreach and Engagement Lead, EnviroIsues, 316 Occidental Ave S, Suite 400, Seattle, WA 98104, 206-269-5041

With over 15 years of experience in public involvement, Kerri is deeply committed to fostering meaningful connections and dialogue. Collaborating with her clients, Kerri applies a nuanced engagement approach, adeptly balancing the unique needs of each community and project. Her commitment to client relationships and effective communication underscores her reputation as a trusted partner in building lasting partnerships and moving projects forward. She helps clients communicate with the public to bridge the gap between technical jargon and accessible information – transforming complex concepts into relatable stories that resonate with diverse stakeholders.

Kerri has led engagement on a wide array of projects across the Pacific Northwest. She excels in crafting and implementing strategic outreach initiatives that are as engaging as they are effective. With a heart that beats for all things water, she's become a known resource for sparking engaging conversations about everything from wastewater treatment to stormwater management and beyond.

Amin Mahdipour
Principal Engineer, Clean Water Services 2550 SW Hillsboro Hwy | Hillsboro OR 97123, Mahdipour@cleanwaterservices.org

Amin is an experienced (16+ yrs) Data Scientist, Professional Civil Engineer (PE) and Climate Change specialist with a demonstrated history of working in academic/industrial fields and for public and private sectors. Amin is skilled in Artificial Intelligence (AI), Machine Learning (ML), data

analytics, hydraulic and hydrologic modeling, water quality modeling, statistical analysis, remote sensing, data assimilation techniques, and spatial analysis. He holds a strong academic background with graduate degrees focused on "Water Resources Engineering", "Environmental Engineering" and "Business Administration".

Shant Douzdjian
Staff Engineer with Leeway Engineering Solutions (based in Portland), Seattle, WA
Shant.douzdjian@leewayengineeringsolutions.com, 503-891-6414

Shant is based in Seattle and is a Staff Engineer for Leeway Engineering Solutions. Shant's expertise includes data analysis, hydrologic and hydraulic wastewater modeling, wastewater and stormwater conveyance design, and infiltration and inflow analysis of wastewater systems. His interest in AI started when looking for ways to streamline tedious analytical tasks, but he has since adopted tools to help with everyday tasks such as writing and cost estimating. Outside of work, Shant can be found day and night at local pickleball courts, cooking with friends, and obsessing over his next hobby or DIY project.

Ted Schilling
Owner/Manager of Schilling AI and Engineering Services, PLLC, 1023 115th Ct NE, Apt E308, Kirkland, WA 98034 ted@schillingai.com 503-866-1095

Ted is a distinguished expert in advanced manufacturing with a wealth of experience spanning multiple industries including pharmaceuticals, semiconductors, data centers, aviation/aerospace, polysilicon, renewable energy, chemical processing, automotive/trucking, and food processing. His expertise also extends to municipal water and wastewater treatment, as well as quasi-public sectors such as marine and airports.

With four decades dedicated to artificial intelligence (AI), Ted's career began at Texas Instruments, where he pioneered the use of AI to automate semiconductor design processes. His journey through AI has been marked by roles as an automation engineer and manager, leading AI program development for esteemed organizations such as Seagen and Pfizer. Ted has trained over 1,000 global professionals, guiding them in practical AI applications and solutions.

Ted's remarkable accomplishments include spearheading the AI initiative that enabled his organization to achieve 110 goals with a lean team of 8. His history in optimizing high-volume manufacturing operations is evidenced by his leadership in delivering over 20 semiconductor fabrication facilities, encompassing both greenfield projects and expansions.

A passionate mentor, Ted is dedicated to developing the engineering and business skills of younger staff and excels in proposal development. As a visionary leader, he remains at the forefront of

technological advancements in the industrial sector, including AI, sub-30 Angstrom semiconductor processes, immersion and liquid-cooled data centers, onsite power generation for AI data centers, and quantum computing.

Ted is the Owner/Manager of Schilling AI and Engineering Services, PLLC. He holds several Professional Engineering Licenses and is a Certified Energy Manager.

Workshop Agenda

8:00-8:10	Welcome & Introductions	Lynsey Burgess
8:10-9:05	Wave of The Future	Shant Douzdjian and Ted Schilling
9:05-10:00	Use of AI in Communications	Kerri Franklin
10:00-10:15	Refreshment Break	
10:15-11:10	Interactive Scenarios	Ted Schilling
11:10-11:30	Case Study Presentation	Amin Mahdipour
11:30-12:00	Panel Discussion	All Speakers

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Exploring the Life Cyle of Collection Systems: Planning to Rehabilitation and Everything in Between

Thursday, February 27
8 AM – 12 PM

Workshop Description

This workshop will break out each of the life cycles for collection system facilities, highlighting industry standards and best practices.

The first session will focus on an overview of sewer planning and modeling. This session will cover project inception, important milestones in the planning process, and gathering stakeholder support early on for defensible and robust projects. The second and third session will introduce design and delivery methodologies for new and rehabilitation of existing facilities, including construction considerations. Various technologies and applications will be described, with project examples from the presenters' professional experience. The fourth and final session will include a panel discussion by Owners on operation and maintenance of their collection systems.

The audience will gain a higher-level understanding and appreciation for the entire process with topics rooted in actual case studies and interactive discussion. This presentation will be helpful for experienced professionals while remaining accessible to those with less experience in collection systems design or management.

Learning Objectives

The audience will gain a higher-level understanding and appreciation for the entire process of planning, design, and operations and maintenance for collection and conveyance systems. Topics rooted in actual case studies and interactive discussion. Participants will be interested in evaluation, design, and/or management of collections systems big and small, including owners/operators and consultants. Attendees will learn how to identify when projects are needed, how to get projects off the ground, and best practices for the planning process. Next, how to move from planning through design by determining best method – whether it be replacement or rehabilitation. In this section, participants will learn about various technologies for application in needed projects identified during the planning phase. Finally, participants will hear from O&M professionals on the key components of maintaining aging infrastructure once it is in the ground.

PNCWA Pacific Northwest Clean Water Assoc. 1935

wef Member Association

Target Audience

This presentation is geared toward planners, engineers, and maintenance professionals at all experience levels. The topics will be useful for owners/operators as well as consultants.

Workshop Speakers

Session Moderator - Helen Purcell

- Company/institution: Tetratech
- Mailing Address: 2003 Western Ave, Suite 700, Seattle, WA 98121
- Phone Number: 206-883-9320
- Email: helen.purcell@tetratech.com
- Biography: Helen is an early-career professional with five years of experience in wastewater collections, conveyance, and treatment. She has worked on pump stations of various sizes, major pipelines, and combined sewer overflow projects in Washington and Oregon.

Amie Campbell

- Company/institution: City of Everett
- Mailing Address: 3200 Cedar St. Everett, WA 98201
- Phone Number: 425-257-7249
- Email: acampbell@everettwa.gov
- Biography: Amie is a Senior Engineer with the City of Everett. She works on a variety of infrastructure projects from project inception through design and construction. Amie is serving as the Project Manager for the City's latest Comprehensive Sewer Plan.
- Presentation Title (Draft): The Conception: Sewer Planning

Drew Henson

- Company/institution: Consor
- Mailing Address: 600 University Street, Suite 300, Seattle WA 98101
- Phone Number: 206-278-9036
- Email: drew.henson@consoreng.com
- Biography: Drew has 20 years of experience in the civil engineering field. He specializes in sewer and stormwater planning projects but is also involved in design projects. Drew enjoys delivering infrastructure projects for communities in the Puget Sound region, especially working with public agencies on planning collection and conveyance systems.

- Presentation Title (Draft): The Conception: Sewer Planning

David Scott

- Company/institution: Tetra Tech, Inc.
- Mailing Address: 2003 Western Ave, Suite 700, Seattle, WA 98121
- Phone Number: (206) 883-9418
- Email: david.scott@tetratech.com
- Biography: David has 29 years of extensive experience in wastewater modeling and design, during which he has overseen and designed new and retrofitted sewer and force mains, projects featuring gravity sewer, inverted siphons, horizontal directional drill, and UV-cured CIPP pipe rehabilitation. He also has expertise in in-water infrastructure, including design and construction supervision for marine polyethylene (PE) pipe outfalls and condition assessment and design of lakeline sewers. Most recently he has been the design lead for triple-barrel in-water siphons across Lake Washington.
- Presentation Title (Draft): The Birth: Sewer Design and Construction

Caroline Barlow

- Company/institution: Seattle Public Utilities
- Mailing Address: 700 5th Ave, Seattle, WA 98104
- Phone Number: (206) 386-9872
- Email: caroline.barlow@seattle.gov
- Biography: With 23 years of experience in the municipal utility industry, Caroline currently serves as the Capacity, Management, Operations and Maintenance (CMOM) Manager for SPU's Drainage and Wastewater Line of Business, overseeing $45M in annual investments to rehab drainage and wastewater system with a focus on trenchless improvements. Caroline uses her utility engineering and project management experience to work closely with a team to define long term improvement strategies, set performance goals and identify resource needs to deliver a programmatic capital improvements portfolio. Caroline received her BS degree in Civil Engineering from Gonzaga University and is a registered Professional Civil Engineer in Washington State.
- Presentation Title (Draft): The Make Over: Renewal and Replacement

Kenny Moffat

- Company/institution: Seattle Public Utilities
- Mailing Address: 700 5th Ave, Seattle, WA 98104

- Phone Number: (206) 615-1013
- Email: kenny.moffat@seattle.gov
- Biography: Kenny has 10 years of experience in capital planning, condition assessment and rehabilitation design of aging utility infrastructure. He currently serves as the Wastewater Pipe Rehab Program Manager for SPU's Drainage and Wastewater Line of Business. After having little knowledge of trenchless engineering while a civil engineering student, Kenny feels very fortunate to have discovered this corner of the water engineering profession. He thoroughly enjoys the balance of construction fieldwork, big data management, economic forecasting, and working on projects that extend the life of pipe assets while minimizing community impact. Kenny received his BS and MS degree in Civil Engineering from University of Washington with a water and environmental focus and is a registered Professional Civil Engineer in Washington State.
- Presentation Title (Draft): The Make Over: Renewal and Replacement

Workshop Agenda

8:00–8:05 am	Welcome and Introductions	Helen Purcell
8:05-9:00 am	The Conception: Sewer Planning	Drew Henson / Amie Campbell
9:05 – 10:00 am	The Birth: Sewer Design and Construction	David Scott
10:00-10:15 am	Break	
10:15 –11:10 am	The Make Over: Renewal and Replacement	Caroline Barlow / Kenny Moffat
11:15-12:00 pm	The Regiment: Maintenance and Operations	Panel Facilitated by: Helen Purcell Panelists from Everett / SPU / Alderwood Agencies

PNCWA Spring Summit

February 26-27, 2025
University of Washington
Seattle, Washington

Georgetown Wet Weather Treatment Station Tour

Thursday, February 27
1 PM – 3 PM

Tour Description

The Georgetown Wet Weather Treatment Station, located at the corner of 4th Avenue and South Michigan Street in Seattle's Georgetown neighborhood, can treat up to 70 million gallons of combined rain and wastewater a day that would otherwise discharge directly to the Duwamish River during heavy storms. Before the station was completed in 2022, heavy rains would fill up the area's sewer pipes, sending polluted runoff and sewage through a pipe into the river.

This tour will provide a technical focus on the Station- from the planning, design, and construction process to the day-to-day operations.

Target Audience

Wastewater professionals- engineers, planners, administrators, and operators.

Tour Guide

John Carter
Wastewater Process Engineer at King County
jocarter@kingcounty.gov

PNCWA Pacific Northwest Clean Water Assoc. 1935

wef Member Association