Wednesday, September 14 1:00PM – 5:00PM

Preparing for the energy shift – how to prime your WWTP for RNG and solve your infrastructure issues while you're at it

Jim Parvey (City of Tacoma), Kathlyn Kinney (Biomethane LLC), Margaret Laub (Anaergia), Jordan Baker (Weaver), Jan Allen (P.E., Impact Bioenergy), Pamela Randolph (City of Edmonds), Will Charlton (Digester Doc)

Brief Description

This workshop shares case studies and leading technologies in the wastewater-to-energy space, educating attendees on best practices and pitfalls while building the green energy economy.

Learning Objectives

Participants will be equipped to get more out of their infrastructure, accommodate the legislative drive for organics diversion, and stay ahead of Edthe curve on biosolids management - all while learning what they can do to stop flaring valuable energy and make the best use of their biogas.

- Why you can almost always benefit from making more biogas
- Navigating the pitfalls and opportunities of co-digestion.
- RNG markets and how to access them.
- Benefits of Class A EQ technologies.
- Capitalizing on PPPs to get ahead of infrastructure issues.
- Pitfalls to avoid when establishing new RNG capturing systems.

Municipal participants will learn why WWTP management is the hip new edge for innovative energy production.

We will take polls by app or show of hands to gauge understanding of key concepts before and after each session, and have attendees rate their comfortability with the broad topics presented again by poll or show of hands at the end of the workshop. During our final focus session we will gather input on key barriers plants anticipate to putting what they have learned into action, and ask participants to contribute verbally or by custom poll response next step they plan to take at their plant to move one of the green concepts they learned forward.

Target Audience

Wastewater plant managers and municipal environmental directors are the primary target audience for this workshop.

Agenda

TIME BREAKDOWN

1:00-1:15 Welcome & Program Intro Committee and Workshop Chairs 1:15-1:45 Increasing Biogas Kathlyn Kinney, Will Charlton 1:45-1:50 Biosolids Reduction Calculator Participants 1:50-2:00 10 MINUTE BREAK 2:00-2:35 Co-digestion and Mini-digestion Margaret Laub, Jan Allen
2:35-3:00 RINs, RECs & the Biogas Market Jordan Baker
3:00-3:15 15 MINUTE BREAK
3:15-3:45 Creative Biosolids Solutions Pamela Randolph
3:45-4:15 Case Studies & Lessons Learned Jim Parvey
4:15-4:20 5 MINUTE BREAK
4:20-4:50 Focus Session/Conclusion All Participants
4:50-5:00 Wrap-up and Networking Workshop Chairs, All Participants

Sessions are currently timed for 25-30 minutes each. This includes 5 minutes of Q&A for each session. If TBD speakers are unable to be secured, each remaining session can readily expand to fill the time available.

BIOS

Jim Parvey has 36 years of experience in civil and environmental engineering. He holds a bachelor's in civil engineering from the University of Washington. He is a licensed professional engineer in the State of Washington and an accredited professional with the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) program. He has worked for both public and private enterprise. His project experience includes the Center for Urban Waters, the Cheney Stadium Renovation, the Hylebos Bridge Rehabilitation, the Murray Morgan Bridge Rehabilitation, Broadway Local Improvement District, Tacoma 2016 Tacoma Environmental Action Plan, 2016 Tacoma Climate Resilience Study, 2021 Tacoma Climate Action Plan, and the Tacoma Renewable Gas Plant. As the city's Chief Sustainability Officer he leads the Office of Environmental Policy and Sustainability where he works on improving the city's overall resilience, environmental performance, and livability.

Kathlyn Kinney, MBA has dedicated her career to making sustainability make financial sense, with a focus on accelerating renewable natural gas adoption. She entered the industry in 2010 building biogas purification systems at the Vander Haak Dairy in Lynden, WA, the first dairy digester in the state. Through her RNG consulting firm, Biomethane, LLC, Ms. Kinney consults for municipalities seeking to upgrade biogas to RNG at low cost and maximum payback. She mixes industry know-how with a healthy dose of outside-the-box thinking, helping wastewater plants demystify and profit from gas upgrading, pipeline injection, and environmental credit sales. Ms. Kinney also serves on the City of Spokane Sustainability Action Subcommittee and Avista Technical Advisory Committee. She holds a degree in Environmental Science from Western Washington University and an MBA in Sustainable Systems from the Bainbridge Graduate Institute.

Margaret Laub is responsible for business and project development for resource recovery projects on the west coast, with a focus on public-private partnerships (P3) with municipal wastewater treatment facilities to enhance anaerobic digestion and upgrade biogas to renewable natural gas (RNG). She interfaces with clients, stakeholders, and internal teams to educate team members on organics-to-energy opportunities and develop projects – driving them from concept to construction. Her five years of experience have largely focused on advancing energy projects with public partners to deliver

infrastructure upgrades, enhanced resiliency, reduced carbon footprint, and economic benefits. Margaret has a Bachelor's Degree in Environmental Engineering from Harvard University, with a secondary concentration in Statistics. Margaret is a Certified Energy Manager (CEM).

Jordan Baker, CIA, has more than nine years of experience performing engagements on all kinds of transportation fuels and the environmental credits surrounding them. This includes work under the federal Renewable Fuel Standard and Gasoline requirements, California's Low Carbon Fuel Standard, Oregon's Clean Fuels Program, and Quality Assurance Plans for Renewable Natural Gas and liquid fuels. A Certified Internal Auditor (CIA), Jordan earned a bachelor's degree in accounting from Southwestern University.

Jan leads Impact Bioenergy as President and Co-Founder. He is a Professional Civil Engineer and a Certified Manager of Quality and Organizational Excellence. He has been involved in design, construction, and operation of wastewater and organics residuals facilities since 1988 at Cedar Grove Composting, CH2M HILL, Concept Kinetics, Harvest Power, and Impact Bioenergy. He is the registered holder of 7 US Patents for composting, digestion, and biofiltration. Jan is a Certified Compost Facility Operator.

Pamela Randolph has served as manager of the Edmonds WWTP for the last 10 years. During that tenure, she has led the plant through a multi-phase pathway to sustainability, dramatically reducing its carbon footprint and energy usage. Under her leadership, Edmonds WWTP has developed and will be commissioning a gasification system for turning wastewater solids into exceptional quality biochar.

Will Charlton, President and co-founder of Digester Doc, has been in the Anaerobic Digestion business for 20 years, as a project developer, consultant and more recently a service provider. Will provides expertise to the AD industry, giving digester operators a much-needed helping hand with enhancing their digester operations via selective biology. He has developed techniques to remotely monitor digester biological well-being, among other technologies and patentable processes. Will graduated with a degree in Organic Waste Management Technologies.

> Wednesday, September 14 1:00PM – 5:00PM

Asset Management – Advancing Practices and Outcomes from Your Current State of Maturity Linda De Boldt (City of Bellevue), Tammy Whipple (Sammamish Plateau Water), Elizabeth Kelly (Parametrix), Rebecca Borker (Northwest Pacific Water)

1. Description of Workshop

Objectives: the intent of this workshop will be to provide very concrete and specific ideas and examples for action by various positions or groups in the organization to advance that organization's practices and

outcomes within the broad topic of asset management. We will make this huge complex topic simple by focusing on clear vision and unpacking pain points for the participants. We will provide practical, ready-to-use ideas and practices that will make a positive difference and advance organizational outcomes.

Message to Potential Attendees: Every asset intensive organization in the water/wastewater sector is doing some asset management, but no organization is a top performer in all aspects of asset management. What this means is that everyone is at a different level of maturity and everyone has an area where they should improve. Assuming the workshop chair and vice-chair can obtain a list of attendees, a pre-workshop survey will be sent to attendees prior to the workshop in an effort to identify themes of their current needs so that we can design content (including exercises) to address those specific challenges. Each module will focus on engaging attendees to help them to identify actionable next steps they may take to advance their organization.

2. Learning Objectives

There are five modules that will be presented to attendees. Each module will present a different viewpoint from "the balcony". Our intent is to provide practical examples of actions that can be taken to improve practices and outcomes. Each one of these topics is cyclical in our organizations and we suggest establishing a goal of making improvement in each during each cycle.

Each module will have an interactive component – to be determined. We will use facilitated small group discussions or on-line surveys.

The Strategic View	For this module we will discuss vision, strategy, and strategic actions, and
	encourage attendees to consider their role, involvement, interaction, and
	dependence on organizational strategy as well as system planning,
	performance management, organizational development, and
	communications. We will facilitate a discussion among the group and
	provide practical, ready-to-use ideas and practices that will make a positive
	difference within their organization given their current maturity level.
The Capital Planning	For this module we will discuss asset risk, project identification, and project
View	prioritization, and encourage attendees to consider their role, involvement,
	interaction, and dependence on effective capital project identification and
	prioritization. We will facilitate a discussion among the group and provide
	practical, ready-to-use ideas and practices that will make a positive
	difference within their organization given their current maturity level with
	project planning and prioritization.
The Project Delivery	For this module we will discuss project delivery and encourage attendees to
View	consider their role, involvement, interaction, and dependence on effective
	project planning, development, and delivery. We will facilitate a discussion
	among the group and provide practical, ready-to-use ideas and practices

	that will make a positive difference within their organization given their
	current maturity level with project delivery.
The Maintenance and	For this module we will discuss the maintenance, operations, renewal and
Operations View	replacement phases of the asset lifecycle and encourage attendees to
	consider their role, involvement, interaction, and dependence on effective
	decision-making throughout the asset lifecycle. We will facilitate a
	discussion among the group and provide practical, ready-to-use ideas and
	practices that will make a positive difference within their organization given
	their current maturity level with maintenance phase of the asset lifecycle.
The Organizational	For this module we will discuss the importance of change management
Change View	processes in implementation of new asset management practices, and will
	encourage attendees to consider their role, involvement, interaction, and
	dependence on an effective change management framework for
	engagement across all levels of the organization. We will facilitate a
	discussion among the group and provide practical, ready-to-use ideas and
	practices that will make a positive difference within their organization given
	their current maturity level with organizational change.

3. Agenda

Workshop is four hours (1:00-5:00), no site visits.

The agenda will start with introductions and an icebreaker, then will proceed to each module in succession (with the full group of attendees, though during each module we may split out into smaller groups). After the five modules we will wrap up with a discussion on learnings, take home messages, and concrete actions they can take.

Preliminary Agenda:	
1:00-1:20 Welcome/Introductions/Icebreaker	Liz Kelly and Rebecca Borker
1:20-2:00 The Strategic View	Liz
2:00-2:40 The Capital Planning View	TBD (Rebecca and/or Linda and/or Tammy)
2:40-3:00 The Project Delivery View (part 1)	TBD (Linda and/or Tammy)
3:00-3:15 Refreshment Break	
3:15-3:40 The Project Delivery View (part 2)	TBD (Linda and/or Tammy)
3:40-4:20 The Operations & Maintenance View	TBD (Tammy and/or Rebecca)
4:20-4:40 The Organizational Change View	Liz (with all)
4:40-5:00 Closing/Reflections	Rebecca

4. Target Audience

Anyone directly working within or supporting asset intensive organizations that are responsible to plan, design, build, construct, operate, maintain and manage infrastructure assets. Anyone interested in hearing from seasoned organizational leaders and learning how to advance and implement leading practices into their respective organizations are encouraged to attend.

Bios

Tammy Whipple

Assistant to the General Manager

Tammy has her Master's in Public Administration and is a Project Management Professional, Certified Reliability Leader and has the IAM Diploma with Distinction. She has worked in non-profit management and local government for more than 16 years. Tammy manages the District's Technology and Business Intelligence Department, asset management program, reliability centered maintenance program and special projects including, performance/business metrics, project management enrichment along with a variety of projects for finance, general management, operations and maintenance, IT and engineering services at Sammamish Plateau Water.

Elizabeth Kelly

LIZ KELLY is the Senior Vice President for the Puget Sound Region at Parametrix, where she oversees company operations in the Puget Sound region which includes providing services to clients in water, wastewater, stormwater, transportation, environmental planning and compliance, construction management, alternative project delivery, and related practices. She was previously Market Lead for Water Asset Management at Jacobs, as well as the US West Regional Solution Lead for Strategic Consulting services, and prior to that held several leadership roles at Seattle Public Utilities. She provides consulting services to infrastructure intensive organizations and advises on a wide range of topics including strategic planning, risk management, project and program management (including implementation of stage gates processes), business case evaluation processes, performance management, asset management assessments, roadmaps, Strategic Asset Management Plans, Asset Management Plans, service levels, and culture change. Ms. Kelly is a member of the Council of Advisors for the Center for Sustainable Infrastructure in Washington State, and is currently engaged in updating the M5 Manual for AWWA (which is the Water Utility Management manual addressing broad topics of management relevant to our industry).

Rebecca Borker

Rebecca Borker is leading WSP's Utility Management Consulting Practice in the Northwest Pacific District. Rebecca brings a wealth of knowledge and experience from working more than 25 years in the public sector. Rebecca has a strong background in public works administration, maintenance and operations, environmental compliance, asset management, policy, planning, and engineering. She approaches each situation with an innovative mindset to develop solutions that are achievable and sustainable. She is well-versed enhancing collaboration and partnerships with stakeholders. Rebecca has experience in strategic planning, comprehensive and utility systems plans, program management, renewal and replacement forecasting, operations and maintenance planning, software configuration and implementation, business process mapping, data and system governance.

Linda De Boldt

Linda De Boldt is a professional civil engineer with 35 years of public works leadership experience in several northwest cities, with experience in utilities, transportation and natural resources stewardship. She is currently the Assistant Director of Bellevue Utilities, overseeing the Engineering Division. In this capacity, Linda oversees the delivery of the Utilities Capital Improvement Program for drinking water, wastewater and stormwater. She is the executive sponsor for Bellevue Utilities' Strategic Asset Management Plan and enjoys being a driver for implementation of the 6-year roadmap for this plan. Linda has a keen interest in working across organizational lines to strategically connect the work of Operations/Maintenance, Engineering, and Finance, using asset management principles and methods.

Wednesday, September 14 1:00PM – 5:00PM Hope for the Future: Using Envision to Improve Sustainability John Phillips (Parametrix), Miamiao Zhang (Murraysmith), Heidi Sowell (King County)

Description of Workshop (up to two pages):

Infrastructure is at the heart of addressing this key challenge of the 21st century, and the standards and methods of the past will not be adequate to meet the needs of the future. A new paradigm is required.

But how do infrastructure developers know whether their decisions are contributing to sustainability or not? How do they bring attention to the need for more sustainable infrastructure? How do they communicate around a shared understanding of what sustainability means? Envision provides a consistent, consensus-based framework for assessing sustainability and resilience in infrastructure. Envision:

- Sets the standard for what constitutes sustainable infrastructure;
- Incentivizes higher performance goals beyond minimum requirements;
- Gives recognition to projects that make significant contributions to sustainability; and
- Provides a common language for collaboration and clear communication both internally and externally.

Envision is a framework that includes 64 sustainability and resilience indicators, called 'credits', organized around five categories: Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Resilience. These collectively address areas of human wellbeing, mobility, community development, collaboration, planning, economy, materials, energy, water, sitting, conservation, ecology, emissions, and resilience. These indicators collectively become the foundation of what constitutes sustainability in infrastructure.

Each of the 64 credits has multiple levels of achievement representing the spectrum of possible performance goals from slightly improving beyond conventional practice, to conserving and restoring communities and environments. By assessing achievement in each of the 64 credits, project teams

establish how well the project addresses the full range of sustainability indicators and are challenged to pursue higher performance.

Through its Envision Sustainability Professional (ENV SP) credential, Envision recognizes and brings attention to individuals trained and dedicated to developing more sustainable infrastructure. When used as a self-assessment tool Envision helps practitioners better understand and recognize their project's contribution to sustainability. Through an optional process offered by ISI, Envision can also be used to receive third-party verification of a project assessment that gives public recognition to infrastructure projects that make exemplary progress toward sustainability.

VI. Short Description:

This workshop will provide an advanced understanding of Envision and the tools for assessing a project's sustainability. Participants will learn about Envision from the Institute for Sustainable Infrastructure and multiple wastewater utilities that have applied Envision both internally and pursued formal project awards. Hands-on activity will include an Envision self-assessment of a project, and an Envision Game

Show. The workshop will count towards 2.0 CEs for maintain ENV SP credentials.

Learning Objectives:

- 1. Participants will learn to use Envision to adapt a sustainability culture in a capital program and portfolio.
- 2. Participants will learn how to perform a self-assessment by utilizing the credit evaluation forms for "go/no-go" decisions and estimating points for potential award.
 - 3. Participants will learn about other utilities lessons learned using Envision for planning and certification of projects.
 - 4. Participants will perform a self-assessment of an example conveyance project (currently a project using Envision that is a pump station and forcemain).
- 5. Participants will receive CE credits for ENV SP Certification (or annual renewal) for participating in workshop

Describe the Interactive Components of the Workshop:

- 1. Each participant will perform a self-assessment on the example project. ISI will set up a training platform for participants to participate on-line.
 - 2. At the end of the workshop participants will participate in an Envision Trivia Game Show to review what has been learned through the day.

Assessment:

Each topic will have a short review and assessment. The end of the workshop will be an interactive evaluation.

Outcome:

This workshop will provide clean water professionals with an advanced understanding of Envision and the tools for assessing a clean water project through Envision. In this workshop, participants will learn about Envision from the Institute for Sustainable Infrastructure and receive an overview of the categories and credits. Understand the different ways to use Envision in a capital program portfolio. See examples of how

different utilities use Envision and what are some lessons learned from experienced utilities. Learn about different tools to assessing projects through a go/no-go process. Learn how to do a self-assessment. Develop hands on self-assessment tools and walk away with a plan to institute Envision at their utility or company.

Target Audience:

This workshop is geared towards clean water professionals that want to receive an advanced understanding of Envision and the tools for assessing a clean water project through Envision. In this workshop, participants will learn about Envision from the Institute for Sustainable Infrastructure and receive an overview of the categories and credits. Professionals will understand the different ways to use Envision in a capital program portfolio, see examples of how different utilities use Envision and what are some lessons learned from experienced utilities, and develop hands on self-assessment tools and walk away with a plan to institute Envision at their utility or company.

What are the Prerequisites for the Workshop?

None. While previous exposure to Envision, registering an account on the ISI website, or obtaining the ENV SP credential would be beneficial, this workshop will not require any pre-requisites. Participants are strongly encouraged to bring a laptop or tablet that can access the internet.

TIME	ТОРІС	INSTRUCTOR AND AFFILIATION
1:00 - 1:15	Welcome, Introductions, Workshop Agenda	John Phillips, Parametrix
		MiaoMiao Zhang, MurraySmith
1:15- 2:00	Envision 101 & 201	Lindsey Geiger, ISI
2:00 - 3:00	Interactive Session #1: Envision Self- Assessment	Lindsey Geiger, ISI
3:00 - 3:15	Interactive Session #1: Review & Feedback	Lindsey Geiger, ISI
3:15 - 3:30	Networking Break	
3:30 - 4:15	Developing your own sustainability program incorporating Envision into small and large projects	Heidi Sowell, King County
4:15 - 4:50	Envision Interactive Q&A, Envision Jeopardy	John Phillips, Parametrix
4:50 - 5:00	Wrap up and Evaluation	MiaoMiao Zhang, MurraySmith

Agenda

Bios

John is the Director of Integrated Watershed Management at Parametrix. John worked for King County managing the Combined Sewer Overflow Control Program. Over his 20-year career, he has managed and developed the Green Stormwater Infrastructure (GSI) and Climate Change Adaptation programs. His climate work has been referenced in both the IPCC and National Climate Assessment reports. He has worked on multiple Envision projects including the Georgetown Wet Weather Treatment Plant and adapting Envision into King County's sustainability review process for all projects. He is Past President of the Pacific Northwest Clean Water Association (PNCWA). He is the current chair of the WEF Envision Task Force.

Miaomiao is a Professional Engineer (PE) with over 20 years of experience in water and wastewater industry.

Highly motivated technologist with excellent problem-solving skills and in-depth design knowledge.

Certified Project Manager Professional (PMP) with hands-on experience. Strong inter-personal communication and public-speaking skills. Experience in collaborating with multi-culture teams internationally. She is the chair of the PNCWA Sustainability Committee

Heidi Sowell brings extensive sustainability and environmental planning experience to her role as the Sustainability Program Lead for King County's Wastewater Treatment Division (WTD), located in Seattle. She is responsible for the development of policies and programs that advance healthy natural environments, equitable and vibrant communities, cost-effective investments, and resilience to future climate disruptions. Heidi has been with WTD since 2011, managing sustainability, environmental planning, and community relations efforts in various capacities. Heidi earned her Master of Science in Environmental Science from Washington State University and has her undergraduate degree in Community and Environmental Planning from University of Washington.

Wednesday, September 14 1:00PM – 5:00PM Find the Leader Within You Amy Dammarell, Kristi Steiner, Erica Haide, Mark Poling, Karen DeBaker, Ana Arango

Discover your leadership potential! Whether you're an aspiring leader or one who's been there, join us for an exploration of leaders at their best. This workshop is based on the five leadership principals outlined in the book "The Leadership Challenge" by Kouzes and Posner. The workshop includes breakouts and table discussions to encourage shared learning. Participation in this workshop will help improve performance of operators, project coordinators, and/or current and aspiring supervisors and managers by helping them work effectively with peers. With a firm understanding of the five practices of

exemplary leadership, participants will be valued employees, supervisors and managers, understanding what it takes to help lead truly outstanding performance.

Learning Objectives:

Understanding of the five practices of exemplary leadership and how anyone can be a leader right where they are.

Assessment:

We will follow up with a survey to gauge both how much the participants have learned as well as how much they have been able to apply the five practices.

Target Audience:

Aspiring and current leaders looking to grow their skillsets as operators, project coordinators, and supervisors/managers.

Outcome:

The curriculum is highly interactive with the material presented followed by specific activities at tables of six to eight to incorporate the learning. Participants will walk away with ready-to-implement skills to become compassionate and inspiring leaders within their organization and in their community.

Торіс	Time
Welcome and Introductions	1:00 - 1:10
Leadership Challenge Summary	1:10 - 1:20
1. Overview of book and 5 Practices	
Model the Way	
 Clarify values by finding your voice and affirming shared values 	1:20 – 1:50
3. Set the example by aligning actions with shared values	
Inspire a Shared Vision	
 Envision the future by imagining exciting and ennobling possibilities 	1:50 – 2:20
 Enlist others in a common vision by appealing to shared aspirations 	
Break	2:20 - 2:30

1. Agenda

Challen	age the Process	
	Search for opportunities by seizing the initiative and by looking outward for innovative ways to improve	2:20- 2:50
7.	Experiment and take risks by constantly generating small wins and learning from experience	
Enable	Others to Act	
8.	Foster collaboration by building trust and facilitating relationships	2:50 – 3:20
9.	Strengthen others by increasing self-determination and developing competence	
	Break	3:20 – 3:30
Encour	Break age the Heart	3:20 - 3:30
10.	age the Heart Recognize contributions by showing appreciation for individual excellence	3:20 - 3:30 2:30 - 4:00
10.	age the Heart Recognize contributions by showing appreciation for	
10. 11.	age the Heart Recognize contributions by showing appreciation for individual excellence Celebrate the values and victories by creating a spirit	

BIOS

Amy Dammarell is an engineer, scientist, and project manager with 25 years of experience. Amy combines her biology and engineering background with the goal of integrating engineering solutions with the natural environment to find multi-objective solutions. Her focus includes restoration planning, permitting, and design along with natural resource analysis and serves in a broad range from technical team member to project manager. In addition to her technical role, Amy is actively involved in initiatives to drive professional development both for herself and others. At HDR, she facilitates a technical knowledge transfer program, serves as a leadership program facilitator, and shapes material development to support learning and development.

Kristi Steiner has almost nine years of experience in the water industry and is currently a design engineer and project manager with the Jacobs Engineering Group, where she focuses primarily on public stormwater and wastewater conveyance projects. In addition to her technical role at Jacobs, Kristi is actively involved in programs and initiatives geared toward developing young leaders in our industry. She is the PNCWA Board representative to the WEF House of Delegates, sits on the Steering Committee for the WEF Water Leadership Institute, and is part of the Utility Management Conference Young Professionals Summit leadership team for 2021 and 2022. She has a B.S. in Civil Engineering from North Carolina State and M.S. in Civil Engineering from Virginia Tech. Erica Haide has been a marketer in the water industry over the last six years and currently supports the Pacific Northwest market for Brown and Caldwell. She's been involved with PNCWA and WEF in leadership positions as well as supporting different committees throughout her time in the industry. She is currently the Students and Young Professionals (S&YP) Chair for PNCWA as well as the Marketing Vice Chair for the WEF/AWWA S&YP national summit, and was the most recent co-chair for the WEF emerging young professionals leadership (EYPL) workshop. Erica's passion for leadership, combined with her experience in communications makes for a compassionate and effective leader in this industry.

Mark Poling is a Strategic Business Associate with Clean Water Services and has more than 35 years of experience working for utilities; serving in a management role for more than 25. Mark is a Past President of the Pacific Northwest Clean Water Association and has served on the Water Environment Federation Board of Trustees. A certified Group 4 operator he also holds a B.S. from Grand Valley State and an M.S. in Environmental Engineering from the University of Washington.

Karen DeBaker is Communications & Marketing Manager for Clean Water Services (CWS) — the water resources management utility serving more than 600,000 residents of urban Washington County, Oregon in the Portland-metro area. Karen joined CWS in 2000 and navigates the District's marketing, branding, communications, research, and public education programs. Karen chairs PNCWA's Leadership Development Committee and is past Chair of the Communication & Outreach Committee. Prior to CWS, she coordinated publicity and marketing for book publishing companies in Portland, Oregon, and Minneapolis, Minnesota. Karen has Bachelor of Arts degrees in Speech-Communications and Spanish from the University of Minnesota and Professional Certificates in Business Management and Marketing from the Portland State University School of Business.

Ana Arango is a wastewater engineer with Jacobs in Boise, Idaho. She is a wastewater process engineer with more than 13 years of experience, both domestic and international, in the planning, design, and startup of wastewater treatment plants. Ana's responsibilities include facility planning, plant modeling, alternatives analysis, preliminary and conceptual design, final design, startup of different unit processes. She holds a Bachelor's degree in environmental engineering from Escuela de Ingeniería de Antioquia (Colombia) and a Master's degree in environmental engineering from Virginia Tech.

Wednesday, September 14 1:00PM – 5:00PM

The Future of Facility Operations: Stories from the Front Line

Dan Cox, Poppy Carre, Casey Mullins, Monica Stone, Brian Stevens, Mark Walter, Chris Maher, Eddie Jones, Hunter Bennett-Daggett, Patrick Kongslie, Michael Parker, James Baird, Jack Liang

The intent of this workshop is to share ideas, experiences, current practices, challenges, and solutions in Facility Operations related to workforce issues. These issues have been broken down to individually address employee:

- Recognition
- Recruitment
- Retention

- Training and Development
- Certification and Licensing
- Succession Planning
- 1. Recognition

The awareness of the value of the personnel needed to operate a WRRF must be increased to facilitate the other workforce issues addressed in the workshop. Communicating not only the knowledge, skills, and abilities needed in the wide range of positions at a WRRF, but the hazards faced will serve to elevate the profession. There and three key audiences for this recognition campaign: Boards of Directors must be informed as they often make final approvals for positions, pay and labor contracts; the public, which has the power of opinion and can influence policy decisions; within the industry colleagues should recognize each other through meaningful honors. Recognition is the cornerstone of an effective workforce as elevated prestige and pay commensurate with service, risk, and technical skills facilitate everything from recruitment to succession planning.

2. Recruitment

Finding the right people to compose an effective workforce is not a new challenge, however, recruitment challenges grow as facilities become more technically advanced. Competition from private industry for positions in electrical and instrumentation, controls systems, and engineering can be intense. Participants will learn of new sources of employees. Recruitment programs and relationships, such as with community colleges, will be presented and their merits debated.

3. Retention

People are motivated in different ways. What makes a workplace a good place to work? Some value pay and the prospect of pay increases. Some are more satisfied to work in a job where they feel they can make a difference. Given equal pay and benefits, why would someone choose your organization over another? Benefit packages, schedule flexibility, ability for remote work, and health and safety are additional factors. Taken together these and others are all elements in what is referred to as the culture of an organization. Discussion will be guided to examine the lessons learned through the Coronavirus pandemic, specifically related to jobs that can be done remotely and to facility operation jobs that must be done on site.

- 4. Training and Development
- 5. Certification and Licensing
- 6. Succession Planning

Target Audience

Facility Operations managers who want to further their skill set in all areas of employee engagement and come away with new ideas from others and new ideas of their own.

Learning Objectives

In this interactive workshop, attendees will learn of new resources and approaches in workforce development and retention and hear from their peers about needs, programs, challenges and solutions. These stories are told through a rotating panel with the goal of engaging the audience as a panel member.

The facilitator provides a 10 minute panel introduction and foundational overview of the topic. A 10 minute breakout session follows in which the small groups are given 5 minutes to discuss the topic and are assigned to respond to the information with one of the following:

- A Question
- A Complaint
- A Ranking
- A Bold Statement

For example, Breakout Group A would be assigned to respond to the subject of recognition with a question, the subject of recruitment with a complaint, retention with a ranking, etc.

The workshop moderators then go around the room for representatives of each group to read their response.

The facilitator then uses the audience input to guide the 15 minute panel discussion, variously asking panelists to respond to the submitted items and to each other and concluding with a summary of issued raised.

Agenda

1:00-1:15	Welcome, Introduction, and Workshop Format
1:15-1:50	Recognition
1:15-1:25	Facilitator Presentation
1:25-1:35	Table Breakout
1:35-1:50	Panel Response and Discussion
1:50-2:25	Recruitment
1:50-2:00	Facilitator Presentation
2:00-2:10	Table Breakout
2:10-2:25	Panel Response and Discussion
2:25-3:00	Retention
2:25-2:35	Facilitator Presentation
2:35-2:45	Table Breakout
2:45-3:00	Panel Response and Discussion

3:00-3:15	Break
3:15-3:50	Training and Development
3:15-3:25	Facilitator Presentation
3:25-3:35	Table Breakout
3:35-3:50	Panel Response and Discussion
3:50-4:25	Certification and Licensing
3:50-4:00	Facilitator Presentation
4:00-4:10	Table Breakout
4:10-4:25	Panel Response and Discussion
4:25-5:00	Succession Planning
4:25-4:35	Facilitator Presentation
4:35-4:45	Table Breakout
4:45-5:00	Panel Response and Discussion

Bios

Dan Cox

Dan is CEO & Managing Advisor at EXOS Advisors. He worked as a Licensed Professional Counselor for 15 years serving families, individuals, and couples who were experiencing some of life's most challenging issues: trauma, broken relationships, addictions, life transitions, loss, physical setbacks, and blended families, to name a few.

Compelled to serve people in their place of work, Dan made a transition to Executive Coaching in 2005. Having spent time "behind the scenes" understanding and impacting the human dynamic, it became his life mission to work in places where people spend the bulk of their waking hours, being on site to cause powerful insights and opportunities for change.

Dan is a masterful coach and facilitator combining compassion and candor in his approach. Dan has coached hundreds of business owners, executives, managers and supervisors of all levels in organizational settings—both profit and non-profit.

James Baird

Appointed by the Board in 2017 as the General Manager, Jim was previously the Engineering and Operations Manager for seven years before Ron Thames retired at the end of 2016.

Jim is a graduate of Umpqua Community College with an Associate of Science in Civil Engineering, and has worked in the water and wastewater field in the Roseburg area since 1991. Jim is currently the President-elect of the Pacific Clean Water Association (PNCWA) and a past president of the Umpqua Basin Operators Section of the PNCWA.

Poppy Carre

Poppy Carre is the Wastewater Operator Certification State Coordinator. She has worked for the Department of Ecology for 24 years, almost entirely in the Water Quality program. She took a project position and worked briefly for the Water Resources program and returned to Water Quality as the OpCert program state coordinator. She has been in this position for 18 years and has a deep respect for wastewater operators.

Chris Maher

Clean Water Services, HIllsboro, OR: 2014 to 2018 – Operations Analyst II 2018 to Present – Senior Operations Analyst

Upper Blue Sanitation District, Breckenridge, CO 2000 to 2013 – Operator III

Certified Water Professional Licensing, Oregon Grade 4 wastewater Operations, \$12610

Professional Organizations

Water Environment Federation (WEF)

Member since 2003

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Plant Operations and Maintenance Committee, member since 2009
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WEF Specialty Conference on Nutrient Removal, Steering Committee Volunteer

2013 Conference, 2011 Conference, 2009 Conference

WEF Specialty Conference on Nutrient Removal, Workshop Chair, 2011

Utility Workshop: Process Control and Sustainable Practice in Established Nutrient Removal Facilities

WEF Specialty Conference on Nutrient Removal, Workshop Chair, 2013

Nutrient Removal Operations and Process Control: From Fundamentals to Emerging Technologies

WEF Publication Task Force, Basic Laboratory Procedures for the Operator – Analyst, 2012 WEF Gascoigne Wastewater Treatment Plant Operational Improvement Medal, 2016

Eddie Jones

Eddie Jones is a group IV with the city of Everett. I started here as an Operator in training in March of 2012 and worked my way up to my current position of Senior Operator. Prior to working here I worked for eleven years with the city of Bellevue's water and wastewater distribution systems. I also retired from the U. S. Navy in the construction battalion know as the SeaBees.

Casey Mullins

This year I celebrate my 21st year in the Wastewater industry. I carry three Class IV licenses (Hawaii, Washington & Oregon) in good standing.

Worked in a half a dozen treatment plants. From Operator Assistant in 2022 all the way up to Operations Supervisor over 4 treatment plants. I have mentored Operators, designed and fabricated large and small process upgrades, and done process analysis for various systems. (Assessments and troubleshooting). Had the distinct privilege of working with some truly gifted and wonderful people.

Patrick Kongslie

Patrick Kongslie has 20 years of experience in the wastewater/water industry. He has been the plant manager of seven wastewater treatment plants (various sizes and technologies) and a Class A water distribution system. He holds many professional certifications including: Wastewater Treatment Plant Operator Group IV, Wastewater Collection Specialist IV (WWC-IV), Water Distribution Manager IV, Water Treatment Plant Operator IT-IV, and Cross-Connection Control Specialist. He graduated with a Bachelor of Applied Science in Organizational Leadership and Technical Management from Olympic College with Summa Cum Laude honors. He went on to obtain his Master of Science in information Technology and Administrative Management from Central Washington University. He is currently the Maintenance and Operational activities for two advanced wastewater treatment plants, 103 pump stations, 830 grinder pump stations, over 730 miles of conveyance piping systems, and also oversees the asset management, accredited laboratory, and industrial pretreatment programs.

Mark Walter

Mark Walter has been an Operations Specialist for Waterdude Solutions LLC since 2016. Providing operations, maintenance and management technical services to water and wastewater utilities. His expertise includes O&M program development, system assessment and process optimization. Mark has over 30 years in the water quality industry and holds Oregon Grade IV certification in treatment and collections. His experience includes operating and managing both large and small systems. Mark has also served as a manufacturers equipment representative assisting clients with the application of treatment systems. He regularly provides training at both regional and national conferences. Mark is a past President of the Pacific Northwest Clean Water Association, currently serving as the Chair of the Plant Operations and Maintenance Committee for the PNCWA.

Jack Liang

Jack Liang joins Clean Water Services as the Chief Strategy Officer in October 2021. Liang served as the Chief Financial Officer / Director of Support Services for Washington County the last three years, and in various financial and technology leadership roles at the City of Portland for seven years. He is CWS' first Chief Strategy Officer.

Michael Parker

Michael Parker serves as the Water Utility Planning Manager for the City of Moscow. Mike is a dedicated public servant who has worked in the water field for 28 years. Mike is certified in water, wastewater, backflow, cross-connection control, and serves as an appointee of the Governor as Vice Chair of the Board of Water and Wastewater Professionals for the State of Idaho.

Mike lives in Latah County with his wife, Teri, and enjoys spending time listening to loud music in his shop while he works on his latest invention or making beer. When Mike is not listening to loud music in his shop, he enjoys spending time with his 4 kids and 3 grandchildren.

Hunter Bennett-Daggett

Mr. Bennett-Daggett has 17 years of experience in design, permitting, and construction on wastewater and water projects. Projects that Mr. Bennett-Daggett has worked on include wastewater treatment facilities, pump stations, conveyance systems, water distribution systems, and fisheries projects.

Monica Stone

Monica completed the Water Environment Technology program at Clackamas Community College and have worked for Portland-metro area municipalities for over 30 years. I have a Oregon Wastewater Operator IV license and a Collection System Operator IV license. Currently I am the Process/Operations Supervisor for the City of Portland, Columbia Boulevard Wastewater Treatment Plant.

Brian Stevens

Brian Stevens is the Treatment Plant Supervisor for the City of Albany Water Reclamation Facility. Brian graduated from Linn Benton Community College with an Associate of Applied Science in Water/Wastewater Technology. He has spent his fourteen-year career working in various capacities in the water, wastewater, and industrial wastewater fields. Most of his professional career was spent with the City of Hermiston's Recycled Water Department assisting in day-to-day operations and startup of a state-of-the-art membrane bio reactor. He spent four years in the education sector as contracted faculty and department co-chair of the Water, Environment, and Technology Department at Linn Benton Community College. Brian has been with the City of Albany as WRF Treatment Plant Supervisor since August 2021, overseeing the operation of the Water Reclamation Facility and the associated man-made treatment wetlands Talking Water Gardens.