

Monday Morning - September 16						
7:00 - 5:30	Registration					
8:00 - 10:00	Opening Session					
10:00 - 10:30	Break & Ops Challenge Viewing Time					
10:00 - 4:00	4-Person Operations Challenge					
	Session 1A Modeling and Simulation	Session 2A Energy Efficiency	Session 3A Biosolids	Session 4A Reuse	Session 5A Asset Management: Collections	Session 6 Public Education
10:30 - 11:15	The Science of Activated Sludge Mixing Improves on the Rule of Thumb <i>Edward Wicklei, Carollo Engineers</i>	When Your High Speed Turbine Blows...UP! <i>Jeffrey Zahler, HDR Engineering</i>	Solids Management at the Lake Stevens MBR Treatment Facility <i>John Wilson, Gray & Osborne</i>	City of Hermiston - Recycled Water Project (or was it?) <i>Bradley Bogus, Tetra Tech</i>	Maintaining High Quality in Expanding Collection System Databases <i>Edward Speer, CDM Smith</i>	Community Decision Making in the Development of Bend's Sewer Collection System Master Plan(followed by panel) <i>John Cowan, Carollo Engineers; Tom Hickmann, City of Bend</i> Panel Discussion: <i>Elizabeth Barg, Barney & Worth, Moderator; Tom Hickmann, City of Bend; John Cowan, Carollo Engineers, David Stangel, Murray Smith & Associates</i>
11:15 - 12:00	CFD Modeling of the Effluent Mixing Zone from the Seattle Steam Outfall <i>Fangbia Lin, Stantec</i>	The Use of High Performance Coating Systems to Optimize and Enhance Energy Efficiency of Centrifugal Pumps <i>Alan Evans, A. W. Chesterton Company</i>	Optimizing Dewatering Can Save Big Bucks <i>Steve Walker, Carollo Engineers</i>	Water Treatment Compliance for Dissolved Metals, Nutrients, and other Anions <i>Mark Lopp, Blue Water Technologies</i>	Bend's Most Critical Asset - Condition Assessment of the Plant Interceptor <i>Robert Lee, Brown and Caldwell; Aaron Collett, City of Bend Public Works</i>	
Monday Afternoon - September 16						
12:00 - 1:15	Networking Lunch					
	Modeling and Simulation: Collections					
1:15 - 2:00	Re-evaluating Sanitary Sewer Design Storm Selection to Meet Regulatory and Level of Service Objectives <i>Andrew Braun, Clean Water Services</i>	Lessons Learned from an Energy Conservation Improvements Project for the City of Blaine LPWRF <i>Xiaomo (Molly) Du, HDR Engineering</i>	Transitioning from Batch to Continuous Solids Processing to Optimize Plant Performance <i>Tim Scott, Salmon Creek WWTP</i>	From the Flintstones to the Jetsons: The Evolution of Wastewater Treatment and Beyond in Dundee Oregon <i>Michael Humm, Kennedy/Jenks Consultants</i>	Optimal R&R Planning Using Advanced Quantified Risk Approach for Distribution Pipe <i>Kurt Vause, StreamlineAM</i>	Advisory Groups, Surveys, and Other Adventures in Community Dialogue: Groundwater Recharge and Emerging Contaminants <i>Ben McConkey, LOTT Clean Water Alliance</i>
2:00 - 2:45	Long Term Simulation for Determining Level of Service, a case study from the City of Everett <i>Eric Habermeyer, HDR Engineering</i>	Incentives to Blow Hot Air: Durham Facility Turbo Blower Installation <i>Tyler Anderson, Kennedy/Jenks Consultants</i>	Evolution of Biosolids Drying Technologies and Energy Utilization Considerations <i>Tim Bauer, CH2M HILL</i>	Double Duty UV Disinfection System at Bend WWTF: Treating Both Secondary Effluent and Filtered Effluent (Class A Reuse Water) with the Same System <i>Gregg Thompson, CH2M HILL</i>	The City of Sweet Home's I/I Abatement Program - A Picture of Success <i>Robert Lee, Brown and Caldwell</i>	
2:45 - 3:00	Break					
	Session 1B Mentorship	Session 2B Nutrient Removal	Session 3B Digestion	Session 4B Emerging Contaminants	Session 5B Asset Management	
3:00 - 3:45	Building Leadership Presence <i>Nicki Pozos, HDR Engineering</i>	Phosphorus Sorption-Transport Modeling of Subsurface Sewage Disposal Systems for Surface Water Protection <i>Michael J. Cook, Idaho Dept. of Environmental Quality</i>	Development and Semiworks Scale Demonstration of a Continuous Thermal Hydrolysis Process for Treatment of Particulate Organic Wastes <i>John Lee, CH2M HILL</i>	Water Reclamation Advanced Treatments Costs Associated with Trace Organic Contaminant Removal <i>Jean F. Debroux, Kennedy/Jenks Consultants</i>	A Day in the Life of an Asset <i>Marc Yarlott, Veolia Water North America</i>	Working Close to Homes and in the Rights-of-Way: There is More to Engineering than the Design <i>Vicki Sironen, HDR Engineering</i>
3:45 - 4:30	Mentoring: Effective Utilization of an Underutilized Strategic Tool for Professional and Organizational Growth <i>Lois D. Cohen, Lois D. Cohen Associates</i>	Pioneering the Boundaries of Low Effluent Phosphorus with Sustainable Biological Treatment <i>Haley Falconer, HDR Engineering</i>	A Full-Scale Case Study of Rapid Volume Expansion of Digester Contents <i>Tom Chapman, Brown and Caldwell</i>	Modeling the Fate and Transformation of Estrogens across Wastewater Treatment Plants <i>Mariko Lust, University of Washington</i>	Creating Information Value Chains to Support Asset Management <i>Tina Miller, StreamlineAM</i>	Location, Location, Location – Rebuilding a Wastewater Pump Station In the Middle of a Pedestrian-Oriented, Thriving Downtown <i>Kevin Goss, Tetra Tech</i>
4:30 - 5:15	Attracting, Engaging, and Retaining Young Professionals <i>Michael J. Lubovich, Parametrix</i>	Sustainable Operating Practices for Achieving Low Phosphorus Effluents <i>Mario Benisch, HDR Engineering</i>	Digestion Improvements at City of Ellensburg Optimized to Mitigate Multiple Operational Impacts <i>Alan Straub, Carollo Engineers</i>	The Impact of Anaerobic Digestion on Pharmaceuticals in Biosolids: A Bench Scale Study <i>Ryan Rehder, Mountain Waterworks</i>	Taking Criticality Analysis to the Next Level <i>Tacoma Zach, Uberlytics</i>	Connecting with Schools <i>Brett Laney and Ely Teragli, Clean Water Services</i>
5:00 - 7:00	Manufacturers Reception—Exhibit Hall					
7:00 - 8:00	Monday Night Dinner					
8:00 - 11:30	Networking Night (hosted by PNCWA Young Professionals - offsite)					

Juniper Ridge Hydroelectric Project Tour 1:15 - 3:45

Tuesday Morning - September 17								
7:00 - 5:30	Registration							
7:00 - 8:00	Operators Breakfast							
	Session 7 Utility Management	Session 8 Energy Recovery	Session 9 Sustainability	Session 10 Nutrient Removal	Session 11 Collections	Session 12 Natural Treatment Systems	EXHIBIT HALL Section Exchange 8:00 - 9:30	
8:00 - 8:45	Predicting the Future—Selecting Level of Treatment, Biological Treatment and Side Stream Treatment Processes in the Face of Unknown Effluent Limitations <i>Adam Klein, Brown and Caldwell</i>	Heat and Power Generation from Digester Gas at the West Point Treatment Plant <i>Susan Hildreth, King County Wastewater Treatment Division</i>	From Grey to Green: Making Water Infrastructure Sustainable in the 21st Century <i>James Clark, Black & Veatch</i>	Energy Reduction and Improved Nutrient Removal through Model Based Feed-Forward Process Control <i>Tito Stahl, BioChem Technology</i>	87 th Ave at Canyon Road: Improving natural stream functions while protecting sanitary conveyance <i>Jadene Stensland, Clean Water Services</i>	An Industrial Municipal Partnership to Treat Wastewater Using Engineered Wetlands <i>Heather Slocum, City of Albany</i>		
8:45 - 9:30	Wastewater Agency Response Network Overview <i>Neil Kennedy, Tualatin Valley Water District</i>	Waste Heat Recovery from Treated Wastewater <i>Jennifer Strehler, CDM Smith</i>	For Better or For Worse - Paperless Bidding and Construction Management Services <i>Jon Baune, J-U-B Engineers</i>	Yakima Washington Struvite System <i>Dan Barbeau, Pharmer Engineering; Dean Smith, City of Yakima</i>	Submerged Sewer Rehabilitation: Lake Oswego Takes the Plunge <i>Nathan Bell, Brown and Caldwell</i>	Treatment Wetlands for Effluent Polishing, Groundwater Infiltration, Habitat Creation, and Recreation <i>Christopher Keller, Wetland Solutions</i>		
9:30 - 10:30	Break - Exhibit Hall							
10:30 - 11:15	The City of Bremerton's Approach to Optimize Capital Improvement Plan Dollars and Maximize Revenue Streams <i>Chal Martin, City of Bremerton Public Works Department</i>	Best Practices for Building a Successful Biogas Utilization Program <i>Lynne Chicoine, CH2M HILL</i>	Finding the Perfect Fit: An Overview of Blower Technologies <i>Colleen Orth, HSI, Part of Atlas Copco</i>	Effectively Converting Conventional Activated Sludge to BNR Process <i>Jyh-Wei (Al) Sun, CDM Smith</i>	We Can Fix That: Ten Years of Seattle Public Utilities Retrofit Program Successes <i>Steven Drangsholt, Seattle Public Utilities</i>	Passive Nitrate and Heavy Metal Treatment Using Woodchips and Biochar within a Constructed Wetland <i>Jeff Hart, Kennedy/Jenks Consultants</i>		
11:15 - 12:00	Preparation of Operations and Maintenance Manuals for Domestic Wastewater Treatment Facilities <i>Jon Gasik, Oregon Dept. of Environmental Quality</i>	Nitrate and Nitrite Monitoring in Wastewater Processes for Advanced Control and Monitoring <i>Justin Smith Irving, s-can Measuring Systems LLC</i>	Bend WRF: Secondary Expansion Project; Sustainability in Design <i>Jim Wodrich and Scott Thompson, City of Bend; Brady Fuller, CH2M HILL</i>	Biological Process Design for Phosphorus Removal at the Nampa WWTP – Integrating Trickling Filters with the A/O Process to Treat a High-Strength Industrial Wastewater <i>Matthew J. Winkler, Brown and Caldwell</i>	The New Wastewater: Collection System Challenges Caused by Today's Modern Trash <i>Robert Domkowski, Xylem, Inc., Water Solutions USA - Flygt</i>	A Multi-Solution Approach to Long-Term TMDL Compliance Using Natural Treatment Systems in Corvallis, Oregon <i>Preston Van Meter, Kennedy/Jenks Consultants</i>		
12:00 - 1:15	Networking Lunch							

Tuesday Afternoon - September 17						
12:00 - 1:15	Networking Lunch					
	Session 13 Stormwater	Session 14 Energy Recovery	Session 15 Climate Science	Session 16 Nutrient Removal	Session 17 Collections: Pump Stations	Session 18 Operations: Automation
1:15 - 2:00	Innovative Stream Channel Rehabilitation Design Solutions Required for Compliance with Washington Suburban Sanitary Commission SSO Consent Decree <i>Lawrence Magura, Black & Veatch</i>	Using Recovered Heat to Economically Produce Class A Biosolids <i>Frank Dick, City of Vancouver WA</i>	Mainstreaming Climate Change <i>Invited Guest Speaker Paul Fleming, Seattle Public Utilities</i>	Application of Lessons Learned from a Pilot Investigation to the Full Scale Design of a DEMON® System to Remove Nitrogen from Dewatering Centrate <i>Lynn Williams, Brown and Caldwell</i>	Interbay Pump Station – A 50-year Progression in Engineering <i>Ray Nickel, Parametrix</i>	Modern Wastewater Facility Automation: Two Northwest Start-Ups in 2013 <i>Lisa Obermeyer, CH2M HILL</i>
2:00 - 2:45	Stormwater Regulations Update – From both Washingtons <i>Nathan Hardebeck, SoundEarth Strategies</i>	Biogas....What is the future? Biomethane as a Transportation Fuel <i>Tony Schilling, Unison Solutions</i>	Assessing the Vulnerability of Wastewater Facilities to Sea-Level Rise <i>John Phillips, King County Wastewater Treatment Division</i>	Short-Term Improvements with Long-Term Benefits for Phosphorus Removal and Recovery <i>J. McCormick, Carollo Engineers</i>	The Quest for Clog-Free Pump Station Operation <i>Michelle Burkhart, CH2M HILL</i>	SCADA in the Cloud <i>Curt Landreth, Advanced Control Systems</i>
2:45 - 3:00	Break					
3:00 - 3:45	Improving Stormwater Standards for Hydromodification - Gresham's Healthy Watersheds Approach <i>Jennifer Belknap Williamson, City of Gresham OR</i>	To Build or Not to Build (a FOG receiving facility)? That was the City's question. <i>Thomas Chapman and Christopher Muller, Brown and Caldwell</i>	Pacific Northwest Streamflow and Precipitation Trends <i>Charles Luce, US Forest Service</i>	Tertiary MBR for Nitrification and Low Level Phosphorus Removal <i>Mario Benisch, HDR Engineering</i>	Reducing Operational Risks Associated with a Large-Scale Regional Pumping System <i>Matt Sprick, Carollo Engineers</i>	Instrumentation Improvements at Silverton WWTP <i>Karen Bill, HDR Engineering</i>
3:45- 4:30	Media Cartridge Filter Maintenance Frequency Testing <i>James Holtz, Clean Water Services</i>	Wastewater and Organic Waste to Bioenergy <i>Dave Parry, CDM Smith</i>	Developing A Program to Evaluate Climate Change Impacts <i>John Dummer, Clean Water Services</i>	Practical Application of Microthrix Parvicella Control Features at the Meridian Wastewater Treatment Plant <i>William Leaf, CH2M HILL</i>	Branch Line Pumping Alternatives <i>Joe Evans, PumpTech</i>	The Growing Influence of Industrial Ethernet in Plant Control <i>Robert Salmond, Tetra Tech</i>
4:30 - 5:15	Optimizing O&M for Public and Private Green Infrastructure <i>Jennifer Belknap Williamson, City of Gresham OR</i>	A Demonstration of Food Waste Co-digestion at the City of Tacoma, WA <i>Christopher Muller, Brown and Caldwell</i>	Applying Climate Change Projections to Inform Public Water Utility Planning <i>Katherine Hegewisch, University of Idaho</i>	Algae Kinetics and Utilization for Nutrient Removal from Wastewater Effluent <i>Michael Marsolek, Seattle University; Students from Seattle University</i>	Pump Station Retrofit Reduces Power and Maintenance Costs <i>Darrell Winans, City of Gig Harbor</i>	Bend Supervisory Control and Data Acquisition (SCADA) Improvements Project <i>Jim Wodrich, City of Bend; Gabe Shones, Harris Group</i>
5:15 - 7:00	Exhibit Hall Closing Reception					
7:00 - 9:00	PNCWA Awards Banquet					

EXHIBIT HALL

Bend Water Reclamation Facility Tour 1:15 - 3:45

Wednesday Morning, September 18						
7:00 - 1:00	Registration					
	Session 19 Regulatory Strategies	Session 20A Operations	Session 21 Odor Control	Session 22 Advanced Wastewater Treatment	Session 23 Wet Weather Treatment	Session 24 Disinfection
8:00 - 8:45	A Credible, Transparent, Turn-Key Solution: What It Takes to Make Water Quality Trading Work <i>Alex Johnson, The Freshwater Trust</i>	Vibration - What Is It? How Does It Affect My Operation? What Can I Do About It? <i>John Koch, HDR Engineering</i>	Odor Control Technology Advancements <i>Anthony Yamini, PureAir Filtration</i>	Design, Construction, and Performance of the Eugene – Springfield WPCF Tertiary Filtration Facilities <i>Onder Caliskaner, Kennedy/Jenks Consultants</i>	CEPT Applications: Exceptional Technology <i>Gregory Land, Kemira Water Solutions</i>	Impacts of Sodium Hypochlorite Degredation <i>James Green, City of Corvallis</i>
8:45 - 9:30	Guidelines for Preparing Wastewater Planning Documents in Oregon <i>Jon Gasik, Oregon Dept. of Environmental Quality</i>	Bend WRF Secondary Expansion: IFAS implementation for efficient operation and expandability <i>Dave Green, CH2M HILL</i>	Emerging Technologies for Controlling Odors and Fats, Oils and Grease (FOG) in Sewer Collection and Pretreatment Systems <i>David Kopchynski, Parametrix</i>	Applying Probabilistic Methods to Quantify Risk in Planning Studies: An Alternatives Analysis for Secondary Expansion at the Durham Advanced Wastewater Treatment Facility <i>Adrienne Menniti, CH2M HILL</i>	Integrating a CSO System into a WWTP Operation Element <i>Cliff Meier, Portland Bureau of Environmental Services</i>	Evaluation of a Pilot Sodium Hypochlorite Gravity Feed System for Wastewater Disinfection <i>Steven Zamperin, King County</i>
9:30 - 10:15	Toolbox for Restrictive Toxic Criteria Includes Treatment Technology and Regulatory Solutions <i>David Clark, HDR Engineering</i>	Improvements in Video Based Knowledge Capture <i>Dale Richwine, Richwine Environmental</i>	Use of Sustainable Biotrickling Filter Technology for WWTP and Collection System Odor Control <i>Matthew Johnson, BioAir Solutions</i>	Submerged Fixed-Film Media System: "Bug Hotels" Open for Business at the Snohomish WWTP <i>Eun Kim, Kennedy/Jenks Consultants</i>	Pilot- and Full-Scale Demonstration of Wet Weather Treatment Using Chemically Enhanced Primary Treatment (CEPT) and High Rate Disinfection <i>Henryk Melcer, Brown and Caldwell</i>	Optimizing Design of Chlorine Control Systems <i>Benjamin Klayman, Black & Veatch</i>
10:15 - 10:30	Break					
		Session 20B Project Delivery				
10:30 - 11:15	Understanding Water Quality Responses to Improve Watershed Management of Phosphorus Loadings on the Boise River <i>Haley Falconer, HDR Engineering</i>	Low Bid-Prepurchase-Negotiated Bid? <i>John Koch, HDR Engineering</i>	Modeling Odor Generation and Control in a Combined Municipal-Industrial Wastewater Collection System <i>Jay Swift, Gray & Osborne</i>	Primary Effluent Filtration as an Intermediary Wastewater Treatment Step <i>Onder Caliskaner, Kennedy/Jenks Consultants</i>	Chemically Enhanced Primary Treatment (CEPT) Modifications in a 60-Year Old WWTP for Compliance with Effluent Phosphorus Limits <i>Bill Benko and Glen Schwenke, City of Boise Public Works</i>	Disinfection Control Improvements Produce Big Savings <i>Dan Hanthorn, City of Corvallis</i>
11:15 - 12:00	Implementing an EPA Approved Pretreatment Program in Jerome, Idaho <i>Larry Rupp, Keller Associates; Dade Pettinger, City of Jerome</i>	The Other Side of the Plant - Meridian's New Administration and Laboratory Facilities <i>David Keil, SPF Water Engineering</i>	The Case for Headspace Air Management in Collection System Odor Control Applications <i>Mark Smith, Brown and Caldwell</i>	The Evaluation of Cloth Media Filtration as Pretreatment to Ultrafiltration in Wastewater Applications <i>Mark Hughes, Aqua-Aerobic Systems</i>	Continuous Rotating Belt Filtration for Primary Treatment <i>Cornelius J Strain, Blue Water Technologies</i>	Next Generation Ultraviolet Light Technology Selection for the Hillsboro WWTF <i>Wayne Gresh, Carollo Engineers</i>

Redmond Water Pollution Control Facility Tour 8:00 - 10:30