

2016 WateReuse

PACIFIC NORTHWEST CONFERENCE

May 17-19, 2016

Red Lion Hotel at the Park Spokane, WA

OVERVIEW OF PLENARY SESSIONS AND EVENTS

Tuesday, May 17th

1:00 pm - 5:00 pm	Technical Tour: Spokane County Regional Water Reclamation Facility
	Departs from Hotel Lobby

Wednesday, May 18th

7:00 am - 2:45 pm	Registration Open Riverfront Ballroom Foyer
7:00 am - 8:00 am	Continental Breakfast Riverfront Ballroom D
8:00 am - 8:10 am	Welcome Riverfront Ballroom A & B
	Kristine Westbrook, WateReuse PNW President
8:10 am - 9:00 am	Keynote Address: Engineering Research Center for Urban Water Infrastructure: Transitioning from Water Reuse Research to Urban Applications and Beyond Riverfront Ballroom A & B
	Dr. Tzahi Cath, Colorado School of Mines
9:00 am - 9:30 am	Reclaimed Water 101 Riverfront Ballroom A & B
	Mark Cullington, Kennedy/Jenks Consultants
9:30 am - 10:00 am	2016 EPA Water Reuse Guidelines Update Riverfront Ballroom A & B
	Jillian Vandegrift, CDM Smith
10:00 am - 10:15 am	Break
10.100 4111 10.110 4111	Riverfront Ballroom D
10:15 am - 11:00 am	
	Riverfront Ballroom D Strategic Planning and Implementation of Water Reuse Projects in the Northwest
	Riverfront Ballroom D Strategic Planning and Implementation of Water Reuse Projects in the Northwest Riverfront Ballroom A & B
10:15 am - 11:00 am	Riverfront Ballroom D Strategic Planning and Implementation of Water Reuse Projects in the Northwest Riverfront Ballroom A & B Allison Esvelt, Esvelt Environmental Engineering Engaging the Public for Reclaimed Water Project Success
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10:15 am - 11:00 am 11:00 am - 11:30 am	Riverfront Ballroom D Strategic Planning and Implementation of Water Reuse Projects in the Northwest Riverfront Ballroom A & B Allison Esvelt, Esvelt Environmental Engineering Engaging the Public for Reclaimed Water Project Success Riverfront Ballroom A & B Patsy Tennyson, Katz & Associates Water Rights Considerations in WA, OR, and ID
10:15 am - 11:00 am 11:00 am - 11:30 am	Strategic Planning and Implementation of Water Reuse Projects in the Northwest Riverfront Ballroom A & B Allison Esvelt, Esvelt Environmental Engineering Engaging the Public for Reclaimed Water Project Success Riverfront Ballroom A & B Patsy Tennyson, Katz & Associates Water Rights Considerations in WA, OR, and ID Riverfront Ballroom A & B

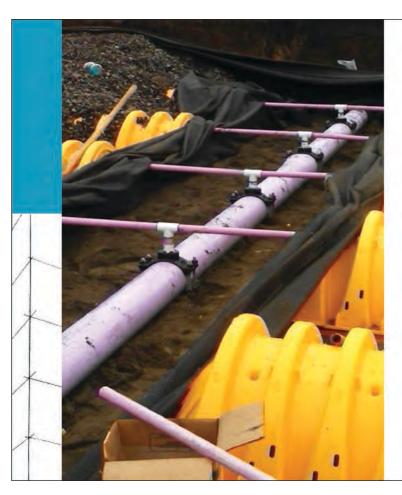
1:15 pm - 2:00 pm	Emerging Contaminants in Our Waters: The State of the Science Riverfront Ballroom A & B
	Dr. Edward P. Kolodziej, University of Washington
2:00 pm - 2:30 pm	WaterSMART Funding Opportunities Riverfront Ballroom A & B
	Amanda Erath, Bureau of Reclamation
2:30 pm - 2:45 pm	Break Riverfront Ballroom D
2:45 pm - 3:30 pm	No Water, No Beer: Water Reclamation & Industrial Reuse in Eastern Washington Riverfront Ballroom A & B Lucy Peterschmidt and Cynthia Wall, Washington Department of Ecology
3:30 pm - 4:00 pm	Reuse as a Solution for Temperature TMDLs in Oregon Riverfront Ballroom A & B Dr. Ken Williamson, Clean Water Services
4:00 pm - 5:00 pm	What's in Our Future: A Regulatory Panel Perspective - WA, OR, ID and More Riverfront Ballroom A & B
5:00 pm - 6:30 pm	Welcome Reception Riverfront Ballroom D

Thursday, May 19th

7:00 am - 3:15 pm	Registration Open Riverfront Ballroom Foyer
7:00 am - 8:00 am	Continental Breakfast Riverfront Ballroom D
8:00 am - 8:45 am	The Path to Potable Reuse Riverfront Ballroom A & B Kim Ervin, CH2M
8:45 am - 9:15 am	Examining Existing Recycled Water Operator Certification and Building a Framework for Potable Reuse Riverfront Ballroom A & B Erin Mackey, Brown and Caldwell
9:15 am - 10:00 am	Food Process Water Augmenting the Drinking Water Supply: Direct Potable Reuse Riverfront Ballroom A & B Megan Rounds, Washington State Department of Ecology and Steve Venner, Cascade Earth Sciences
10:00 am - 10:15 am	Break Riverfront Ballroom D

Thursday, May 19th, continued

10:15 am - 11:15 am	Lessons Learned and Applied in MBR Operations for Reuse Riverfront Ballroom A & B
	Terri Prather and Ben McConkey, LOTT Clean Water Alliance
11:15 am - 12:00 pm	Planning for Recycled Water Use When Water Scarcity is Not a Driver
	Riverfront Ballroom A & B
	Todd Miller, City of Springfield, Oregon
12:00 pm - 12:45 pm	Lunch Riverfront Ballroom C
12:45 pm - 1:15 pm	Being a Good Neighbor with Recycled Water and Wastewater Land Application Projects Riverfront Ballroom A & B
	Dane Higdem and Aric Frostenson, Glanbia Gooding
1:15 pm - 1:45 pm	Regulation of Aquifer Storage and Recovery Riverfront Ballroom A & B
	Llyn Doremus, Washington State Department of Ecology
1:45 pm - 2:15 pm	Aquifer Storage and Recovery: Geology and HydroGeological Design Considerations Riverfront Ballroom A & B
	Phil Brown, EA Engineering Science and Technology
2:15 pm - 2:25 pm	The Casterville, California Area's Agricultural Irrigation Story Riverfront Ballroom A & B
	WateReuse and Pentair
2:25 pm - 3:15 pm	Recycled Water for Irrigation of Food Crops - Proven Safe, Economical and Drought-Resistant Riverfront Ballroom A & B
	Dr. Bahman Sheikh
3:15 pm - 3:30 pm	Break Riverfront Ballroom D
3:30 pm - 4:15 pm	Recycled Water and Organic Crops in Oregon Riverfront Ballroom A & B
	Mark Cullington, Kennedy/Jenks Consultants
4:15 pm - 4:55 pm	Quincy: Crop Production with Reclaimed Water and Food Processor Reuse Riverfront Ballroom A & B
	Jon Turk, Brown and Caldwell
4:55 pm - 5:00 pm	Closing Remarks Riverfront Ballroom A & B
	Kristina Westbrook, WateReuse PNW President & King County Recycled Water Program Manager



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Brown and Caldwell is a 100% environmental firm offering engineering, scientific, consulting and construction services. We believe that delivering safe, clean water reliably for generations to come requires an integrated approach to water management. Our company is built upon the knowledge and service of innovative thinkers and experienced professionals in water, wastewater, stormwater, industrial water, and water reuse.

CH2M

Kim Ervin 1100 112th Avenue NE, Suite 500 Bellevue, WA 98004 (425) 233-3536 Kim.Ervin@ch2m.com www.ch2m.com

CH2M is the leading professional services firm delivering sustainable solutions to clients working on the world's most complex challenges. CH2Mers make a positive difference providing consulting, design, engineering and management solutions for vital infrastructure and resources serving diverse public- and private-sector clients. With \$5.4 billion in revenue and ~24,000 people, the firm has offices in 50 countries and four business groups: water: environment & nuclear; transportation; and energy & industrial.

HDR

Jeff Hansen 606 Columbia Street NW, Suite 200 Olympia, WA 98501 (360) 570-4410 Jeff.Hansen@hdrinc.com www.hdrinc.com

HDR is a full-service consulting firm with offices throughout the Pacific Northwest and around the world. We have the resources to meet the engineering and environmental needs of public agencies of all sizes through engineering, architecture, environmental, and construction services supported by scientists, economists, builders, analysts, and artists.

Kennedy/Jenks Consultants

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www.kennedyjenks.com

Since 1919, Kennedy/Jenks has grown to be an employee-owned firm with over 430 professionals in 26 offices nationwide. Kennedy/Jenks has been involved with numerous non-potable and potable recycled water projects including planning, pilot testing of emerging technologies and design of pipelines, pump stations and treatment and storage facilities.

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Carollo Engineers

Brian Matson 1218 Third Avenue, Suite 1600 Seattle, WA 98101 (206) 684-6532 bmatson@carollo.com www.carollo.com

Carollo Engineers is an environmental engineering firm that specializes in the planning, design, and construction of water and wastewater facilities. The firm was founded in Phoenix, Arizona in 1933 and since then has grown to more than 800 people in 39 offices throughout the United States. Our staff includes civil, structural, electrical, mechanical, environmental, I&C engineers, as well as scientists, planners, architects, and CAD designers. We continually strive to emulate our mission statement of being: "The BEST water consulting firm in the United States."

GeoEngineers, Inc.

Bruce Williams
523 East Second Avenue
Spokane, WA 99202
(509) 363-3125
bwilliams@geoengineers.com
www.geoengineers.com

With 14 offices nationwide, Geo-Engineers employs a deep understanding of surface and groundwater science and "in-the-water" experience to assist clients in finding cost-effective water-management solutions. We work closely with regulatory agencies and clients on watershed assessments, hydrogeologic evaluations, wellhead protection, water supply development, groundwater control, natural resource protection and geologic hazards.

Murray, Smith & Associates, Inc.

Mike Carr 121 SW Salmon, Suite 900 Portland, OR 97204 (503) 225-9010 Michael.Carr@msa-ep.com www.msa-ep.com

Murray, Smith & Associates, Inc. (MSA) is a consulting civil engineering firm with eight offices in Washington, Oregon, and Idaho. MSA specializes in public/municipal infrastructure planning, design and project delivery and has served public agencies throughout the Pacific Northwest since 1980 in the fields of water, wastewater, stormwater, and transportation.

Tetra Tech

Marcos Lopez
1420 Fifth Avenue
Seattle, WA 98004
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Marcos.Lopez@tetratech.com
www.tetratech.com

For more than 65 years, Tetra
Tech has helped provide safe and
abundant water supplies. Our
experience with reuse programs
includes permitting, compliance, regulations, infrastructure
improvements, treatment and
conveyance design. Tetra Tech
offers expertise in groundwater
and surface water, brackish water,
and saltwater— from pilot testing,
through design, and construction.

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Black & Veatch is an employeeowned, global leader in building Critical Human InfrastructureTM in Water, Energy, Telecommunications and Government Services. Since 1915, we have helped clients improve the lives of people in more than 100 countries through consulting, engineering, construction, operations and program management. Through its water reclamation/reuse practice, Black & Veatch's sustainable solutions are extending the life of local water resources.

Esvelt Environmental Engineering LLC

Allison Esvelt or Mark Esvelt 8908 East Dalton Avenue Spokane, WA 99212 (509) 926-3049 Allison@esvelt.com www.esvelt.com

Esvelt Environmental Engineering, LLC, specializes in water, industrial and domestic wastewater. and reclaimed water treatment system design, planning, studies, modeling, operation, and permitting assistance. Our engineers are licensed professional engineers with advanced degrees in environmental engineering, and are board certified in water supply and wastewater engineering by the American Academy of Environmental Engineers. We are located in Spokane, Washington, and have been serving the Pacific Northwest for 40 years.

Ovivo USA, LLC

Dennis Livingston 2404 Rutland Drive Austin, TX 78758 (512) 834-6000 dennis.livingston@ ovivowater.com www.ovivowater.com

Ovivo heritage companies pioneered MBR technology starting in the 1960s. Today we're driving innovation at the system level to reach the full potential of MBR technology. At our facilities in Austin, TX we're pushing the boundaries of a new digital landscape, driving membrane design to match industry needs and creating new training methods to empower operators. To learn more about MBR technology visit MBRCentral.com.

Xylem, Inc.

Steve Green 14125 South Bridge Circle Charlotte, NC 28273 (503) 396-2695 greens@xyleminc.com www.xyleminc.com

Water has always been vital. Now it is also becoming scarce. Responsible environmental stewardship requires that industries and utilities work to improve water efficiency through reuse. Xylem can show you how. With a broad selection of treatment options, Xylem application engineers can assist you in evaluating the correct processes for any reuse requirement. For more information, call 1-855-XYL-H2O1 (855-995-4261) or visit www.xylem.com/treatment/us/applications/reuse.

EXHIBITORS

Brown and Caldwell

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www.brwncald.com

Brown and Caldwell is a 100% environmental firm offering engineering, scientific, consulting and construction services. We believe that delivering safe, clean water reliably for generations to come requires an integrated approach to water management. Our company is built upon the knowledge and service of innovative thinkers and experienced professionals in water, wastewater, stormwater, industrial water, and water reuse.

Cascade Earth Science

Steve Venner, Managing Soil Scientists 12720 E. Nora Avenue, Suite A Spokane, WA 99216 (509) 928-4320 steve.venner@ cascade-earth.com www.cascade-earth.com

Cascade Earth Sciences (CES) has been providing professional solutions for water, wastewater and environmental problems for over 40 years. CES is best known for its land based water treatment and reuse systems that significantly reduce system operational costs. Professional scientific and engineering staff provide site specific solutions with the goal to reduce capital and maintenance costs while increasing the ease of operation. CES provides services to government and industry clients. Professional services include water/wastewater supply, treatment, reuse and water resource management, NPDES permitting, agricultural engineering and irrigation systems, groundwater studies and environmental site assessments.

Kennedy/Jenks Consultants

Christopher Stoll 1191 Second Avenue, Suite 630 Seattle, WA 98101 (206) 753-3412 chrisstoll@kennedyjenks.com www.kennedyjenks.com

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Pacific Groundwater Group

Peter Schwartzman 2377 Eastlake Avenue, East #200 Seattle, WA 98102 (206) 329-0141 peter@pgwg.com www.pgwg.com

PGG is an environmental and water resource consulting firm that addresses hydrogeologic considerations associated with reclaimed water infiltration, including: infiltration feasibility & capacity; subsurface conditions & groundwater flowpaths; water quality and downstream receptors; hydrologic impacts; monitoring; and value of infiltrated water for water-rights mitigation.

NOTES:

Learn about the benefits of becoming a WateReuse member and more about the WateReuse Pacific Northwest Section at

https://watereuse.org

