



Oregon Association of Clean Water Agencies (ACWA) Application for Wastewater CEUs for a stormwater professionals workshop May 24, 2023 entitled:

2023 ACWA Stormwater Summit

Wastewater/General CEUs requested:

- Pre-Stormwater Summit Optional Workshop—1 hour = .1 CEUs
Choice between “Stormwater 101” and “Groundwater 101”
- Stormwater Summit--A total of 4.833 hours of instruction--0.483 (or .5 if you can round up) CEUs—is requested for the main workshop.
- Attendees to all sessions, including the pre-Stormwater Summit workshops would be eligible for a maximum of 0.583 (or .6 if you can round up) CEUs.

This document includes the information required to demonstrate eligibility for wastewater and/or general CEUs, including: 1) the educational need for the program provided; 2) the learning outcome for attendees; 3) an expanded program including a description of the course content and importance to stormwater/wastewater/water quality professionals; 4) the qualifications of the instructors; 5) the time schedule; and 6) the method of tracking attendance.

Educational Need and Learning Goals:

The ACWA Stormwater Summit is convened annually to update stormwater management and other water quality/wastewater management professionals across the state on current issues and trends impacting their work to protect Oregon’s surface water quality. CEUs have been approved for this instructional event every year for over 25 years. The goal of this workshop is to increase the knowledge and understanding of wastewater and stormwater managers, engineers and operations professionals regarding water quality regulations, water quality challenges, and technologies and operational controls for managing and improving stormwater quality and adapting stormwater management systems and practices to emerging issues of concern.

The course emphasizes science-based information on stormwater pollutants and the effectiveness of stormwater management practices and facilities intended to improve water quality. It also focuses on regulatory compliance pathways and innovation in best management practices centered on low impact, green infrastructure, as well as best management practices to meet pollution reduction objectives. The course also educates attendees regarding emergent issues and challenges that must be addressed through adaptive management, such as climate change impacts and water quality impacts associated with microplastics, tire wear particles, pesticides and other pollutants. Finally, the work shop provides important up-to-date information on the legal and regulatory backdrop for municipal stormwater programs.

A variety of research scientists, technical experts and experienced practitioners are included in the program as speakers/instructors. The workshop will be convened in person at the LaSells Stewart Conference Center on the Oregon State University campus, as described in the expanded program/course outline below.

Method of Tracking Attendance for CEU Certification:

All attendees wishing CEUs will be required to sign a CEU registration and certification roster for the sessions, which will be attended by a conference logistical coordinator. ACWA will monitor attendance and the roster and will sign and maintain the roster as required.

Course Outline (Program), Instructor Information, and Time Schedule:

2023 ACWA Stormwater Summit—Wednesday, May 24, 2023:

Pre-Summit Workshop; 8:45 am to 9:45 am: Stormwater 101 (Optional—0.1 FTE requested)

Krista Reininga, P.E., Brown and Caldwell

The “Stormwater 101” Pre-Summit Workshop is intended to introduce new stormwater professionals and permittees to the basics of stormwater quality and quantity management, the regulatory framework, best management practices, evolving permit requirements and implementation strategies, and resources. This session provides important background for professionals that are new to stormwater and other water quality management programs and is a good refresher for people who have worked in the field but have not kept their knowledge current.

Krista Reininga, P.E., is a water resources engineer at Brown and Caldwell with nearly 30 years of experience. She is currently focused on assisting municipal jurisdictions with regulatory compliance related to their stormwater programs. She is experienced in NPDES permitting, TMDL planning, multiple objective stormwater master planning, stormwater quality monitoring, stormwater and water quality data evaluations, pollutant source identification, hydrologic/hydraulic modeling, and the development of municipal stormwater quality standards for new development. Reininga earned a B.S. degree in Civil Engineering from Michigan State University and a M.S. degree in Environmental Science from Indiana University.

Pre-Summit Workshop; 8:45 am to 9:45 am: Groundwater 101 (Optional—0.1 FTE requested)

Matt Kohlbecker, R.G., Supervising Hydrogeologist, GSI Water Solutions

The “Groundwater 101” Pre-Summit Workshop is intended to introduce new stormwater professionals and permittees to the basics of using underground injection control (UIC) and other groundwater infiltration measures to manage stormwater quality and quantity. He will review current research findings and examples of successful methods ,and will address the regulatory

framework for these methods, including Water Pollution Control Facility (WPCF) permits. This session provides important background for professionals that are new to stormwater and other water quality management programs who may be contemplating use of groundwater injection or infiltration facilities and is a good refresher for people who have worked in the field but have not kept their knowledge current.

Matt Kohlbecker, RG, is a Supervising Hydrogeologist with GSI Water Solutions, Inc. Mr. Kohlbecker has over 15 years of experience helping municipalities and businesses solve stormwater infiltration challenges. His broad experience includes applying innovative infiltration techniques, preparing groundwater protectiveness evaluations for underground injection control (UIC) permits, infiltration testing, and using stormwater recharge to augment water supply. Prior to rejoining GSI, Mr. Kohlbecker worked for 3 years at the Oregon DEQ, serving as the technical lead for the UIC program.

Wednesday, May 24th Stormwater Summit Program-- 10:00 am to 4:30 pm; with a 70-minute lunch break and afternoon breaks totaling 30 minutes.

10:00 am	<p>Welcome & Introductions ACWA Stormwater and Groundwater Committee Co-Chairs</p>
10:10 am	<p>What’s on the Horizon for DEQ’s Water Quality Programs—Implications for Stormwater Programs Jennifer Wigal, Water Quality Administrator, Oregon Department of Environmental Quality</p> <p>Ms. Wigal will provide updates and previews from DEQ’s Water Quality Division, including plans to tackle new challenges and how the agency will partner with local government agencies. It is important for stormwater management professionals to understand the regulatory drivers and mandates DEQ is delegated to implement, including the impacts of updated Total Maximum Daily Loads, water quality standards and litigation results. Wigal will discuss the status and plans for updating general and individual stormwater-related permits, and what local jurisdictions can expect to see emerge from DEQ as priorities for the Stormwater program.</p> <p><i>Jennifer Wigal</i> is the Administrator for the Oregon DEQ Water Quality Division. Prior to this appointment, she served as Deputy Administrator since April of 2018, and as the Water Quality Program Manager before that. Ms. Wigal is responsible for administration of all DEQ Water Quality Programs, including Water Quality Permitting, Water Quality Standards, and Water Quality/Watershed Assessments. Prior to coming to DEQ in 2008, Jennifer built her expertise in water quality programs through various positions at U.S. EPA Headquarters during her 10 years there. Jennifer holds an M.S. degree in Environmental Engineering from Johns Hopkins University and a B.S. degree in Civil Engineering from Washington State University.</p>

10:30 am	<p>National News—An Update from the National Association of Clean Water Agencies (NACWA) Emily Rimmel, Director of Regulatory Affairs, NACWA</p> <p>Ms. Rimmel will provide an overview of current legislative, regulatory, and legal happenings at the national level. In particular, she will provide updates on EPA actions and other developments at the national level that will impact municipal stormwater permits and programs in Oregon. It is important for stormwater professionals to stay abreast of legislative, legal, and contemplated EPA actions that may drive changes in how they implement stormwater permits and manage regulatory stormwater programs.</p> <p>Emily Rimmel leads NACWA’s regulatory efforts and support members nationwide on a suite of issues from water quality to PFAS to stormwater. She is also an Adjunct Instructor at the University of Oklahoma, teaching classes on environmental law and water resources advocacy. Rimmel has an aquatic ecology background and a law degree from Vermont Law School. She has M.S. and B.S. degrees in Zoology from the University of Oklahoma, Norman, OK.</p>
10:50 am	<p>Microplastics and Municipal Stormwater Elise Granek, Ph.D., Professor, Environmental Science and Management, Portland State University</p> <p>Microplastics are ubiquitous in our environment--found in atmospheric samples as well as our wastewater, waterways, and organisms sampled from rivers and oceans. Microplastic contamination is found in more rural rivers (such as the Deschutes and Rogue) as well as more urban waterways (the Willamette and Columbia) as well as in animals in these rivers and our oceans. Microplastic exposure and ingestion affects these animals and may have implications for human health. A number of interventions are currently being researched to reduce the microplastic load entering the environment via stormwater and wastewater systems. Dr. Granek will discuss ongoing research and recent findings on microplastics in stormwater and their impacts on aquatic life. She also will discuss best management practices and green infrastructure under evaluation to determine effective treatment approaches for urban stormwater management programs.</p> <p>Dr. Granek is a marine ecologist whose research examines ecosystem functioning and connectivity and disturbance (both anthropogenic and ecological). More recent research has focused on the distribution and effects of emerging contaminants on species and communities as well as perceptions and attitudes about marine issues. She holds a Ph.D. in Zoology (Marine Ecology) from Oregon State University, an M.Esc. in Forest Science and Conservation Biology from Yale University, and a B.A. degree in Environmental Studies and Nonwestern History from the University of Pennsylvania.</p>
11:40 am	<p>Gaining Traction on Tire Wear Particle Pollution—Next Steps Toward Solving Urban Runoff Mortality Syndrome in Washington State Eli Mackiewicz, City of Bellingham, Washington</p> <p>Eli Mackiewicz is the Chair of the Washington State 6PPD-Q Subgroup which is part of the state-wide Stormwater Work Group that has been working collaboratively for two years to</p>

	<p>understand the causes of, and solutions to, tire wear particle pollution, which has been linked to Urban Runoff Mortality Syndrome (URMS) in coho salmon and steelhead. This workgroup’s effort draws on over 20 years of scientific inquiry and diligent research. This presentation covers the discovery of URMS in Washington, the research that isolated 6PPD-Q as the primary cause, and the work underway to address this important issue. A special focus is to highlight the collaboration between regulators, researchers, local leaders, tribal entities, tire industry representatives, stormwater managers, fisheries biologists, and environmental advocates toward understanding and addressing this emerging stormwater pollutant. The Washington State Legislature commissioned a comprehensive report on the sources, solutions, and science surrounding tire wear particles as pollutants, published in December 2022, which informs this presentation. This is important to urban stormwater professionals because they will need to adapt stormwater best management practices and green infrastructure to address this problem.</p> <p>Mr. Mackiewicz is an environmental/natural resources technician for the City of Bellingham, Washington where he has spent the last sixteen years managing residential- and neighborhood-scale stormwater improvement projects. Eli serves as the City’s subject expert and technical lead on stormwater retrofits, watershed planning, and structural pollutant controls. Since 2020, Eli has been the co-chair of the 6PPD-Q Subgroup, a research and education committee created to inform stormwater managers about the sources of, and solutions to, URMS caused by tire wear particle pollution. Mr. Mackiewicz holds an M.S. degree in Environmental Science and Policy from Johns Hopkins University, Washington, D.C., and a B.S. degree in Wildlife Biology from Ohio University, Athens, Ohio.</p>
12:20 pm	LUNCH
1:30 pm – 2:20 pm	Concurrent Workshops—Session A
Ag Production Room	<p>Implementing Stormwater Program Requirements—Through the Lens of DEQ Blair Edwards, Interim Stormwater and UIC Program Manager, Oregon DEQ Pablo Martos, Sr. Permit Writer, Oregon DEQ</p> <p>Blair Edwards and Pablo Martos of DEQ’s Stormwater Program will present on general MS4 compliance matters with a focus on construction, including overlap and distinction between the MS4 and 1200-C permits and examples of the division of responsibilities for DEQ and municipalities. The presentation will also discuss records & documentation, escalating enforcement, and staff training. Understanding DEQ’s perspective on stormwater permit implementation and compliance issues is critical to municipal stormwater permittees.</p> <p>Blair Edwards has been with DEQ since 2018. He has served as DEQ’s Stormwater Program Coordinator and as a 401 Project Manager and he is presently filling in as the Stormwater & UIC Program Manager. Blair has had extensive experience in the construction industry. Mr. Edwards has bachelors and masters degrees from Portland State University.</p> <p>Mr. Martos has been a Sr. Permit Writer in the Oregon DEQ Stormwater Program since 2018. Prior to this position, Martos was a Portland Harbor Superfund Specialist for the Oregon Department of State Lands for six years. Mr. Martos earned a B.S. degree in Applied Ecology from the University of California at Irvine and has completed a Graduate Certificate in Fisheries Management from the Oregon State University.</p>

<p>Ag Leaders Room</p>	<p>Current Legal Issues for MS4 Permittees Jerry Linder, General Counsel, Clean Water Services, ACWA Legal Committee Co-Chair Laura Maffei, RG, Partner, Cable Huston, ACWA Legal Committee Co-Chair</p> <p>Jerry Linder and Laura Maffei will provide an update on recent legal and permitting issues impacting municipal stormwater and groundwater programs. As long-time ACWA Legal Committee Co-Chairs they have significant experience in supporting the MS4 permittees in their efforts to obtain implementable, defensible permits. This update will give attendees a current view of issues they may need to address within their stormwater programs to maintain compliance and avoid liabilities and risks associated with third party lawsuits.</p> <p>Laura Maffei is a partner in the Cable Huston law firm in Portland, Oregon. She provides a wide range of environmental legal support to both municipal and business clients. She holds a law degree (J.D.) from Northwestern School of Law, Lewis and Clark College, Portland, Oregon; an M.S. in Geology from the University of Washington, Seattle, Washington, and a B.S. in Geology from the University of California at Los Angeles. She is one of a very small number of lawyers in Oregon who are also Registered Professional Geologists.</p> <p>Jerry Linder has served as General Counsel for Clean Water Services since 1996, performing a broad range of legal services and oversight for the district. Prior to joining Clean Water Services, Jerry worked for several different law firms from 1989 to 1996. He has a law degree (J.D.) from Loyola Marymount University in Los Angeles, California, and a B.A. degree in Business Administration from the University of Washington, Seattle, Washington.</p>
<p>Ag Science Room</p>	<p>Case Study of Engineered Media Filtration to Meet Stringent Treatment Objectives Daniel Pankani, PE, Geosyntec Marc Leisenring, PE, Geosyntec</p> <p>This talk presents a case study of the design, construction, and on-going operations and maintenance of a vegetated engineered media infiltration basin at Port of Portland Terminal 4. The presentation covers site specific regulatory targets, piloting treatment technologies, selecting alternatives, infiltration testing, design, construction, and long-term operations and maintenance monitoring of the basin. It highlights the utility of advanced media blends, the benefits of detailed site investigations and pilot studies, and the transferability of lessons learned to MS4 agencies.</p> <p>Dan Pankani, PE, is a Senior Engineer at Geosyntec Consultants with 20 years of experience. His background is Civil Engineering, Computer Science, and Software Engineering. He specializes in stormwater modeling, green infrastructure design, and development of mobile applications for field data collection. Mr. Pankani holds a B.S. in Civil Engineering from Oregon State University, and a B.S. in Computer Science and an M.Sc in Software Engineering from Portland State University, Portland, Oregon.</p> <p>Marc Leisenring, PE, is a Senior Principal Engineer and Water Resources Department manager at Geosyntec Consultants in Portland. He specializes in stormwater management, capital improvement planning, and NPDES permit compliance. He has over 20 years of water resources engineering and stormwater management experience. Mr. Leisenring has a B.S. in Environmental Resources Engineering from Humboldt State University in California, and a M.S. in Civil and Environmental Engineering from Portland State University, Portland, Oregon.</p>

<p>First Inter-state Room</p>	<p>Oregon’s Emerging Pollutant Roundup Jenna DiMarzio, GIT, GSI Water Solutions Keri Handaly, City of Gresham Kevin Masterson, Stony Creek Consulting</p> <p>From pesticides to PFAS, the list of toxics we are concerned about in water continues to grow. This session will explore the current state of knowledge about 17 emerging pollutants that have the potential to impact groundwater and surface water, as summarized in the Emerging Pollutant Evaluation developed by GSI for several ACWA members. Detailed information on 6PPD-quinone data being collected by ACWA agencies in Oregon will be shared, as well as the latest on stormwater considerations related to PRAS and EPA-funded work ACWA is doing to reduce PFAS.</p> <p>Jenna DiMarzio, GIT, has been with GSI Water Solutions, Inc., since 2020. In that time, she has worked on a diverse portfolio of projects, from sediment characterizations to stormwater contaminant load evaluations. Ms. DiMarzio has an M.S. in Geoscience from Colorado State University and a B.S. in Chemistry from Arcadia University.</p> <p>Keri Handaly has worked for the City of Gresham as the Stormwater Permit Coordinator with a focus program area of toxics reduction outreach for the past 20 years. Ms. Handaly has an M.S. in Public Administration from the University of Washington in Seattle and a B.S. degree in Political Science from the University of Georgia in Athens.</p> <p>Kevin Masterson is a Sr. Environmental Consultant with Stony Creek Consulting, focusing on toxics reduction and assessment initiatives with non-profit organizations such as ACWA. Prior to joining Stony Creek Consulting, Mr. Masterson worked for Oregon DEQ; he has over 35 years of experience developing, implementing, and evaluating pollution management and reduction programs for public agencies. Masterson holds a B.S. degree Economics and a M.S. degree in Urban and Regional Planning from the University of Oregon, Eugene, OR.</p>
<p>2:30 pm – 3:20 pm</p>	<p>Concurrent Workshops—Session B</p>
<p>Ag Production Room</p>	<p>Implementing Stormwater Program Requirements—Through the Lens of DEQ Blair Edwards, Interim Stormwater and UIC Program Manager, Oregon DEQ Pablo Martos, Sr. Permit Writer, Oregon DEQ (Repeat of session from Session A—See information above)</p>
<p>Ag Leaders Room</p>	<p>Stormwater Asset Performance Management—From the Field to the Cloud Rylan Farr, Vice President, Apex Companies, LLC</p> <p>Management of stormwater assets means different things to different people depending on your outlook and position within the industry. Usually, this starts with education around what stormwater actually is, how it is effectively managed, and what proper treatment looks like from both a water quality and quantity perspective. Given the increase in severe weather events, growing populations creating more development and impervious surface, and ongoing efforts to combat climate change and the side effects of such, proper stormwater management is no longer a choice but a must. This presentation will cover what proper stormwater treatment looks like, how to leverage technology allowing professionals to do more with less, and a review of case studies of how proper treatment along with technology integration can create effective management programs. Professionals will be able to understand what the</p>

	<p>stormwater asset workflow process looks like up close with deep dives into each aspect of this workflow process and how we can continue to improve in each of these areas. Additionally, we will discuss how technology is able to take each component of the workflow process and continue to add value allowing for increased visibility of asset performance, real-time monitoring during both dry and wet seasons, and how to leverage this technology for proper program implementation and planning for future funding commitments. The case studies will show real world examples of these activities and the advantages gained on these projects and programs.</p> <p>Mr. Farr is a Vice President with Apex leading strategic growth initiatives across the company’s Water Resources section. With over 20 years of experience in the environmental and water industry, he has experience across drinking water, wastewater, and stormwater system design, installation, maintenance, and repair. Mr. Farr holds a B.S. degree in in Natural Resources Management and Engineering from the University of Connecticut at Storrs, Connecticut.</p>
Ag Science Room	<p>Retaining Stormwater by Infiltrating Deeper Torrey Lindbo, Water Resources Science and Policy Manager, City of Gresham</p> <p>The current Phase I and II MS4 permits in Oregon require retention, which means that infiltration is the critical mechanism for reducing direct runoff into streams, while recharging groundwater. Soils near the surface may not always be ideal for infiltration, but there are occasions where slightly deeper infiltration may be possible to do safely. Gresham recently installed a modified drywell as a retrofit project designed to reduce the volume of flow to their MS4, while ensuring that stormwater infiltrated using this deeper UIC was protective of groundwater the community relies on as a drinking water source. This is an important option for stormwater managers to be aware of as they tackle the new stormwater post construction retention requirements.</p> <p>Mr. Lindbo has worked for the City of Gresham for over 15 years. He manages the group responsible for City compliance with regulatory permits, policies and plans related to stormwater, surface water and groundwater protection (e.g. NPDES, WPCF, TMDL). His program areas include the city’s stormwater management plan, environmental monitoring, erosion control, public and private water quality facility inspection and maintenance, reviewing and updating stormwater standards, developing and implementing stormwater retrofits, and business inspection. Mr. Lindbo holds an M.S. degree in Environmental Science and Engineering from the Oregon Graduate Institute of Science & Technology in Hillsboro, Oregon and a B.S. degree in Biology from George Fox College in Newberg, Oregon.</p>
First Interstate Room	<p>Oregon’s Emerging Pollutant Roundup Jenna DiMarzio, GIT, GSI Water Solutions Keri Handaly, City of Gresham Kevin Masterson, Stony Creek Consulting</p> <p>(Repeat of session from Session A—See information above)</p>
3:20 pm	BREAK and POSTER SESSION
3:40 pm – 4:30 pm	Concurrent Workshops—Session C

	<p>The Urban Waters and Wildlife Partnership—Stormwater Collaboration in the Upper Willamette Sara Whitney, Long Tom Watershed Council Sydney Nilan, Upper Willamette Stewardship Network Susan Fricke, Eugene Water and Electric Board</p> <p>The Urban Water and Wildlife Partnership was established to improve and protect water quality and wildlife habitat in Upper Willamette urban waterways and aquifers for healthy, livable communities. This session will provide an overview of the Partnership’s collaborative efforts, with a focus on the voluntary installation and maintenance of green stormwater infrastructure on private lands. Insights will be shared about the challenges and opportunities related to coordinating actions, carving out roles, and accommodating the unique perspectives of a large and diverse group of partners. These partners include four watershed councils, area municipalities, local utilities, Lane County, the local parks district, and a soil and water conservation district. This case study is an important example for stormwater professionals to see how partnerships among urban stormwater programs and other organizations can produce synergistic water quality benefits.</p> <p>Sarah Whitney joined the Long Tom Watershed Council in July, 2014. Ms. Whitney brings unique skills to the Council in urban watershed management including 17 years of experience in designing, implementing and maintaining low impact development strategies, rainwater harvesting, and green infrastructure. Previous to this position Sarah taught in the Water Conservation Technician program at Lane Community College and was the lead designer and cofounder at Habitats, Inc., an architecture & landscape design/build firm that accomplished the first green roof in Eugene. She holds a B.A. degree in Landscape Architecture from the University of Oregon, and a B.A. degree in Fine Arts Management from the University of Long Island at Southampton. She is a Registered Landscape Architect as well as a certified Sustainable Building Advisor and Green Roof Professional.</p> <p>Susan Fricke has served as the Water Resources and Quality Assurance Supervisor at Eugene Water and Electric Board (EWEB) since 2021. Susan has been working in Water Resources for 18 years including water monitoring, restoration, research, and policy with an emphasis on collaboration. Susan has an M.S. degree in Natural Resources and Fisheries Biology from Humboldt State University and a B.S. degree in biology from Kansas State University.</p> <p>Sydney Nilan is the Director of the Upper Willamette Stewardship Network. Her position brings together the Coast Fork & Middle Fork Willamette, Long Tom, and McKenzie Watershed Councils, the McKenzie River Trust, the Friends of Buford Park & Mt. Pisgah, and other key partners, helping to leverage each organization’s unique strengths to create new opportunities and landscape scale impact throughout the Upper Willamette basin. Ms. Nilan holds a B.A. in Political Science from the University of Oregon and an M.S. degree in Sustainable Development Practice from the University of Florida’s Tropical Conservation and Development program.</p>
<p>Ag Leaders Room</p>	<p>Stormwater Asset Performance Management—From the Field to the Cloud Rylan Farr, Vice President, Apex Companies, LLC</p> <p>(Repeat of session from Session B—See information above)</p>

<p>Ag Science Room</p>	<p>Case Study of Engineered Media Filtration to Meet Stringent Treatment Objectives Daniel Pankani, PE, Geosyntec Marc Leisenring, PE, Geosyntec</p> <p>(Repeat of session from Session A—See information above)</p>
<p>First Interstate Room</p>	<p>Keeping Suds out of Storm Drains—An Innovative Training and Certification Program for Employees Who Wash Vehicles Lara Christensen, Water Quality Coordinator, Oak Lodge water Services Frances Gilliland, Environmental Project Manager, PPRC Ryan Johnson, Municipal Stormwater Specialist, Oregon DEQ</p> <p>Oak Lodge Water Services partnered with NWPPRC’s EcoBiz program and DEQ’s Ryan Johnson to develop a short, practical training for employees that wash vehicles. Due to automotive business activities and lack of awareness, soapy, warm wash water and detailing products can sometimes end up in local waterways. Lack of employee education and employee turnover can cause a simple lack of knowledge and incentive to change washing practices.</p> <p>This presentation will provide an overview of an innovative training and certification program for automotive businesses and all employees that wash vehicles. This free and easily accessible training program has been developed to address the ongoing issue around businesses and storm drain use. This program can help address MS4 permittees’ education and outreach requirements for a niche that hasn’t been previously addressed in this format. The presentation will show how the training module can be adapted to individual jurisdictions to annual reporting requirements and water quality.</p> <p>Lara Christensen has served as the Water Quality Coordinator for Oak Lodge Water Services since 2015. She implements best management practices for programs in the MS4 permit, focused on the six minimum measures. She has over 25 years of experience in non-profit and government organizations. She holds an M.S. degree in Environmental Studies from the University of Oregon and a B.A. in English Literature from Pomona College.</p> <p>Frances Gilliland is the Oregon Environmental Project Manager for the Pollution Prevention Resource Center. In this capacity, Ms. Gilliland works closely with Oregon DEQ staff and pollution prevention experts in the Portland Metro Area and EPA Region 10 to develop and deliver outreach and environmental technical assistance programs for a wide range of businesses. She manages the Oregon EcoBiz certification program. Ms. Gilliland holds a B.A. in Environmental Studies from the University of California at Santa Barbara.</p> <p>Ryan Johnson is an MS4 permit writer and inspector for Oregon DEQ. In this role, Mr. Johnson helps communities implement MS4 permit requirements throughout the state. He has also served as a pollution investigator in the US Coast Guard and as a river ranger on the Smith River in Montana. Mr. Johnson holds a B.S. degree in Biological Sciences from Montana State University in Bozeman, Montana.</p>