



Oregon Association of Clean Water Agencies (ACWA) Application for Wastewater CEUs for a stormwater professionals workshop May 21, 2025 entitled:

2025 ACWA Stormwater Summit

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 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 and ground water quality. CEUs have been approved for this instructional event every year for over 30 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, operational controls, and green infrastructure best management practices (BMPs) 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 workshop 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:

2025 ACWA Stormwater Summit—Wednesday, May 21, 2025:

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

Angela Wieland, 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.

Angela Wieland, P.E., is a water resources engineer at Brown and Caldwell with 22 years of experience. She has worked for Brown and Caldwell since 2010, focusing on the assessment, planning and management of water quality and quantity. Her work includes stormwater planning, municipal separate storm sewer (MS4) compliance, water quality analyses, capital improvement program (CIP) development, Low Impact Development (LID) design, groundwater and surface water analysis, best management practices (BMP) evaluations, and hydrologic and hydraulic analysis of drainage systems. Angela has a strong knowledge of federal, state, and local laws and policies related to water resources in the Pacific Northwest. Wieland earned a B.S. degree in Civil Engineering from Portland University and an M.S. degree in Environmental Engineering from Oregon State University.

Pre-Summit Workshop; 8:45 am to 9:45 am: Groundwater 101—Everything you Ever Wanted to Know (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 Principal Hydrogeologist with GSI Water Solutions, Inc. Mr. Kohlbecker has over 22 years of experience helping municipalities and businesses solve stormwater infiltration challenges

and developing groundwater supplies. 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 21st 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, Groundwater Committee, and Education Committee Co-Chairs</p>
10:10 am	<p>Water Quality Management in Uncertain Times—Oregon DEQ Water Quality Division’s Focus and Efforts Jennifer Wigal, Water Quality Administrator, Oregon Department of Environmental Quality</p> <p>Ms. Wigal will highlight the DEQ Water Quality Division’s current and near-term efforts to protect and improve water quality in Oregon. The session will include high-level summaries of efforts to track and understand changes occurring at the federal level, status of Oregon budget and legislative bills related to DEQ water quality program, and updates related to permit renewal efforts and other water quality division changes. 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 Municipal Stormwater program.</p> <p><i>Jennifer Wigal</i> is the Administrator for the Oregon DEQ Water Quality Division. Prior to this appointment, she served in several different management positions within DEQ’s water quality program since joining DEQ in 2008. Ms. Wigal is responsible for leading DEQ’s Water Quality Programs, including permitting, water quality standards, TMDLs, and assessments among other programs. Prior to coming to DEQ, Jennifer spent the first decade of her career at U.S. EPA Headquarters working in various water quality programs. 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) Matthew McKenna, Government Affairs Director, NACWA</p> <p>Mr. McKenna will provide an overview of current legislative, regulatory, and legal happenings at the national level. In particular, he will provide updates on EPA actions and other developments at the national level that will impact municipal stormwater permits and programs in Oregon. The presentation will include a general legislative update, a brief analysis of the President’s EPA budget proposal, and what we might anticipate coming out of the EPA under the new administration. 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>Matthew McKenna is the Director of Government Affairs at NACWA. In his capacity, Matt works with both NACWA’s legislative and regulatory affairs teams to engage with Congress and the Administration on the critical federal issues that impact NACWA’s members. Before coming to NACWA, Matt served as the Director of the Great Lakes Washington Program at the Northeast-Midwest Institute, a nonprofit and nonpartisan research, education, and policy organization. Matt has also worked in the policy shop of a large, Midwest-based law firm and on Capitol Hill. He holds a BA degree from George Washington University in Washington, DC.</p>
10:50 am	<p>6ppd-Q—Defining the Problem, Solutions, and Next Steps for Oregon Roy Iwai, Water Resources Specialist, Multnomah County</p> <p>Mr. Iwai will present the efforts of an Oregon working group that is working to address 6ppd-quinone, a pollutant of growing concern in Oregon’s rivers and streams. This presentation will highlight the efforts of the many partners around Oregon that are working collaboratively to share data and insights around 6PPD-Q. From local water quality data to adult spawning surveys, the impacts are known, but they are not yet well defined. With participation from local jurisdictions, state and federal agencies, local watershed councils, Soil and Water Conservation Districts, and Riverkeepers organizations, the new working group seeks to define the extent of the problem, understand our roles and responsibilities, and find solutions to reduce 6PPD-Q in our rivers and streams. Because 6ppd-Q is a pollutant of emerging concern in stormwater, it is important for stormwater professionals to learn about the sources and best management practices that work to remove or reduce 6ppd-Q in urban stormwater runoff.</p> <p>Roy Iwai has served as a Water Resources Specialist in the Transportation Division of Multnomah County since 2007. In this capacity, Mr. Iwai manages federal and state regulatory compliance and program evaluation for water quality and stormwater permits. He leads interagency planning and projects, including local and regional workgroups for clean water outreach, environmental management of road operations, watershed restoration, and diversity and equity. He also provides staff training on environmental best management practices and presentations on water quality and watershed research. Mr. Iwai has a Bachelor of Architecture degree from the University of Oregon, and an M.S. degree in Oceanography and Coastal Sciences from the Wetland Biogeochemistry Institute at Louisiana State University.</p>
11:40 am	<p>A Review of Recent Studies that Have Looked at the Treatment of 6ppd-Q by Pervious Pavements and Bioretention Systems Anand Jayakaran, Ph.D., Professor, Washington State University Extension, Puyallup Research and Extension Center, WA</p> <p>Professor Jayakaran’s presentation will review recent studies on the removal of 6ppd-Q in stormwater by two types of green stormwater infrastructure (GSI) systems – permeable pavements and bioretention systems. Emphasis will be placed on how these studies might impact the design and maintenance of green stormwater infrastructure systems. Research efforts currently underway in the Washington and Oregon region and their implications for how 6ppd-Q might be further treated will also be highlighted. Because 6ppd-Q is a pollutant of emerging concern in stormwater, it is important for stormwater professionals to learn about the sources and best management practices that work to remove or reduce 6ppd-Q in urban stormwater runoff.</p>

	<p>Ani Jayakaran, Ph.D., has been a professor and extension specialist with Washington State University and an affiliate faculty member of the Department of Biological Systems Engineering and the School of the Environment since 2015. He leads the Green Stormwater Infrastructure Lab at WSU's Puyallup Research and Extension Center. Dr. Jayakaran provides extension and research strategies to manage water resources using GSI principles and improve current engineering designs through applied research. He holds a Bachelors degree in Engineering from Bangalore University in India, a Masters degree in Civil Engineering from Ohio State University, and a Ph.D. in Agricultural and Biological Engineering from Ohio State University.</p>
12:20 pm	LUNCH
1:30 pm – 2:20 pm	Concurrent Workshops—Session A
Ag Production Room	<p>Stormwater Tree Wells—Tree Centric Bioretention Facilities Doug Singer, P.E., Development Services Manager, Principal Engineer, City of Eugene Torrey Lindbo, Water Resources Program Manager, City of Gresham</p> <p>Bioretention facilities, which use a combination of soil, plants, and microbes to treat stormwater, have become one of the preferred practices for treating polluted runoff before it infiltrates or discharges to streams and rivers. In the Pacific Northwest, bioretention planters or rain gardens typically focus on the use of facultative wetland vegetation that has deep roots and can handle seasonal inundation, as well as hot, dry summers. Across the globe, and in cities across North America, trees have been a primary component of bioretention systems, rather than an option that can be added to streetside stormwater facilities. This presentation will highlight some examples of how trees have been integrated into stormwater facilities in other countries – particularly Sweden – as well as some installations that Gresham has been using over the past several years. In addition to providing shade and improving aesthetics and walkability of streets, managing stormwater using trees may also be more cost effective from a lifecycle cost perspective. This information is important for stormwater professionals because it is important for them to stay abreast of existing and emerging green infrastructure facilities that are effective at managing stormwater quality in compliance with MS4 permits.</p> <p>Doug Singer, P.E., is a registered Professional Engineer in the State of Oregon and a Certified Stormwater Manager through the American Public Works Association (APWA). Mr. Singer is the Development Services Manager and Principal Civil Engineer for the City of Eugene Oregon. Mr. Singer has been an active member of APWA since 2004, is the 2025 Oregon APWA Chapter President and is a member of the APWA International Constituents Committee. Mr. Singer has a B.S. from Oregon State University in Civil Engineering and a River Restoration Professional Certificate from Portland State University.</p> <p>Torrey Lindbo has worked for the City of Gresham for over 17 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 inspections. 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>

<p>Ag Leaders Room</p>	<p>Successfully implementing an Illicit Discharge Detection and Elimination Program for a Medium-sized MS4 and TMDL Program Chris Desiderati, Environmental Services Supervisor, Clackamas Water Environmental Services</p> <p>This presentation will cover Clackamas Water Environment Services’ (WES) Illicit Discharge Detection and Elimination Program (IDDE) as it is implemented today, highlighting significant changes made over time. WES’ IDDE program is implemented through four key services: administrative and enforcement actions, a dry weather outfall screening program, report response, and provision of education and training to the public. ACWA’s IDDE toolkit has aided WES in providing education and training to the public helping to eliminate illicit discharges to the storm system. This presentation will also include a review of the ACWA IDDE toolkit that is available for all ACWA members to use. IDDE programs are a required element of all MS4 permits and TMDL implementation plans. Implementing these key services in a collaborative manner within and beyond WES is critical for successfully implementing any municipal IDDE program, whether large or small. This presentation will be especially important to new permittees to aid them in developing their required programs.</p> <p><i>Chris Desiderati</i> is an Environmental Services Supervisor at Water Environment Services. He supervises teams that work in pollution prevention and watershed protection programs. Before joining WES, he graduated with a chemistry degree from Western Washington University and worked at environmental testing and chemical production firms. Beginning in WES’ Water Quality Lab in 2015, he built his core technical skills in industrial pretreatment, stormwater monitoring, and compliance, and eventually shifted to a leadership role directing talented teams. Mr. Desiderati also holds a graduate Professional Master’s Degree from PSU in Environmental Science and Management.</p>
<p>Ag Science Room</p>	<p>Renewal of Stormwater UIC WPCF Permits and DEQ UIC Program Updates Kevin Weberling, R.G., Oregon DEQ Derek Sandoz, Oregon DEQ</p> <p>Many of Oregon’s communities manage at least a portion of their stormwater infrastructure through underground injection control devices. These devices often require water quality permits separate from their MS4 permits. This presentation will provide updates from DEQ’s Underground Injection Control (UIC) Program. Kevin Weberling and Derek Sandoz will highlight issues which have arisen in the process of DEQ’s renewal of Stormwater UIC Water Pollution Control Facility (WPCF) permits for several communities in Oregon. They will also discuss the changes in permit language, emerging contaminants of concern, etc. that permittees can anticipate seeing in their renewed permits. This information is important to stormwater professionals who are contemplating adding stormwater injection devices, such as drywells, to their stormwater infrastructure.</p> <p><i>Kevin Weberling</i> has served as a Senior Hydrogeologist in DEQ’s Underground Injection Control Program since 2021. Prior to joining DEQ he worked as a Senior Geological Advisor for the California Resources Corporation; Kevin has over 20 years of professional experience as a geologist/hydrogeologist in various capacities. Kevin has a BS degree in Geology/Earth Sciences from Central Washington University and an MS degree in Geological and Earth Sciences from the University of California at Santa Cruz. He is a registered geologist in Oregon and Washington.</p>

	<p>Derek Sandoz has served as the DEQ Underground Injection Control Program Coordinator since 2013. Prior to joining DEQ, Derek worked in the private sector at several environmental consulting firms for 17 years. Derek has a BA from the University of Puget Sound in Tacoma, Washington. He also completed a one-year program at Murdoch University in western Australia with a focus on Environmental and conservation Sciences.</p>
First Inter-state Room	<p>Collaboratively Managing Threats to Water Quality—Emerald Ash Borer Case Example Kat Bethea, Emerald Ash Borer Specialist, Oregon Department of Forestry Matt Mills, Emerald Ash Borer Specialist, Oregon Department of Forestry</p> <p>In this presentation, Kat Bethea and Matt Mills of the Oregon Department of Forestry will be sharing information on the emerald ash borer (EAB), using it as a case example collaborative and inclusive community engagement to address a significant water quality concern. Emerald ash borer is an invasive wood-boring beetle from NE Asia that is responsible for the death and decline of tens of millions of ash trees in North America since 2002. EAB was discovered in Forest Grove, Oregon in 2022 and has been found in additional counties since. The rapid die off of Ash forested riparian areas is a major concern to stormwater and watershed managers because the tree has been a primary go-to species for riparian restoration and enhancement to protect flood plains and water quality, and effective alternative trees have not been identified. This presentation includes information on planning for the arrival of EAB including: collaboration with partners, preparing communities for anticipated impacts, and creating a management plan for developed and riparian areas.</p> <p>Kat Bethea (they/them) is an Emerald Ash Borer Specialist at the Oregon Department of Forestry in the Urban and Community Forestry program. In this role Kat assists communities as they prepare for the arrival of EAB in their area by providing educational outreach and information on management and mitigation. Previously, they worked as a Botanic Specialist in Urban Forestry for the city of Portland in street tree inventory, planting, and the free tree programs. Kat has also spent several field seasons as a field technician on projects ranging from specimen collection for museums to invasive insect surveys. Bethea has Bachelors degrees in Biology and in Forensic Science from the University of Central Oklahoma.</p> <p>Matt Mills (he/him) is one of the Oregon Department of Forestry’s Emerald Ash Borer Support Specialists, working in the Urban and Community Forestry Program. Matt previously worked as the Oregon Department of Agriculture EAB Survey and Monitoring Coordinator and oversaw the visual survey of over 10,000 ash trees; the removal and destruction of infested trees throughout Forest Grove; the release of EAB specific parasitic wasps; and planned and executed State’s EAB SLOWing Ash Mortality (SLAM) projects in 2023 and 2024. Matt has cultivated strong working relationships with partner agencies. Mills has a Bachelors degree in Biology from the University of Oregon.</p>
2:30 pm – 3:20 pm	Concurrent Workshops—Session B
Ag Production Room	<p>Stormwater Tree Wells—Tree Centric Bioretention Facilities Doug Singer, Development Services Manager, Principal Engineer, City of Eugene Torrey Lindbo, Water Resources Program Manager, City of Gresham</p> <p>(Repeat of session from Session A—See information above)</p>
Ag Leaders Room	<p>Current Legal Issues for MS4s and City’s with UICs Laura Maffei, Cable Huston, ACWA Legal Committee Co-Chair Amanda Keller, Clackamas County, ACWA Legal Committee Co-Chair</p>

	<p>Laura Maffei and Amanda Keller, both Co-Chairs of the ACWA Legal Committee, will provide an update on recent legal issues and court decisions impacting municipal stormwater and groundwater programs. This update will give attendees a current view of court decisions impacting the legal landscape for MS4 permittees and 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>Amanda Keller is the Co-Chair of the ACWA Legal Committee. She is a Senior Legal Counsel for Clackamas County and has served as the lead attorney for Clackamas Water Environment Services (“WES”) since 2013. Her primary work includes municipal business transactions and advising on regulatory issues related to stormwater and wastewater permit compliance. Amanda holds a law degree (J.D.) and an M.B.A from Willamette University; she holds a B.A. in Communication Studies from the School of Journalism at the University of Oregon.</p> <p>Laura Maffei is the Co-Chair of the ACWA Legal Committee. She 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. Laura has advised many Oregon municipalities on stormwater issues, including permit development and compliance, response to agency enforcement, and citizen suits. 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.</p>
Ag Science Room	<p>Research Findings on Streetside Stormwater Planters—Design, Soil Types, and Plant Health Katie Holzer, PhD, Watershed Scientist, City of Gresham</p> <p>This presentation will present research findings on what the City of Gresham has learned over the years by studying their streetside stormwater planters. Research results were derived from hydrant testing, water level loggers, and plant health surveys. Key findings are that to be effective, streetside stormwater planters need to have proper inlet dips, shallow soil slopes, an adequate number of check dams, and that there should be limitations on rock galleries, underdrains, and liners. This information is important for stormwater professionals because it’s important for them to stay abreast of existing and emerging green infrastructure facilities that are effective at managing stormwater quality in compliance with MS4 permits, and to continue to understand the performance of these facilities based on science-based research.</p> <p><i>Kati Holzer</i> is a Senior Watershed Scientist at the City of Gresham where she leads the stormwater monitoring program. She’s worked as a watershed scientist for Gresham since 2015. Prior to that, she worked in the Portland metropolitan area as a wetland consultant, an environmental educator, and a habitat restoration technician. She has a PhD in Ecology from UC Davis and a BA in Biology from Lewis and Clark College.</p>
First Interstate Room	<p>Urban Housing Needs and Water Quality Protection Clara Olson, P.E., Parametrix</p> <p>Population increases and associated urban housing needs can put a strain on water resources. In Washington State, HB 1110 has mandated the upzoning of all single-family residential lands within urban growth areas. Parametrix has developed an approach to evaluate potential impacts of these changes on natural water resources and guide jurisdictions through alternative development to help protect these receiving waters. This presentation will discuss</p>

	<p>recommended analysis considerations, lessons learned, and alternative options to help you address future needs in your municipality. Real-life case studies from the Cities of Everett and Tacoma will be included. This presentation is important to stormwater professionals in Oregon, because legislative mandates and executive orders by the Governor are similar to the recent housing density and zoning requirements in Washington, which impact local governments' ability to comply with MS4 permits.</p> <p>Clara Olson, P.E., has served as a surface water planner and engineer at Parametrix engineering since 2016. She has a B.S. in Civil Engineering and is a licensed professional engineer in Oregon and Washington.</p>
3:20 pm	BREAK
3:40 pm – 4:30 pm	Concurrent Workshops—Session C
	<p>Seeing the Forest and the Trees with LiDAR and Multispectral Imagery - A GIS Method for Evaluating Stream Shade to Address Temperature TMDLs in Oregon Chad Tinsley, Senior GIS Analyst, Parametrix</p> <p>Direct incoming solar radiation is recognized as a critical factor contributing to elevated water temperatures in Oregon streams. In Total Maximum Daily Load determinations, DEQ has established effective shade targets as a surrogate measure for addressing temperature load allocations that represent historically natural vegetation or “system potential” (DEQ 2006). With the increased availability of precision remotely sensed data and shade modelling tools developed by DEQ, cities like Lake Oswego can establish a baseline measure of effective shade from current canopy conditions and protection schemes, and compare alternate riparian protection approaches to the shade targets established TMDLs. Results from this analysis can also be used to prioritize locations for riparian habitat enhancement. Future canopy conditions can also be analyzed with these methods and compared to these results as a way to track progress toward meeting the TMDL load allocations. This session is relevant because many municipal stormwater programs now include temperature TMDL compliance requirements and must implement TMDL plans that include benchmarks for achieving increased shade targets.</p> <p>Chad Tinsley is a Senior GIS Analyst at Parametrix, based in Portland, Oregon, with over a decade of experience in geospatial analysis. He specializes in GIS solutions for surface water planning and urban forestry initiatives across the Pacific Northwest. With expertise in remote sensing, including multispectral imagery and LiDAR analysis, Chad develops data-driven insights to support water quality improvement efforts for public agencies. Tinsley began his career as a GIS intern with the City of Lake Oswego. He holds a Masters degree in GIS from Penn State University and a Bachelors degree in Geography from the University of Oregon.</p>
Ag Leaders Room	<p>Successfully implementing an Illicit Discharge Detection and Elimination Program for a Medium-sized MS4 and TMDL Program Chris Desiderati, Environmental Services Supervisor, Clackamas Water Environmental Services</p> <p>(Repeat of session from Session A—See information above)</p>
Ag Science Room	<p>Research Findings on Streetside Stormwater Planters—Design, Soil Types, and Plant Health Katie Holzer, PhD, Watershed Scientist, City of Gresham</p>

	(Repeat of session from Session B—See information above)
First Interstate Room	<p>Key Issues in Municipal Stormwater Permits, Implementation, and Enforcement Pablo Martos, Sr. Permit Writer, Oregon DEQ</p> <p>This presentation will discuss the status of the Phase II renewal, key issues and changes in the permit language, the process of involvement of interested parties, and the schedule for permit issuance and future opportunities for review and engagement, as well as inspection and enforcement updates. DEQ will also share information on other stormwater permits (Phase I MS4 and 1200-C) as well as visions for future expansions of DEQ’s municipal stormwater program including a statewide stormwater manual and an expansion of stormwater technical assistance and education programs.</p> <p><i>Pablo Martos</i> is the Municipal Stormwater Permit Coordinator for the Oregon Department of Environmental Quality and has worked as a Sr. Permit Writer for DEQ since 2018. Prior to that he served at the Oregon Department of State Lands as the agency’s Portland Harbor Superfund Specialist for 6 years and spent the earlier part of his career in the private sector at environmental engineering consulting firms. He holds a BS in Applied Ecology from UC Irvine and a Graduate Certificate in Fisheries Management from Oregon State University.</p>