

Technical Session Descriptions

TUESDAY, OCTOBER 16, 2018

Wildlife Safari Technical Tour

So how do you improve and expand an elephant habitat when there are elephants living in it? What does emergency preparedness look like for lions, tigers and bears (oh my)! How does the facility handle water and wastewater management for both park visitors and park residents? This technical presentation and tour will cover the unique challenges of running a wildlife park and the infrastructure it takes to keep the 500 animals and 200,000 annual visitors safe and comfortable. The field trip will include a presentation on how the park handles these challenges followed by a behind the scenes tour for attendees. Space is limited to 25, so early registration is encouraged. Don't miss out!

Better RFPs: Requests AND Responses (Pre-Conference Workshop)

This workshop will reverse the roles of the RFP Document preparers in reviewing and responding. Each common element of the RFP will be reviewed and critiqued by the workshop attendees; Project Understanding, Project Approach, Project Teams (firm), Key Staff, Project Examples, Availability, Resumes, and Corporate Responsibility. A group exercise will have consultants and vendor attendees score a mock RFP Response while Agency attendees prepare a draft outline to a mock Request (aligning responses to the scoring criteria). *Kittelson and Associates*

Cultivating Resilience Under Pressure (Tuesday Keynote Address)

Findings from brain science and organizational research align around the idea that when we feel better, we think better. Under stress, we are less primed for connection, collaboration, creativity, and strategic thinking. And yet, as demands constantly outpace our capacity to deliver, we're often called on to deliver optimal results under suboptimal conditions. In Public Works, where work impacts the well-being of entire communities, the pressure is on.

Within this context, resilience becomes a critical competency—not just for our own benefit, but for the benefit of our colleagues, staff, communities we serve, and loved ones. Incredible developments in neuroscience research over the last several decades have enabled a greater understanding of how resilience practices such as mindfulness and gratitude—both individually and organizationally—have a significant and lasting impact on our well-being and our capacity for creative thinking, productivity, efficiency, empathy, focus, and more. *Lizza Robb, MSW (Redshift Leadership)*

Local Agency Bridge Program Funding

Federal Funds are Available for Counties and Cities for deficient bridges. ODOT receives federal funds and ODOT shares the funding with the local agencies to replace/rehab the local agencies' deficient and/or functionally obsolete bridges. This presentation will discuss when the applications are solicited and the required documents for the application submittals. What is the process of getting the application processed? What are the rules and criteria of selecting bridge projects for the bridge program funding for each STIP cycle? *Holly Winston, PE (ODOT)*

Exploring Emotional Intelligence

Decades of organizational research across all industries show that the qualities that differentiate people who truly thrive in organizations are related to competencies of emotional intelligence: self-awareness, self-management, social awareness, and relationship management. Emotionally intelligent people know themselves and pay close attention to the impact they have on others. Increasingly, hiring officers are looking for candidates who embody these competencies (yes, even in engineering). Emotional intelligence is not just about ideas, but specific observable behaviors that we can cultivate in ourselves, others, and our relationships in service to the highest good. Supported by our Keynote Speaker, Lizza Robb from Redshift Leadership, participants will explore the model of emotional intelligence and engage in self-reflection and personal intention setting. *Lizza Robb, MSW (Redshift Leadership)*

Blue Green Algae and Cyanotoxins

Conventional water treatment consisting of coagulation, sedimentation, filtration and chlorination can generally remove intact cyanobacterial cells and low levels of cyanotoxins. However, severe bloom events are likely to be challenging. There are lake and reservoir management and maintenance approaches that can limit the growth of blue green algae, and thus inhibit the production of cyanotoxins. This talk will focus on the management and maintenance techniques to avoid cyanotoxins. *Harry Gibbons, PhD (Tetra Tech)*

Pavement Mgmt. Implementation Options & How to Comply with HB2017

Starting in 2018, Oregon House Bill 2017 requires that by February 1st of each odd-numbered year, every city and county shall report the condition of its transportation infrastructure to be eligible for grant funding. This presentation will focus on the different options agencies have to implement a cost-effective pavement management strategy, it will discuss different methodologies available to assess pavement condition, and what is needed to meet the reporting requirements to be eligible for grant funding. *Lindsy Hammond, PE (GRI)*

Willamette Falls Legacy Project: A Pathway to Opportunity, Access and the Future

Walk down Main Street in historic Oregon City, and you'll reach a complex of hollow industrial buildings. This former paper mill separates Oregonians from one of the state's scenic and cultural treasures: Willamette Falls, roaring through the river just out of view. But not forever. Since 2011, individuals, community groups and project partners have worked to develop a bold vision for the Willamette Falls Legacy Project site. A vision that opens public access, provides jobs and opportunities, maintains and respects the local ecosystem, and connects us to our heritage and history. *Christina Robertson-Gardiner (City of Oregon City), AICP / Dayna Webb, PE (City of Oregon City)*

Risk Mitigation for Existing Subsurface Utility Infrastructure

ASCE 38 outlines how to perform a utility investigation and use a depiction method based upon uncertainty of accuracy and attributes depending upon the success of investigative techniques. A new standard is under development at the behest of many parties, including APWA, and is meant to develop national standards for producing as-built utility records and exchange qualities for project owners, right of way managers, and utility owners. This session will discuss how the use of these standards reduces risk, increases resilient and sustainable infrastructure, and benefits to the taxpayer. *Corey Biddle (Cardno)*

WEDNESDAY OCTOBER 17, 2018

Managing Large Teams on Complex Projects

Some projects—whether due to size, complexity, or unique issues—require a large team of specialty consultants to deliver the best possible result. Using examples from Century West's recent Stewart Parkway Road Realignment project, this presentation will include successful strategies for maintaining a strong client relationship and close collaboration with sub-consultants to deliver a challenging project in a timely manner and stay on budget. *Rawley Voorhies, PE (Century West Engineering) / Jim Maciariello, PE (City of Roseburg)*

Panel Discussion: Design, O&M, and Performance of Stormwater Planters

Stormwater planters and other LIDA are mainstay stormwater management solutions in the Northwest. However, they can be viewed as difficult to design, challenging to include in all streetscapes, costly to construct and an O&M nightmare. Long term performance meeting stormwater treatment and flow control standards can be difficult to obtain. Bring your questions and examples for an interactive panel discussion between you, the City of Eugene, the City of Wilsonville and Clean Water Services about the challenges, solutions and performance of stormwater planters in three different Oregon locales. *Steve Adams, PE (City of Wilsonville) / Doug Singer, PE, CSM (City of Eugene) / Jadene Stensland, PE, CSM (Clean Water Services)*

Preparedness Culture for Operations and Maintenance

Attendees should attend this session if they are interested in preventing an emergency from turning to a disaster at home and/or work. This is an interactive session which helps the listener and their staff realize how effective their preparedness culture is. Now, how to develop it with some changed/new habits and the right tools to attain greater hazard resilience and expected results. A sustainable preparedness culture significantly helps individuals overcome the fear associated with unusual events. *D. Leslie Miller, PE (Square Knot Preparedness Education and Coaching)*

Implementing Protected Bike Lanes in the City of Portland

This presentation will be about Portland's experience in constructing Protected or Separated Bike Lanes. Protected bike lanes are an exclusive space on or next to the roadway for bicycling. There are several design guides which explain what to do but not the details of how to do it. The construction of a raised bikeway can be either retrofit or new construction. This presentation will be more focused on retrofits. It will include information about what materials we have used to achieve the separation and what challenges we have experienced. *Lewis Wardrip, PE (City of Portland)*

Technology Spotlight

Three micro-sessions to spotlight public works technology brought to you by the Technology Committee. *Speakers TBD*

Death by 1,000 Cuts: New Restoration Standards for Utility Cuts

Like most urban areas, aging infrastructure, growth, and new technology have greatly increased the amount of utility cuts in the Portland city limits. With those higher demands, PBOT observed more failing patches, inconsistent work, and in turn fielded a lot of questions about what really meets the standard(s). To get better outcomes, PBOT implemented entirely new trench restoration standards which went into effect Jan 1, 2017. *Michael Magee, PE (City of Portland) / Steve Townsen, PE (City of Portland)*

Water Tank Seismic Vulnerability Assessment for Klamath Falls

To better understand the seismic vulnerability of Klamath Falls' 21 water tanks, the DOGAMI hazard maps were reconstructed, focusing on the risk presented from a potential nearby M 7.4 earthquake. The results were used to help the City better understand their tanks' vulnerability and efficiently target upgrades. This yielded the potential for system reconfiguration to provide greater resiliency, operational efficiency, and reduced capital costs. *Stephen McLandrich, PE, GE (Shannon & Wilson) / Brian Murphy, PE (Tetra Tech)*

Integrating Regional Geospatial Data to Make Informed Decisions

Multnomah County's update to the Roads Capital Improvement Plan includes a robust data collection process to respond to the County's concerns about how to compare urban and rural projects, predicting needs for future improvements based on geographic conditions, and comparing project types. *Erik Brewster (David Evans and Associates) / Chet Hagen (Multnomah County)*

Pavement Management for Small Cities - Case Study Eagle Point

The City of Eagle Point just completed the first 5 years of a pavement management program. Since 2012 the pavement condition index (PCI) was raised from 74 to an overall 82 for a cost of just over \$2.0 M. Utilizing a strategy of seal coat, modified chip seal, or paving over 76% of the city's streets received treatment in 5 years. This included the repaving of 32 road sections rated "poor" or "very poor", and three gravel roads. The topic presentation will include the partnerships, maintenance strategies, lessons learned, and moving forward in an HB 2017 world. *Robert Miller, PE (City of Eagle Point)*

Restoring Urban Streams

This presentation will describe stream enhancements to Hall Creek with the intended benefits of reducing flood hazard, improving stormwater runoff quality, improving safety for pedestrians, providing a green space that the community can enjoy, and presenting an example of how a creek can effectively fit and interact with an urban area. *Nick Danis, PE (Cardno) / Cedomir Jesic (Cardno)*

Practical & Sustainable Solutions for Rockfall Hazards

Rockfall can occur in rural or urban areas and is a serious problem which is expensive to evaluate and mitigate. Sometimes practical methods of evaluation and mitigation can make addressing rockfall manageable and reduce its environmental impact. Two such instances will be discussed, one near Oregon City and one on Oahu, Hawaii. Practical methods were used to evaluate both sites and mitigation was selected that sufficiently addressed risk to the public. The evaluation methods used, how the hazards were addressed, and the sustainable aspects of the approaches will be explained. *Tim Blackwood, PE, CEG (Pali Consulting)*

THURSDAY OCTOBER 18, 2018

Keys to Successful TPARP Application

One of the first full Temporary Pedestrian Access Route Plans (TPARP) for ODOT, the I-205 Pacific Highway to Abernethy Bridge Paving Project has become the standard for TPARP implementation. Come hear lessons learned in designing for the new pedestrian safety guidelines and how close coordination during construction made this effort a resounding success. *Nicholas Polenske, EI (OBEC) / Cody Mitchell-Chavez, EI (OBEC)*

Green Street LIDA Planter Testing

Clean Water Services has recently seen an increase in installations of green stormwater infrastructure as permit conditions drive more developments towards onsite stormwater management. These Low Impact Development Approaches (LIDA) facilities manage stormwater through retention, infiltration evaporation & reuse. This presentation will describe the development, implementation, results and lessons learned from testing six vegetated curb street-side LIDA planters for distribution, capacity, infiltration, and overall condition. *Jadene Stensland, PE, CSM (Clean Water Services)*

Franklin Blvd Upgrade - Implementing a River District Vision

Springfield's contemporary and inspiring vision for Glenwood has been evolving since it gained jurisdiction in 1999. The vision as articulated in planning documents provides a framework for redeveloping the area into an attractive place to live, work and visit. To support implementation of the vision was to begin the transformation of Franklin Boulevard from being auto-oriented into a multi-way/multi-modal boulevard with multi-lane roundabouts, BRT stations, protected bike facilities, access lanes, sidewalks, LIDA stormwater facilities, and landscaping. *Kristi Krueger, PE (City of Springfield)*

Maintaining a Successful Partnership During Construction

Since March 2016, the SW 124th Ave Extension project has been under construction. Installing approximately 14,000 feet of 66-inch steel pipe, in conjunction with the construction of approximately 4.5 miles of new and expanded roadway. This presentation will focus on how the partnership has addressed the construction phase through communication, inspection, change orders and other lessons learned. *Renus Kelfkens (Washington County) / Mike Britch, PE (Tualatin Valley Water District)*