

2016 Sewer Summit

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Be Sewer Smart!
This Rainy Season



2016 Sewer Summit

Sponsored by the Association of Bay Area Governments' Pooled Liability Assurance Network (ABAG PLAN), California Sanitation Risk Management Authority (CSRMA), California Joint Powers Risk Management Authority (CJPRMA), and Municipal Pooling Authority of Northern California (MPA).

On October 20, 2016 the annual Sewer Summit was held in Union City, California. One hundred ninety-eight professionals representing 71 wastewater agencies, municipalities, special districts, and contractors were in attendance. Attendance was up almost 47% from the 2015 Sewer Summit.



The annual Sewer Summit has grown since its inception in 2005 into a very popular event bringing governmental, regulatory, and private organizations together around a common goal of learning about and implementing best practice policies and procedures related to sewer backup and backflow issues.

This year the Sewer Summit was expanded into four different tracks, each focusing on a different aspect of wastewater system management, policies and practices.

Track One: Collections Worker Safety

Track One was geared toward keeping collections workers safe and in compliance with CalOSHA regulations.



James Cole of Du-All Safety kicked off the Summit with a discussion of **Traffic Control and Flagging Basics**. This awareness level training was designed for flaggers and supervisors who work on foot on roadways near vehicular traffic and conduct temporary lane closures. Cole covered planning requirements, use of appropriate traffic control devices, control of vehicular traffic, and how to close and reopen lanes safely.

John Balestrini of The Barritt Group covered two essential topics for collections workers. In the morning he detailed **CalOSHA's Fall Protection Requirements for Sewer Workers**. Balestrini started with an overview of the different roles and responsibilities in a Fall Protection Program from management to workers, with particular focus on the responsibilities of Competent Persons and Qualified Persons. A large segment of the presentation covered Elevated Surface Works Plans. Balestrini offered a form to use to document the plan including listing authorized workers,



identifying hazards and protection methods, performing a Fall Hazard Analysis, and developing a Rescue Plan. Attendees will no doubt use Balestrini’s comprehensive Job Hazard Analysis Checklist!



In the afternoon, Balestrini shifted gears to demystify regulations with ***Making CalOSHA Compliance Practical***. This session will surely make compliance managers sleep better knowing they are aware of and complying with all applicable regulations. Balestrini also highlighted *My Safety Officer*, a hands-on compliance and training management service, and *TrainingWise* a well-designed self-managed training tracking solution.

Rounding out Track One was Don Freeman of OCCUmetric with a fresh look at ***Biomechanics for the Sewer Worker***. Freeman offered a straightforward approach to evaluating physical demands and applying the NIOSH lifting equation to reduce the risk of injury. Attendees learned how to efficiently identify high-risk tasks, understand the factors that contribute to the physical demands, and identify solutions—from engineering to culture—to empower workers and supervisors to create a safer work environment.



Track Two: Engineering and Management

The talk turned to engineering and management issues on Track Two.

Rob Morishita of Leucadia Wastewater District kicked off Track Two with ***Clean Water Act Lawsuits: An Agency’s Perspective***. Morishita shared the lessons LWD learned in order to help others reduce their exposure.



To put everything in context, Morishita offered a detailed description of his District, which includes over 60,000 residents, 200 miles of gravity lines, 10 pump stations, and 5,000 manholes. Morishita discussed California River Watch, its 15-year history of lawsuits, the regulations they reference, and how they mine wastewater agency data. When faced with a CRW lawsuit, LWD decided to settle. Morishita discussed the elements of the settlement as well as the lessons learned during the process. Very important information for any risk management team!

The next session shifted gears to training with James McPherson’s discussion of ***Competency Based Training for Sewer Workers***. McPherson detailed a systematic approach to training to enhance workforce performance as well as safety, starting with the question, “When I say an employee is trained I mean...?” He taught attendees how to close the loop between regulations and practical skills by developing a process that identifies training requirements, provides practical training, and then assesses consistently to ensure that the training is effective. Without successful demonstration of the acquired knowledge and skills you won’t have the data you need to make sure your training is effective.





Chris Ewers of Ewers Engineering teamed up with City of Tulare Management Analyst Ben Siegel for a session called **Telling Important Things to Madmen: How Risk Makes a Good CIP**. Ewers and Siegel illustrated how a graphically oriented risk model helped Tulare prioritize projects, comply with regulations, make decisions, and ensure cost and permit consistency over time. Attendees were inspired by Ewers' model for creating graphical output for risk assessment that can make evaluating even the most complicated capital improvement projects manageable.

Jon Wells of West Yost Associates finished up Track Two with **From Drought to El Niño: Managing Climate Impacts on Collection Systems from Low Flows and Water Restrictions to Inflow/Infiltration**. Wells gave attendees a fresh perspective on the challenges of the ongoing drought and a discussion of the approaches Northern California agencies are taking. Wells shed some light on how to address some of the most difficult problems related to the drought in a time when budgets are also drying up. There was a particularly lively discussion about how attendees' priorities and revenues have shifted in the past five years, and the innovative ways different agencies are addressing capital improvements. Wells wrapped up with some engineering solutions and recommendations about how to meet the challenges of the drought.



Track Three: Regulatory Compliance

Paul Causey of Causey Consulting kicked off Track Three with a session called **WRD and SSMP Compliance Failures: Causes and Consequences**. Causey shared his perspectives on the most common causes and failures of regulatory compliance based on the dozens of gap analyses, audits, revisions, and inspections he has conducted or observed over the past several years. Causey's extensive resume consulting for collection system operators throughout the state makes him uniquely qualified to discuss the state of affairs when it comes to compliance. After reviewing the risks and liabilities associated with being out of compliance, Causey launched into an informative hour of anecdotes and evidence making a case for proactive compliance efforts. He certainly covered a lot of ground and sent attendees away with comprehensive handouts that will no doubt become a working tool for agencies going forward.



A popular speaker from previous Sewer Summits, James Fischer from the State Water Resources Control Board (SWRCB) came this year with a session on **Sanitary Sewer Systems Waste Discharge Requirements (WDR)**. Fischer gave attendees an overview of major milestones including compliance, enforcement, and examples of "real world" reduction practices seen in audits throughout the state. To mark the 10th anniversary of the Statewide Enforcement Initiative, Fischer highlighted the accomplishments of the WRD in reducing Sanitary Sewer Overflows and improving outcomes. Fischer stressed that the



effectiveness of best practices is essential and should be measured. A wide range of example practices was covered along with strategies for implementation. Fischer closed the session with case studies to illustrate areas of concern.

Dillon Cowan from the East Bay Municipal Utility District (EBMUD) joined the Sewer Summit this year to discuss **Pump Station Risk Assessment**. Cowan shared the methodology, results and lesson learned from EBMUD’s comprehensive assessment of 11 pump stations. He covered the process of scoping and performing



a condition assessment, which he considers the foundation of risk assessment. Cowan detailed EBMUD’s approach to the work, which included a multi-disciplinary team made up primarily of in-house staff. The process included site visits, functional tests and a CMMS audit. Cowan shared EBMUD’s findings and supported the discussion with many helpful photos. Cowan shared his formula for calculating risk using all of the data collected. This will no doubt be used in many of the attendees’ agencies! Cowan wrapped up his presentation with tips for project leaders—everything from setting reasonable

expectations to the value of understanding one’s own limitations in terms of knowledge and experience—and tips for project participants—most notably to speak up!

The final session in Track Three was a **Free OERP and Employee Training Gap Analysis** led by David Patzer of DKF Solutions Group. As Patzer says—regulatory compliance is not the gold standard, it is the minimum standard and the overall goal must be risk management. He walked attendees through a process to evaluate where their Overflow Emergency Response Plan and related employee training meet, or do not meet, regulatory requirements. Patzer started with the basics of what the regulations state and how they have been interpreted, and then highlighted some elements that are not required, but that should be included in the risk management plan. Patzer reflected on Cowan’s previous session, stressing how interested the SWRCB’s Office of Enforcement is in pump stations. Patzer went on to cover in detail the different requirements and how they can be evaluated and built on to effectively manage risk. A great segment of the presentation covered volume estimations—an area that agencies tend to struggle with in terms of consistency and training. Patzer rounded out the session with a discussion about competency-based training and how it starts with core competency determination and then to the loop must be closed with effective assessments to ensure effective training.



Track Four: Collection System Operations



The final track in the Sewer Summit was focused on Collection System Operations. This was the most popular track of the Summit with the top four spots in the number of attendees per session.

Lenny Rather of Oro Loa Sanitary District covered **Easement Sewer Maintenance: Problems and Solutions**. Rather offered his insight about how to get easement work done while keeping customers happy and

crews productive. Rather provided the most multi-media presentation of the day with many photos and video clips to illustrate his points. He offered a great deal of insight about the concerns of collections workers when it comes to working on easements, from the more obvious worries about dogs and hostile tenants to more unique situations like homeless encampments or grievances about project design. By sharing his experience, Rather effectively illustrated ways to ensure project success—including comprehensive planning, an inclusive process, and focusing on the best solutions without getting caught up in the easiest or cheapest options.

Next, Vincent Falzon from the City of Burlingame discussed concrete strategies that can be implemented for ***Managing and Preventing Sewer lateral SSO's***. Using the City's program as a guide, Falzon walked attendees through the detailed elements of an effective sewer lateral maintenance program. Falzon discussed the importance of effective ordinances and communicating clearly with customers about them. It is essential that customers understand their responsibilities when it comes to their laterals. Falzon covered some tools the City uses to support their program from a simple tape measure to a mobile SSO response application. Before-and-after photos supported Falzon's discussion as did his charming "Song of Sewers" that this writer just cannot do justice with the written word. In other words, you had to be there!



In a particularly inspiring session, Vivian Housen of V. W. Housen & Associates taught attendees ***How to Know if the Agency is a Wastewater Collection System of the Future***. Housen presented an overview of a 2014 effort by nine collection system agencies, along with her firm and Dewpoint Consulting, to develop a roadmap for the Collection System of the Future. The 18-month process included nine workshops, which Housen detailed in her presentation. Workshops included sessions on leading vs. lagging indicators of effectiveness, customer service, succession planning, CMMS and mapping, operations and maintenance, and asset management. A roadmap to the entire process was published in August and will no doubt be a great resource for attendees.

Andy Morrison of A. M. Consulting rounded out Track Four with ***Preventing Bad Things From Happening and Responding to Them When They Do Happen***. As Morrison likes to say-- Risk Management is not somebody else's job, it's everyone's job! He pointed out to attendees that with effective planning they can save lives, prevent injuries, and save money. Morrison broke the risks down into things that can be prevented, such as accidents, fires, SSOs and floods, and things that we can plan for, such as earthquakes, active shooter situations, and negative media attention. By offering a detailed strategy, Morrison gave attendees a plan for taking action and not just waiting for bad things to happen.



We certainly packed a lot of information into a single-day conference and attendees were eager to get back to work and put their new knowledge into action. Each of the presenters has provided their PowerPoint slides, which are available at www.sewersmart.org. We look forward to seeing everyone next year for Sewer Summit 2017.