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The Eleventh Annual International Conference for Environmental Data Management (ICEDM) provides environmental data management professionals with a two-day opportunity to share: Ideas, Tools and Custom Applications, Brainstorm and Collaborate on Data Workflow, and Present Data Management Success Stories.

Dates: September 15-16, 2021

Times: All times are in US Mountain Time Zone:
9 AM MST is the following in other time zones:

- 10 AM CST (Add 1 hour to agenda times),
- 11 AM EST (Add 2 hours to agenda times),
- 8 AM PST (Subtract 1 hour from agenda times),
- 7 AM AST (Subtract 2 hours from agenda times)

Location: Virtual- Invitations will be sent out about a *week* before the conference. The conference will leverage both Teams and MiBo virtual meeting platforms to ensure that conference is as interactive and enjoyable as possible. Each agenda item specifies the virtual meeting tool(s) to be used during each activity. MiBo rooms will be available throughout the conference to allow individual teams to meet and traditional “hallway” networking to occur throughout the conference.

Registration: You can register for the conference website at www.icedm.net.

* The 2021 Draft Conference Schedule and Agenda presented below may change as the conference approaches. The most current version of the agenda will be available on the conference website.

Conference Agenda:

Meeting Space:

Teams and Mibo (See email for links, links will also be IM'ed during conference)

Day 1 – September 15, 2021

9:00 AM	<p>OPEN TO UNREGISTERED INDIVIDUALS</p> <p>Panel Discussion: The Importance of Digitization</p> <p><i>Teams Link</i></p>	<p>A panel of leaders from a variety of organizations and background will discuss why digitalization is important and the impacts of digitalization on their business. Attendees will be able to ask the panel questions and have a lively discussion about a variety of topics, including approaches and challenges associated with digitalization.</p> <p>Brian Vassigh (Spring Hope Consulting), ERM, Dan Higgins Data Designs, Mike Apfelbaum (Woodard & Curran)</p>
<p>10:15 AM BREAK – <i>MiBo Links Active</i></p>		
10:30 AM	<p>Welcome and Greeting</p> <p><i>Teams Link</i></p>	<p>Sarah Wright (ERM) and Dan Higgins (Dan Higgins Data Designs)</p>
10:45 AM	<p>Introductions</p> <p><i>Teams Link</i></p>	<p>ICEDM’s participants are what make the conference exceptional every year. The connections that are made at ICEDM have helped participants enhance their knowledge and build lasting networks. For these reasons we will spend time introducing ourselves to each other! Please be prepared to give a 2 minute introduction of yourself including: your name, organization, your role, what you want to get out of ICEDM.</p>
11:30 AM	<p>Introducing the DQO Process to a Large Wastewater Utility: Applications, Growth, and Challenges</p> <p><i>Teams Link</i></p>	<p>In early 2020, Seattle Public Utilities (SPU) introduced the SPU Environmental Data Quality System (EDQS), modeled after EPA’s Quality System and seven-step Data Quality Objectives (DQO) process, to provide guidance documents as well as in-house EDQS support to assist study teams with systematic planning and DQOs for environmental data collection. SPU’s EDQS has had some new applications over the last year and a half that have helped further the program, as well as presented new challenges!</p> <p>To be honest—the DQO process is a high hurdle between where SPU is now and Utility-wide adoption of the EDQS. Right at the outset, DQO step one “Define the Problem” or answering the basic question of “Why are we doing this project?” and doing so <i>before</i> study execution and monitoring, is almost always a challenge for our study teams. The EDQS team’s main challenge is not to espouse good science or convince our scientists to collect more data, but to make a process that has been described as onerous,</p>

		<p>esoteric, tedious...more accessible and edify teams about the positives of systematic planning and the potential negatives without it—for example, lost time, unusable results, and unnecessary costs.</p> <p>Since EDQS was introduced, SPU has made progress. The focus of today’s talk has evolved over the last year and a half from mostly challenges to applications including City IT natural resources data management, green stormwater infrastructure (GSI) program, and urban watershed science education projects that have reached out to the EDQS team for assistance with the DQO process. It remains that SPU is a large organization with varied and ongoing environmental projects that are often event-based or limited by schedule and budget, and that the DQO process is not easy and takes a considerable amount of time. The EDQS team’s goal is for continual growth using EDQS systematic planning more effectively and autonomously, and I look forward to sharing our progress and receiving feedback to help inform our efforts toward SPU’s Utility-wide adoption of EDQS.</p> <p>Jennifer Arthur, Ph.D. (City of Seattle, Seattle Public Utilities)</p>
12:00 PM	LUNCH - MiBo Links Active	
12:45 PM	<p>Round Table Discussion</p> <p>Technical Skills Needed to Improve Your Organization’s Environmental Data IQ</p> <p><i>Standard Teams Link & MiBo Links – (To be assigned)</i></p>	<p>We believe there’s a strong competitive advantage for organizations managing environmental data to facilitate the highest quality information. Good environmental data is critical to supporting important technical decisions for clients. Therefore, <u>All Staff</u>, not just the data people, need to be committed to supporting dependable, readily available data.</p> <p>Roundtable discussion ideas include:</p> <ul style="list-style-type: none"> • What business outcomes represent a data-centric culture? • What data skills in technical staff, company leaders, and data managers support a data-centric culture? • How would data skill improvements be implemented/propagated? <p>Dan Higgins (Dan Higgins Data Designs)</p>
2:00 PM	BREAK - MiBo Links Active	

<p>2:15 PM</p>	<p>Security 101 – What Data Managers Need To Know</p> <p><i>Teams Link</i></p>	<p>It seems like every day when we turn on the news, we hear about another hacking incident. From companies that manage critical physical infrastructure to those that provide tools and services related to digital infrastructure and security, we have seen that all organizations are at risk. As data managers, we typically have a role in managing systems that could be at risk for hacking, either for access to the data itself, or as a way in other systems. Although most of us are not IT/security experts, it is important for us to understand how we can best secure the data we manage. This talk will cover security basics related to data management based on our experience in recently undergoing several security reviews of our hosted data management system. This will be followed by an open discussion of security management practices and lessons learned from the audience.</p> <p>Christine Lew (Tetra Tech)</p>
<p>2:45 PM</p>	<p>BREAK - MiBo Links Active</p>	
<p>3:00 PM</p>	<p>Data Governance for Managing Unstructured Data</p> <p><i>Teams Link</i></p>	<p>Building a Data Governance Framework for Managing Unstructured Data – The management of unstructured data, which is collected, stored, managed, and used in a variety of forms and sizes, provides a unique challenge to data managers and businesses alike. Up to 95% of businesses cite the need to manage unstructured data – such as pdf documents, images, emails, etc. – as a problem, according to Forbes. Real-world experience tells us this is a significant challenge for the environmental industry as well. While there are a variety of technology solutions and approaches to managing unstructured data and integrating it with other more structured data sources, this presentation will focus on the need for a data governance framework that aligns with business objectives and identifies the value and risks associated with the management of unstructured data in the environmental industry. By leveraging a solid data governance foundation, organizations will be able to benefit from a strategic approach to implementing and maintaining unstructured data assets. Shaping a fit-for-purpose data governance policy that identifies data quality objectives, roles and responsibilities, data sources and a cohesive data management plan is key to mitigating risk and supporting compliance with environmental requirements.</p> <p>Lacy Smith (ERM)</p>

<p>3:30 PM</p>	<p>A look at DoD and Non-DoD Data Validation and the Impacts of the Modules and the DoD Data Validation Guidelines</p> <p>Teams Link</p>	<p>Since data validation was first used as a process to assess to be entered Superfund program, it has expanded to include data generated from a variety of methods and for a variety of purposes. Similar to laboratories, it's crucial for data validation organizations to stay up to date in a changing landscape of guidance documents, analytical methods, EPA Regional and State agency requirements, and program specific requirements. With the publishing of guidance documents over the past few years, validation organizations have adjusted processes to ensure data intended for DoD use adheres to its guidelines.</p> <p>This presentation will focus on the use of DoD Data Validation Guidelines and the various Modules and the impact it has on data generated in support of DoD projects. Specifically, the presentation will look at similarities and differences in the data validation and data management processes between DoD and non-DoD projects. Where there are differences, the presenter will discuss the specific process, the resulting data qualifier, and/or data management activities and how data generated in support of DoD projects is affected. The presentation will highlight the importance and benefits of well established guidelines and procedures.</p> <p>Christina Rink (Laboratory Data Consultants, Inc. (LDC))</p>
<p>4:00 PM</p>	<p>BREAK - MiBo Links Active</p>	
<p>4:15 PM</p>	<p>Field Sampling Event Workflow Management</p> <p>Teams Link</p>	<p>This session focuses on the evolution of document and data management processes as experienced by the speaker. She will share with you how she organized the processes for collecting, processing, and cataloging analytical data and related reports, and how she created a visionary process that allowed for a seamless transition to the remote working environment. You will learn about the integral relationship between sample collection and reporting requirements and that field sampling events neither begin nor end in the field.</p> <p>Roberta P. Prohaska (SLAC National Accelerator Laboratory)</p>
<p>4:45-5:15 PM</p>	<p>OPEN DISCUSSION</p> <p>Teams Link</p>	<p>ICEDM strives to provide attendees a forum for open discussion of data management topics. During this session attendees will engage in discussion of the topics covered throughout the day and propose topics for further discussion throughout the conference.</p>
<p>5:15-7:00 PM Happy Hours – MiBo Links to be IM'ed</p>		

Day 2 – September 16

<p>9:00 AM</p>	<p>Coffee Talk!</p> <p>2020/2021: Lessons Learned</p> <p>Teams Link</p>	<p>What a year, and then some! Terms like “New Normal” and “Data Trends” have been standard on the news and in our personal lives. People have shifted to working from home and integrating their family lives with their professional lives. All, in all, it has been a challenge, but with all challenges we learn and grow. During this year’s Coffee Talk, we will discuss how the pandemic has impacted Environmental Data Management at our organizations. Topics may span: better understanding of the importance of data, understanding of working from home, transition to digital information management, “Living in a Teams Box”, Tiny Humans and Furry Creatures invading your workspace and learning about what we actually do all day!</p> <p>While this topic is presented with levity, the COVID-19 pandemic has been devastating for so many globally. The ICEDM community extends our deepest sympathies to families impacted.</p> <p>Sarah Wright (ERM)</p>
<p>10:15 AM BREAK - MiBo Links Active</p>		
<p>10:30 AM</p>	<p>Configuring EQUIS Collect for Building and Updating SPM Plans</p> <p>Teams Link</p>	<p>The British Petroleum (bp) project team has the need to routinely create and update SPM plans in a time efficient manner and cannot be delayed by waiting for specific resources. The majority of end users interact solely with EQUIS Enterprise, however the SPM plan loading and updating processes are accessible primarily to select power users with EQUIS Professional access, and an SPM skillset.</p> <p>The implementation team developed a Collect template for Enterprise user data entry and modifications of SPM plans by leveraging Collect, a new SPM format, and a forthcoming Enterprise Widget to make sample planning accessible.</p> <p>This solution establishes a standardized, easy-to-use process for updating EQUIS SPM data while maintaining the database reference values, locations, MAGs, and sampler information. By utilizing existing EQUIS software, the project team can seamlessly load new, and change existing, SPM plan data without purchasing additional software licenses or developing software integrations.</p> <p>Morgan Smith (ddms, inc.)</p>

<p>11:00 AM</p>	<p>Time-saving Automation Tools in the RockWorks Subsurface Modeling Program</p> <p><i>Teams Link</i></p>	<p>Software interface menus allow for easy processing of subsurface models and diagrams but can be cumbersome for repetitive tasks or when multiple steps are required to create a complex model. The RockWorks Playlist tool enables users to complete repetitive or time-consuming tasks in a fraction of the time it would take to execute the same tasks using the standard program interface. Alison will present one or more playlist case studies and a software demo.</p> <p>Alison Alcott (RockWare)</p>
<p>11:30 PM</p>	<p>LUNCH - MiBo Links Active</p>	
<p>12:30 PM</p>	<p>Networking Challenge!</p> <p><i>Mibo Links</i></p>	<p>Networking Challenges to grow your career and develop marketing savvy. Example: Find 5 people you have something in common with and come up with a way to work with them in the future on a unique project or brainstorm a technical solution, write a white paper, etc.</p> <p>Winner gets a \$50 gift card of your choice (Amazon, etc.).</p>
<p>1:30 PM</p>	<p>BREAK - MiBo Links Active</p>	
<p>1:45 PM</p>	<p>ITRC Data Management Team</p> <p><i>Teams Link</i></p>	<p>Inspired by ICEDM, the ITRC Environmental Data Management Best Practices Team was formed in early 2021 with the mission of developing products to help states and other organizations with the often daunting task of managing environmental data in an ever-changing technical landscape. In the last several months seven writing sub-groups have formed, focused on key components of the environmental data management life cycle. Please join us for an update on current progress with the team and how you can still participate!</p> <p>Brian Pointer (North Carolina Division of Water Resources – ITRC Team Lead)</p>
<p>2:15 PM</p>	<p>Establishing a Data Management Culture</p> <p><i>Teams Link</i></p>	<p>Katie will discuss how to establish a shared data management culture while allowing project teams to maintain autonomy and control over their data, how to expand data management teams, how to leverage cultural/economic shifts around data.</p> <p>Katie Elich (Woodard & Curran)</p>
<p>2:45 PM</p>	<p>Closing Discussion and Remarks - <i>Teams Link</i></p>	