

2023 International Conference on Environmental Data Management (Draft Agenda)



The 13th Annual International Conference for Environmental Data Management (ICEDM) ICEDM inspires environmental data management best practices and collaboration for leaders in a data-driven culture.

Dates:	Sept. 12-13, 2023	
Times:	All times are US Central Time:	
Location:	<ul> <li>In person at <u>the Harlow</u> in Kansas City, MO. or Virtually with MIBO and Microsoft Teams.</li> <li>Virtual attendees will have access to cameras showing the presenter and slides, and audience view from the presenter perspective and from the rear. During socialization times you can meet up with other virtual attendees and analogue attendees in MIBO meeting rooms just like we used in the 2022 ICEDM Conference. Your questions can be relayed to the presenter by a moderator.</li> <li>Virtual Invitations will be sent out about a <i>week</i> before the conference. Contact Dan after you register if you prefer the virtual option.</li> </ul>	
Registration:	Registration at <u>www.icedm.net</u> .	
Contact:	Dan Higgins (503-789-4759) dan.higgins@danhigginsdatadesigns.com	Sarah Wright (206- 794-5888) sarah.wright@gza.com



### **Conference Agenda:**

### Meeting Space: The Harlow

Teams and Mibo (Links will emailed and will be IM'ed during conference)

### 8:30 Breakfast

### 9:00 Welcome and Introductions

Dan Higgins (Dan Higgins Data Designs) and Sarah Wright (GZA)

### 10:00 Excel Tips and Tricks

### Erin Dietrich (Barr Engineering)

Join us in this session tailored exclusively for Data Managers, where we'll discuss some of the hidden gems Microsoft Excel has to offer. You will be introduced to new formulas, short-cuts and innovative techniques to working with large analytical data sets that remove the tedium and potential for human error. This is not your ordinary Excel training.

#### 10:45 Break

#### 11:00 Automated Tools for Optimizing Groundwater Monitoring Programs

Tori Ward (Woodard & Curan)

Once remediation is complete, many sites rely on Monitored Natural Attenuation (MNA) to demonstrate continued compliance and provide a line of evidence toward regulatory closure. Because this continued monitoring presents a long-term cost for responsible parties, reducing the number of samples collected each round can substantially reduce the total cost to closure. This presentation will illustrate how R scripting and Microsoft Power BI were used to efficiently assess sampling program representativeness and track progress toward key performance indicators (KPIs). The R programming language was used to automate processing of the project data for calculation of the KPIs and to evaluate the spatial density of monitoring wells. A Microsoft Power BI dashboard provided a front-end for the project team to review the site's performance while allowing for dynamic recalculation of KPIs via filtering. This presentation will also discuss how these tools were scaled across multiple projects to increase return on investment (ROI) and support Woodard & Curran's efforts to streamline and centralize our approach to data management and analytics. The use of these modern tools resulted in the strategic reduction of MNA monitoring wells at a state-led Superfund Site.

## 11:45 Lunch

#### 1:00 Lightening Round

1:00 Stakeholders answering their own data questions – (ddms)







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Data managers receive questions from project team members on a regular basis. This presentation will discuss reporting tools to help stakeholders answer data questions themselves. Data questions such as: Has my data loaded? Is it complete? What does the data mean?

## 1:10 Measuring the business value of your data management team (ERM)

A case study of how ERM was able to successfully influence operational metrics to demonstrate the value our data team brings to the organization.

# 1:20 The Power(BI) of Pagination

Learn to turn data into automated reports project managers love. Insights and basics of Microsoft PowerBI PDF and Pagination.

## 1:30 Environmental Justice Data (SGS)

In the EJ world our clients are often up against VC and PE firms with unlimited resources. I will tell you how we've used Data Quality and Data Managers as the Keys to overcoming the sleek presentations of the PE firms. I can also help answer questions related Environmental Justice and what we are seeing across the market landscape.

## 1:40: Integrating and Centralizing Data Management in an Autonomous Culture (Woodard Curran)

Centralized data management is critical to implementing best practices, data security, and advanced data analytics. At the same, decentralized data management often leads to innovative practices that are more readily adopted by project teams. So how can you get the best of both? This talk will share Woodard & Curran's journey to centralizing environmental data management in an autonomous culture, drawing on concepts from ITRC guidance and touching on lessons learned, successes, and setbacks.

## 1:50 Break

# 2:00 Multi Data Stream Analysis and Organization

Taryn Crosby (SGS North America, Inc.)

Real time data collection is a great opportunity for our clients to get a broader picture of what is happening on their sites. However, data quality can often come into question and the amount of data generated can be overwhelming. I have collected examples of innovative ways to present multi streams of data. I will also present some ideas for EDD's that can be generated out of this data as well.

# 2:45 Scaling Up/Scaling Down: EQuIS for All

Alexa Teipel and Kelsey Tobin (Terracon)

Terracon is scaling up EQuIS as an enterprise solution for all Environmental and Geotechnical projects regardless of size. Our talk will highlight some of the challenges encountered during the implementation of a one-size-fits-all workflow for tens of thousands of tiny projects.









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### 3:30 Evaluating an Existing Data Management System

Samantha Bennett (ddms Inc.) & Ellen Tomlinson, (RSI EnTech, LLC, Contractor to the U.S. Department of Energy Office of Legacy Management)

Environmental data management systems often grow organically as data needs evolve and additional use cases are realized. It is common for complex organizations with multiple systems to unknowingly develop redundant or inefficient workflows, many without robust documentation. These redundancies and inefficiencies can unnecessarily increase the cost and complexity of the organization's overarching data system. This presentation explores best practices for (1) documenting and evaluating current environmental data workflows and (2) documenting suggested areas of improvements to those workflows to improve the quality, integrity, and accessibility of data in the U.S. DOE Office of Legacy Management's environmental data system.

## 4:15 Building the Administrators Toolbox – Taking Advantage of Permissions and Training

Kristen Brown & Chanice Fish (TRC)

For those of us who wear many hats, administrative tasks associated with data management including, managing users, permissions, reports, troubleshooting, etc. can be time-consuming, difficult to keep well organized and encompass only a small portion of our overall responsibilities. This presentation will discuss how developing trainings with some thoughtful dashboarding can streamline some of these administrative tasks.

## <u>5 – 7 PM Happy Hour</u>











### 8:30 Breakfast

### 9:30 Coffee Talk: What is the Scope of "Environmental Data"

Sarah Wright (GZA) and Dan Higgins (Dan Higgins Data Designs)

Environmental Data has long been referred to as analytical data. While analytical data is a large percentage of environmental data, the environmental industry is evolving to understand that "environmental data" includes so much more. During this year's Coffee Talk, we will discuss what your organization(s) include in this category and strategies for incorporating these data into your existing platforms and workflows.

### 10:30 Break

### 10:45 Field Data Collection: Meeting Users Where They Are At

### Eric Sprouls (GZA)

Collect is EarthSoft's mobile field data collection tool. It allows us and others who use EQuIS to "jump" into the mobile data collection game. It has also, to a lesser degree, been seen to be implemented as a tool to aid data managers manage the EQuIS system. Its capabilities are wide-ranging depending on the problem to be solved. This session covers our experience of implementing Collect. It attempts to highlight general concepts, key considerations to successfully implementing Collect, as well as when we have decided to utilize a different mobile data collection application/platform as a solution.

#### 11:30 Lunch

## 1:00 Mentor Mentee Mash-up!

## Sarah Wright (GZA) and Dan Higgins

One of the most popular requests ICEDM has received over the past 13 years has been to create a Mentorship Program. This year, we will undertake a kick-off to that task through the "Mentor Mentee Mash-up" activity. At the beginning of the conference attendees will select different colored stickers to place on their nametags to indicate what topics they would be willing to provide or receive through this mentorship activity. Then, during the mentorship mash-up, attendees will work to meet with at least three mentors or mentees to build their mentorship network.





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#### 2:30 Break

#### 2:45 Implementation of a Data Program for 12 Sites and 60+ Users

Tina Sullivan and Julia Michienzi (ERM)

It's every data lover's dream, a single source of truth database made accessible to a wide variety of stakeholders from the client's upper management to database managers from six consulting firms. We will share considerations, decisions, and lessons learned from this implementation.

#### 3:30 Interim Measure Remedies Performance Monitoring Dashboard

#### Ruta Deshpande (Ramboll)

Ramboll optimized the collection and management of performance monitoring data for remediation systems through the integration of Survey123, Microsoft Power Automate, and EQuIS. Data from various sources, including field measurements, treatment system instrumentation, and laboratory analytical data, was consolidated on a Microsoft Power BI dashboard. This dashboard is instrumental in providing a complete picture by integrating and visualizing OMM data from different sources on a single platform. This approach has assisted with evaluating system performance as well as with troubleshooting efforts. Dashboard has also streamlined our routine reporting needs i.e., graphics are relatively automated and easily extracted, which allows for efficiencies and to be made on time and cost.

4:15 Thank You!





