2026

The 15th Annual International Commission on Environmental Data Management (ICEDM)

ICEDM champions the adoption of best practices in environmental data management, fostering collaboration among leaders to drive data culture.

DATES: May 19th and 20th, 2026

TIMES: 8:00 – 4:30 Each Day – Happy Hour 5-7 on May 19th

LOCATION: Austin Swim Club, Austin, TX or Virtually on Microsoft Teams

REGISTRATION: https://www.icedm.net

The 2026 Agenda may change as the conference approaches, please check the website and e-mail communications.

MEETING SPACE: Austin Swim Club/Teams Links (e-mail and IM)

VENDOR SPACE: Austin Swim Club (More Details Soon!)

ICEDM
INTERNATIONAL COMMISSION ON ENVIRONMENTAL DATA MANAGEMENT

2026

8:00 – 9:00: Breakfast and Networking

9:00 – 9:45: Welcome and Introductions

9:45 -10:00: BREAK

10:00 – 10:45: GIS Centric Data Management for Linear Infrastructure

Julia Michienzi (ERM)

Linear transmission projects require coordination for permitting, land access, safety, and environmental constraints across multiple teams and extended corridors. This presentation describes an approach used on a long-range transmission planning project to implement a GIS-based environmental data management platform that supports requirements gathering, data governance, and role-based access for land and right-of-way, environmental, and construction stakeholders. Lessons learned are shared on applying governance-driven, spatially enabled data management practices and how they complement traditional environmental data management workflows for complex projects.

10:45 – 11:30: Conducting a Robust and Objective Evaluation of Environmental Data Management Systems

Shana Whitney (Woodard & Curran)

The selection of an environmental data management system (EDMS) for a company is a significant decision with far-reaching impacts. Selecting environmental data management platforms requires structured, defensible evaluation methods that go beyond feature comparisons. In this presentation, we will share the criteria-driven evaluation process used to assess multiple data storage and management solutions. The evaluation framework incorporated multiple lines of evidence, including market research, vendor provided information, peer references, business and financial considerations, and a structured pilot process. Together, these inputs supported a transparent and objective assessment across

technical, operational, and organizational dimensions, combining quantitative scoring with qualitative feedback from representative users and leadership.

In addition to system capabilities, the evaluation considered user adoption, platform interoperability, data governance requirements, client familiarity, implementation effort, and overall cost and business value. We will highlight the planning, documentation, and engagement strategies that led to a successful evaluation, and made the process clear, repeatable, and grounded in real project needs, ultimately leading to a well-supported selection decision.

11:30 – 12:15: Building the Modern CDE: Lessons from Decades of Infrastructure Information Management

Mario Morales (Symetri)

For decades, the Infrastructure industry has managed information through a series of major technological shifts, each one changing not only how projects are documented, but how teams think, collaborate, and deliver. From the days of marked-up vellum sheets, field books, and diazo prints to the introduction of CAD, network drives, and FTP sites, every phase solved problems while creating new ones. Today's Connected Data Environments (CDEs) represent the first truly integrated approach to managing project information across its lifecycle.

This session looks at how we arrived at the modern CDE, the pressures that forced change, the habits and workflows that lingered from the analog era, and the new expectations around transparency, model-centric design, and cloud collaboration. We will break down what a CDE actually is beyond the buzzwords and explore how it supports digital delivery, Standards Compliance, and Multi-Discipline Work-Sharing.

Attendees will leave with a solid understanding of why the shift to cloudbased collaboration isn't just another technology trend, but a long overdue evolution in how infrastructure projects are created, coordinated, and delivered.

12:15 - 1:15: LUNCH BREAK

1:15 - 2:00 Translating Data Skills into Accessible Solutions through Automation

Kyle Fitch and Kelly Dubois (Sanborn, Head & Associates, Inc.)

Data analysts are commonly asked to come up with deliverables that meet an ambiguous goal – "Can you do something with our data?". Many of us have valuable skills in data analysis, but it can be a challenge to translate them into actionable outputs for decision makers. By leveraging automation tools like R and Power BI, we can streamline repetitive workflows while expanding access to clear, reliable insights. R programming is useful for modeling statistical trends and producing custom visualizations. Power BI supports data accessibility through quickly digestible dashboards, and routine data monitoring. Integrating R and Power BI allows teams to interact directly with their data, freeing up time to answer the questions that matter the most.

2:00 – 2:45: Proactive Landfill Management Through Real-Time Monitoring and Automated Alerts

Josh Cullum (ddms) and Laura Williams (Sanborn Head Associates, Inc.).

Managing landfill gas and leachate systems is increasingly complex due to evolving regulations and operational risk. This presentation demonstrates how ddms, Inc. Project Portal®, in collaboration with Sanborn Head & Associates, is used to improve landfill compliance and operational performance. Continuous monitoring of landfill parameters such as gas flow, methane concentration, pressure, temperature, and leachate levels enables high-frequency analysis through Project Portal dashboards and automated alerts. Case-based examples demonstrate how Project Portal supports landfill gas compliance, optimizes leachate management, reduces manual data collection, and enhances

monitoring through early detection of anomalies, enabling more proactive landfill operations.

2:45 – 3:00: BREAK

3:00 – 4:15: Speed Mentoring Exercise

4:30 – 5:00: Open Discussion

5:00 – 7:00: Happy Hour at Austin Swim Club

ICEDM
INTERNATIONAL COMMISSION ON ENVIRONMENTAL DATA MANAGEMENT

2026

DAY 2

8:00 – 9:00: Breakfast and Networking

9:00 - 9:45: CEO Chat

Patrick Sheehan (GZA)

9:45 - 10:30: From PDF to Phase I: Using AI Agents to Improve Traceability, Transparency, and Efficiency in Environmental Data Review

Greg Martin (Datanest)

Environmental professionals routinely digest large volumes of information, unfortunately not all of it is structured the way that we want. It is typically in the form of PDF documents, historical site assessment reports, regulatory correspondence, and scanned field notes. Data in these formats is often laborious to collate and most consultants are looking for ways to do so more efficiently and accurately. In particular, Phase 1 Environmental Site Assessments consume the most resource for the lowest margins, and are crucial to get the next phase of work.

This presentation explores how AI agents can be applied to support professional judgement in data collation from third party resources. Rather than focusing on generative AI as a drafting shortcut, we examine the structured use of specialized AI agents designed for discrete tasks: document extraction, contextual interpretation and traceable report-ready summarization.

Through real-world implementation examples, we demonstrate how different agent configurations can produce materially different outputs depending on prompt design, source constraints, and validation rules. We discuss how introducing multiple agent types can streamline Phase I preparation while maintaining transparency and defensibility. A key

theme of this session is traceability. In regulated industries, undocumented automation introduces risk. We will outline practical approaches for:

- Maintaining source citation from PDF paragraph to report output
- Preserving audit trails of AI prompts and responses
- Constraining agents to verified source material
- Enabling human-in-the-loop review at critical decision points

Attendees will gain insight into the journey from beginning to end. We will show that AI agents reduce manual transcription, improve consistency in document digestion, and accelerate early-stage environmental assessments, without compromising professional accountability.

10:30 – 10:45: BREAK

10:45-11:30: AI as a Force Multiplier in Data Management

Meghan Eschbaugh (ERM)

Environmental data managers are facing unprecedented growth in data volume, complexity, and scrutiny, while expectations for defensibility and speed continue to rise. We will explore how AI can serve as a practical tool to support experienced environmental data professionals without compromising data quality, transparency, or accountability. Drawing on real-world examples from ERM's environmental data management practice, including large EQuIS databases, multi-site programs, and ESG-driven reporting, the session will focus on where AI can effectively augment data management, QA/QC support, and analysis, while reinforcing the irreplaceable role of human judgment. Attendees will gain a clear, hype-free perspective on AI as a force multiplier rather than a replacement, an understanding of key risks when AI is poorly governed, and pragmatic guidance on how data managers can lead thoughtful, defensible AI integration within their organizations. The

session will conclude with a call to action for ICEDM professionals to shape best practices and steward the responsible use of AI in environmental data management.

Generative AI was used as a thought partner in drafting this abstract, with final content shaped and validated by the author.

11:30 – 12:15: Data Governance with EQuIS in the Age of Artificial Intelligence

Dan McCarthy & Alek Hage (EarthSoft)

Effective data governance is fundamental to transforming raw environmental data into reliable, actionable insights. As artificial intelligence (AI) capabilities rapidly expand, tools such as agentic workflows, Model Context Protocol (MCP) servers, and natural-language query interfaces are reducing friction for stakeholders who need timely, trustworthy environmental information. However, AI does not compensate for weak governance—rather, it amplifies gaps in data quality, structure, and accountability.

This presentation outlines a modern data governance framework designed to work in tandem with emerging AI toolsets. It highlights how structured data models, validation rules, and complete audit histories form the essential foundation for trusted AI in environmental management. The session will also explore practical applications, including automated Electronic Data Deliverable (EDD) generation that enforces schema and vocabulary controls at the source, as well as secure SQL-based MCP endpoints that provide permissioned access to curated datasets.

Through real-world examples, the presentation demonstrates how integrating strong governance practices with AI-enabled workflows enhances the value, integrity, and usability of environmental data repositories—ensuring that advanced analytical tools operate within a transparent, well-architected, and compliant ecosystem.

12:15 - 1:15: LUNCH BREAK

1:15 – 2:00: Modernizing Environmental Data Management at ORNL to Strengthen Compliance and Resilience

Jesse Morris & William McCarter (Oak Ridge National Laboratory (ORNL))

Oak Ridge National Laboratory (ORNL) undertook a six-year effort to modernize environmental data management systems supporting compliance and mission-critical operations. This presentation highlights the migration from legacy, manual workflows to an enterprise-grade solution using EQuIS that was driven by cybersecurity, electronic records requirements, and the need for improved data integrity. Attendees will learn about decision-making strategies, stakeholder collaboration, and lessons that enhance resilience and scalability for future data initiatives.

2:00 – 2:45: Career Path Lightning Round and Discussion

2:45 - 3:00: BREAK

3:00 – 3:45: Data Workflows for Remediation System Pilot Testing

Kristen Brown (TRC)

The development of a remediation treatment system often starts with pilot scale testing to determine the feasibility of the proposed solution and to assess key parameters relevant to full-scale system design. The primary focus of testing is typically on reducing concentrations of compounds of concern below relevant action levels and/or laboratory detection limits. Pilot testing facilitates the estimation of capital, and operation and maintenance (O&M) costs for different possible configurations of a full-scale system.

Having the ability to document system adjustments and track the corresponding impact on water quality is critical to determine the effectiveness of the system. This presentation will

focus on the data management workflow developed to support analysis of the results of pilot system testing. Specifically, we'll review:

- The mobile data collection configuration needed for capturing process adjustments, including the schema and EDD customizations made to accommodate process and other O&M data.
- The development of a PowerBI dashboard to analyze the impact of system adjustments on the resulting water quality.
- How this workflow supports full-scale remediation system monitoring.

3:45 - 4:00: Creative Dashboard Strategies to Guide Decision Making

Omed Zibari (Terracon)

Effective dashboards are a powerful method for measuring and relaying to decision-makers the impact that data management teams have on an organization. The talk will step through the process of determining value by defining impact, discussing tools for pulling data from various sources using APIs and reports, and transforming that data into dashboards to clarify the value of good data management.

4:00 - 4:15: Action Levels Everywhere, All at Once

Sarah A Sokol (Terracon)

Up-to-date and complete action levels are essential for users and practitioners to get the most value out of EDM platforms. Terracon's Data Management team has been rolling out a project-agnostic workflow in EQuIS designed for use across the entire company. With a small central team, maintaining action levels at scale required a new approach. We trained practitioners to create and manage action levels directly by instituting a flexible, but standardized development and review process. This approach leverages local expertise, reduces bottlenecks, and ensures action levels stay accurate and current over time. It also expanded the coverage and increased adoption of Terracon's EQuIS DataHub. While the

rollout surfaced challenges and continues to evolve, it has been largely successful and continues to improve. Most importantly, it provides a scalable, sustainable path forward for action level management.

4:15 – 4:30 Photo Management with QNOPY

Emily Dryden (QNOPY)

Field photos can be a headache! They get mixed in with personal photos, captions don't always get written in the field, storage becomes a mess, and formatting photo logs? Try moving a photo in Microsoft Word and suddenly your whole document looks like a mosaic.

Using a digital data solution can solve these problems. Hopefully, you got a chance to download QNOPY and take some photos during the conference. In this session, I'll walk through how QNOPY simplifies photo management from field capture to organized reporting, with the very photos we took this week!

4:30 – 5:00: Closing remarks, What I learned at ICEDM 2026!