2019 Midwest Esri Utility User Group Conference

March 27th thru the 29th at the Cranberry Country Lodge Tomah WI
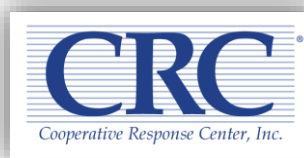**Hosted by Oakdale Electric Cooperative and Jackson Electric Cooperative**

Track 1	GIS Beginners Classes
Track 2	GIS Intermediate & Advanced Classes
	Sponsor Presentations

Wednesday, March 27, 2019

Time		Event
11:30 am – 4:30 pm		**Registration**
12:30 pm – 5:00 pm		**Sponsor Presentations –**
12:30 pm – 1:05 pm	Exhibits Open	Clevest Booth Sponsor – Brad Johnson
1:05 pm – 1:40 pm		Seiler Instruments Booth Sponsor – Gale Shea
1:40 pm – 2:15 pm		Power System Engineering, Inc. Booth Sponsor – Logan Suhr
2:15 pm – 2:30pm		**Afternoon Break**
2:30 pm – 3:05 pm		WSB Engineering Booth Sponsor – Justin Hansen
3:05 pm – 3:40 pm		mPower Innovations Booth Sponsor – Greg Calcari
3:40 pm – 4:15 pm		Condux International Booth Sponsor – Clay Harris, Santosh Saride
4:15 pm – 4:50 pm		**Open**
5:00 pm – 8:00 pm		**Vendor Hall Evening Social Meet & Greet**

Reserve your room at the Cranberry Country Lodge, Tomah. Book before February 15th for discount
319 Wittig Road, Tomah, WI 54660
Phone: (608) 374-2801   Website: http://cranberrycountrylodge.com/

Thursday, March 28, 2019

Time		Event
7:30 am – 5:15 pm		
7:30 am – 8:00 am		**Hotel Complimentary Breakfast**
8:00 am – 8:05 am		**Welcome – General Assembly**
8:05 am – 9:00 am		**Plenary Session – Tell us what you are doing** (General Assembly)
9:00 am – 10:00 am		**Keynote Speaker – Adam Carnow, Esri – The Underutilization of GIS & How to Cure It** (General Assembly)
10:00 am – 10:15 am		**Morning Break**
10:15 am – 12:00pm		**Esri – Utilities overview** (General Assembly)
12:00 pm - 1:00 pm		**Lunch Break**
1:00 pm – 2:00 pm		**Data Driven Decisions** Ryan Elvrum & Todd Copeland - MPS / **Web App Builder** Pete Metzger – Minnkota Power Cooperative
2:00 pm – 3:00 pm		**Related Tables in Collector** Mike Siedschlag – GRE / **Explore new life by building an ESRI Enterprise** Kate Scheurer – Owatonna Public Utilities
3:00 pm – 3:15 pm		**Afternoon Break**
3:15 pm – 4:15 pm		**Tightening the shoestrings getting ready for ArcGIS Online** Robert Borchert – GRE / **Task Tracking with Mobile and Dashboard Applications** Denny Hoskins – DairyLand Power
4:15 pm – 5:15 pm		**Explorer for ArcGIS Offline Capability** Jay Forstner - RPU
6:00 pm – 10:00 pm		**Group Dinner and Social @ the Ground Round Heartland Room** 201 Helen Walton Drive, Suite 1, in Tomah, WI 54660

(Exhibits Open at Breaks — vertical label spanning 8:00 am – 5:15 pm rows)

Friday, March 29, 2019

Time	Event
7:30 am – 8:00 am	**Hotel Complimentary Breakfast**
8:00 am – 9:00 am	**MWEUUG Business Meeting / Q & A Session**
9:00 am – 9:15 am	**Morning Break**
9:15 am – 11:45 pm	**Elk River's Enterprise: The Turning Point** Angela Hauge – Elk River Municipal Utilities **Data Sharing Best Practices, REST Service Sharing** Panel discussion **Roundtable discussion on New Collector App** Jeff Grussing & Todd Copeland **Conversion to ArcGIS Pro from AutoCAD** Steve Hanson – Detroit Lakes Public Utilities
11:45 pm	**Adjourn**

(Exhibits Open at Breaks — vertical label spanning 8:00 am – 11:45 pm rows)

Vendor Presentations – Wednesday March 27

mPower Innovations

Seiler Instruments

Power System Engineering, Inc.

ArcGIS Pro is the flagship desktop software from Esri that is quickly replacing ArcMap in many workflows. Using ArcGIS Pro can be a challenge but with it comes with many new concepts and time-saving processes. We will present a series of Tips and Tricks for map navigation, editing, and layouts that make life a little easier in this new environment.

Clevest

Safely guiding crews and resources during mutual aid events: How Esri and Clevest are helping Dairyland Power and their members

Calls for mutual aid are becoming more frequent with major weather events, and cooperatives need to be prepared to borrow/share crews on short notice. Keeping mutual aid crews safe needs to be part of your disaster plan, guiding them through unfamiliar territory and preventing delays in your response. Dairyland Power Cooperative's members have been a leader in adopting technologies for mutual aid events, and we will share their emergency planning, reporting procedures, use of real-time mapping, as well as lessons learned over the years.

WSB Engineering

How can your organization become successful with mobile GIS? We will be discussing successful mobile GIS strategies using WSB's Datafi platform to do more than just collect data. Datafi is an Esri-based field-to-office data management application used to manage projects, create field inspections and run reports. Datafi's dashboard simplifies the inspection process into one simple step. Datafi has transformed how WSB manages field data collection and reporting. Datafi can be used for a variety of compliance related inspection workflows and we will discuss how WSB uses Datafi for Pipeline and Environmental inspections.

Condux International

As right of way becoming more & more congested with multiple utility duct installations and not knowing precise shape, location, depth and duct condition of assets may lead to deployment interruptions that result in dig-ups, infrastructure dames, cross boring and finally project delays. Current existing 2D imaging & CAD information doesn't take earth curvature in consideration, which may affect the quality of data. Condux International will present an informative session on IMU (Inertial measuring unit) for 3D mapping underground assets to a higher accuracy levels. By mapping utilities and load to ESRI software will significantly help contractors/owners to avoid cost obstacles and seamlessly load the data collected to GIS platform.

General Session Presentations – Thursday March 28

Plenary
Jeff Grussing, Chad Schauf

In this group discussion we will focus on you and how you are or plan to use GIS, discuss challenges you face and what you're Utilities future GIS plans are. How are you using GIS currently? What challenges are you encountering? What projects are you working on? What do you want to implement but need assistance with? What is your GIS plan or initiatives for next year, five years and ten years?

Beginner Breakout Sessions

Data Driven Decisions
Ryan Elvrum & Todd Copeland – MPS

Moorhead Public Service (MPS) continues advancement of MPS GIS by providing authoritative data to assist in making data driven decisions across the organization. While GIS has been used for several years at MPS, the primary focus has been on data cleanup and data entry. As we transition to a GIS-centric asset management, MPS staff will be able to evaluate projects not just based on experience, but rather on data and other business processes. GIS is much more than making maps, it has the power to help users make informed decisions, increase efficiencies and productivity, and ultimately providing vital business intelligence that enhances the entire organization.

Related Tables in Collector
Mike Siedschlag – GRE

A related table is a second table that sits alongside your original data table. Records that are created in this second table are associated to the original table through a common field, or key field. Collector supports related tables through relationship classes built between features, between tables and between features and tables. This can be a powerful tool to help you view and update information in the field. In this presentation we will review the different types of relationships that are supported and go through the steps to prepare your data and ArcGIS Online maps to utilize related tables in Collector. Additionally, we will go through examples that you may use within your organization to get started using related tables in Collector.

Tightening the shoestrings getting ready for ArcGIS Online
Robert Borchert – GRE

Most ArcMap Electric GIS systems started off as something else and were converted to ArcGIS. Paper map books were still a high priority for getting the system out to the field. Systems had to be drawn so that details were visible on a paper or pdf map page. Today ArcGIS online and Carry Map are becoming a medium of choice. You quickly see that what looks good on paper does not necessarily translate to an online map. Meaning your primary conductor that was nestled up to the road is now 500 feet out in the middle of a corn field. This presentation will explore some of the methodology I used to prepare a distribution GIS from paper to online. I found the process was very similar to tightening your shoestrings and pulling everything closer together. The process increased positional accuracy and a more accurate estimation of miles of conductor.

Intermediate and Advanced Breakout Sessions

Web App Builder
Pete Metzger – Minnkota Power Cooperative

Are you a web developer fluent in Javascript or Silverlight? Me either, that's why during this session I will cover how to turn your data into an interactive web map using Web App Builder. Web App Builder is a What You See Is What You Get component of ArcGIS Online and ArcGIS Portal that turns you into a web map developer without having to learn any code. This session will start with how to set up a web map in ArcGIS Online, configure your layers, and then move it to Web App Builder where we'll customize the map and add tools to help your stakeholders make the most of your GIS.

Explore new life by building an ESRI Enterprise
Kate Scheurer – Owatonna Public Utilities

Come see what combining Amazon Web Services and ESRI Enterprise can do. I'll walk you through our current Amazon Web Services structure and how we deployed ESRI Enterprise. Highlighting pros and cons of our new structure and the process getting there. Also I will touch on how we plan on taking advantage of our new capabilities for Utility Network and company engagement.

I will be going over set up and key terms within AWS. AWS has provided our own GIS infrastructure outside of our company making it available for GIS staff to control upgrades to servers and SQL directly. We can also work remotely easier than before and direct database access has been reduced significantly making our system more secure. This also has increased our services and use of ESRI enterprise with a federated server. I will go over how we have this setup along with Portal and the capabilities we get with that. I will also talk about how this sets us up for Utility network and using Pro and the difference in database structures. I believe this will be useful for others by understanding what decisions we had to make and where the limitations are for taking this path.

Task Tracking with Mobile and Dashboard Applications
Denny Hoskins – DairyLand Power

Dairyland has developed a mobile and dashboard application to work together to help track and manage tasks in the field using ESRI products. Tasks can be assigned using a web app from the office and accepted via a mobile app from the field. Additionally, tasks can be created from the mobile app and updated to the web app as they are created. This presentation will cover the process Dairyland followed to get to a working program along with a demo.

Explorer for ArcGIS Offline Capability
Jay Forstner – RPU

The rise of mobile technology for field crews has opened numerous doors for GIS in the field. From real-time mapping to data editing, mobile technology has allowed field crews to ditch paper maps and view the information in real-time….in a perfect world. However, we all know technology issues arise: cellular coverage issues, connection speeds slow, and of course budgetary issues for keeping server technology up to date or even having server technology in place. A solution to some of these issues? Esri's Mobile Map Package (.mmpk). This presentation will walk through the steps of creating, sharing and using the .mmpks within Explorer for ArcGIS (iOS version); as well as, some tips, tricks and setbacks that we have learned through the process at Rochester Public Utilities.

General Session Presentations Friday March 29

Business Meeting
MWEUUG Committee

We look to the users to provide direction for next year's conference. What should we change or better improve upon? What are your likes and dislikes about the conference. What topics do you want to hear presented on? We will also show you the ArcGIS Ideas page and how we can be an influence on the direction of Esri's development team. Announce next year's venue and host utility.

Utility Presentations

Data Sharing Best Practices, REST Service Sharing
Panel discussion

New Collector App
Esri

Conversion to ArcGIS Pro from AutoCAD
Steve Hanson – Detroit Lakes Public Utilities

Over the past several years, the City of Detroit Lakes has been planning to convert to ESRI for our GIS System. Steve will be going over the steps it took to convert his drawing, as well as the work he has been doing to make sure his AutoCAD drawing was ready for the conversion.

Conference Surveys

We are trying a new approach for the conference surveys this year using Survey123.
Use this link https://arcg.is/1WfCfn or the QR Code Below to access the survey.