Northern Area GIS User Group Meeting

Thursday April 30, 2020

Microsoft Teams Virtual Meeting

9:00 AM – 3:00 PM

Agenda

9:00 – 10:00: Welcome and Discussion
Share updates on your work/ projects with the group and ask questions for discussion.

10:00 – 10:15: Break

10:15 – 11:15: Wisconsin Drone Network

Christopher Litzkow, Lieutenant of Specialized Services, Wisconsin State Capitol Police

This presentation will cover the Wisconsin Drone Network and the resources they provide for public safety missions throughout the state. The presentation will provide information on how to add an unmanned aviation program to your business or agency, and will provide tips, tricks, and pitfalls to avoid. Drawing from the Drone Network's experience of over 170 real-world deployments in Wisconsin since 2016, the presenter will show the value of a close relationship with GIS professionals.

11:15 – 11:30: Break

11:30 – 12:15: UAS LiDAR Project Planning and Applications

Tyler Kaebisch, Geospatial Project Manager, Ayres Associates

Advancements in UAS hardware and Lidar technologies have provided opportunities for organizations to gather highly accurate and dense Lidar point clouds for small scale projects. This presentation will outline steps for planning a successful UAS Lidar mission and detail UAS Lidar system specifications and applications. Assessing site suitability and the size of project area are important factors for UAS projects. Dense point clouds will be explored from engineering projects.

12:15 – 1:15 Lunch Break

1:15 – 1:45: Rainbow Gathering

Jerry Petruzalek, GIS Specialist, Chequamegon-Nicolet National Forest

Last summer, 2019, the Chequamegon-Nicolet National Forest was the location of a special annual event for the Rainbow Family of Living Light called the Rainbow Gathering. This group has gathered every year in a national forest since 1972. This event hosted some 5,000 participants who came to gather to pray

for world peace and take part in spiritual activities. As you can imagine, with this amount of people, there were some natural resource issues that needed to be addressed. The Region (Region 9) put together a special incident management team to deal with these issues. This team was made up of resource specialists from various disciplines including, archeological specialists, hydrography specialists, biologists, and recreation staff. This group worked very close with the law enforcement agencies to manage the event. Join me as we look at how the team used GIS, specifically ArcGIS Pro and Collector, to help the resource specialists manage this unique gathering.

1:45 – 2:15: Parcel Fabric Update from Bayfield County

Carmen Novak, GIS Technician, Bayfield County

Bayfield County converted to the parcel fabric in fall of 2018. Since then, steps have been taken to account for all parcels, add appropriate PLSS framework layers, and correct overlap and gap issues. The fabric provides tools to help correct and better align parcels, but it also highlights many problem areas in the data. We will show areas where the fabric has improved parcel mapping alignment and focus on next steps, which include eventually transitioning from ArcMap to ArcGIS Pro, adding new PLSS control points, and working toward making our parcel mapping as accurate as possible.

2:15 – 2:45: Using GIS for Groundwater Projects

Anna Fehling, Hydrogeologist, Wisconsin Geological and Natural History Survey

Groundwater studies rely on numerous types of geospatial data. Recent hydrogeological investigations in Bayfield County highlight the need for quality geospatial data for creating products such as water-table maps and groundwater flow models. In this presentation, we will give an overview of the types of GIS products that can be used and created in groundwater studies using examples from the Bayfield County projects.

2:45 – 3:00: Questions