

Session Abstracts

Informed Decision Making: Tree Canopy and Dashboards

Presented by Kassandra Hernandez-Galvan, City of Warrenville and Tripp Corbin, Cultivate Geospatial Solutions LLC

Description: The City of Warrenville, like many cities, is always striving to make better informed decisions that improve the quality of life, promotes sustainable growth, increases efficiency and provide more transparency. To this end, it has been working on two big but related initiatives. The first of these was to develop a reliable tree canopy dataset that identifies areas with low canopy coverage for priority planting, tracks tree health and growth, and supports climate resilience by reducing urban heat. It also helps engage the community, measure program success over time, and integrate tree preservation into urban planning. This data was then fed into a portal powered by SpatiaLens, a product from Cultivate Geospatial Solutions, that provides a single location decision makers can use to access critical data, apps and dashboards. This portal provides access to not only GIS-related content but also contains financial and asset management information, putting it all right at our fingertips.

Keywords: *Local Government, Urban Canopy, Data Analysis*

Creating an Interactive Conservation Scorecard Application

Presented by Madeline Tripp, VIEWSHED

Description: GIS can be a powerful decision-making tool for municipal committees, but how do you make it accessible for non-GIS users? Join me for this case study to discuss how we created a custom suitability analysis tool for a local conservation committee. Through trial and error, we developed a workflow using Arcade, Forms, and Experience Builder to allow users to draw a polygon and calculate a conservation priority score based on existing state and local vector data. The “magic” of Arcade took a process that once involved a complicated spreadsheet and manually measuring wetland buffers and stream frontage on printed maps, to simply outlining the area of interest. This presentation will include takeaways for building your own tool, learning where AI helped and hurt, why user testing is important, and tips for setting up templates for user-friendly reports.

Keywords: *Arcade, Experience Builder, conservation, suitability analysis, municipal GIS*

Rapid GIS Deployment for Flood Situational Awareness: A Saint John Case Study

Presented by Yves Leger, City of Saint John

Description: Following the historic Saint John River floods of 2018 and 2019, the City of Saint John's GIS team developed a pair of mobile-compatible flood mapping applications to support public awareness and emergency management operations. Using LiDAR-derived elevation data, the team generated real-time spatial visualizations of actual and predicted flood levels, made accessible through two distinct apps: one for the general public and one restricted to Emergency Measures Organization (EMO) personnel.

Both applications provided critical spatial context during the events, helping coordinate road closures, sandbag deployment, and evacuations. After the floods, the public app continued to serve as a historic reference, supporting insurance claims and informing future land use decisions. This work was recognized with the Canadian federal government's Emergency Management Exemplary Service Award, and illustrates how GIS tools can be rapidly deployed to improve situational awareness, emergency response, and long-term community resilience.

Key words: Community Resilience, lidar, Emergency Management