

## POLK COUNTY, MN: KEEPING CITIZENS INFORMED WITH ARCGIS ONLINE

Pro-West & Associates supports Polk County, MN with the creation of an application to help mitigate the impact on citizens of the flooding experienced in the area each year.

Polk County is an agrarian county located in north-west Minnesota and is the state's leading producer of dry bean, sugar beet, and spring wheat. Each spring the County, which lies in the Red River Valley, experiences significant flooding. Culverts wash out, water rises above the roads, and other flood-related issues occur, requiring Public Works staff to close numerous County highways. These closures occur at a time when farming activity is high, making the need for an effective method of informing farmers and other citizens of road closures and re-openings critical.

In past years the workflow consisted of the following steps:

1. Public Works staff drove to the flood site to investigate, before returning and reporting to GIS staff the location at which the road should be closed.
2. Using ArcGIS for Desktop, GIS staff created a PDF containing details of all road closure updates and re-openings. This was reported for every change - often dozens per week.
3. GIS staff sent this PDF to IT staff, who uploaded it to the County's public website.

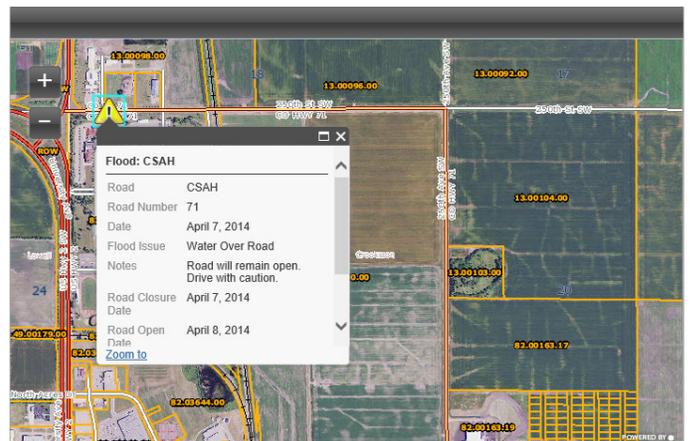
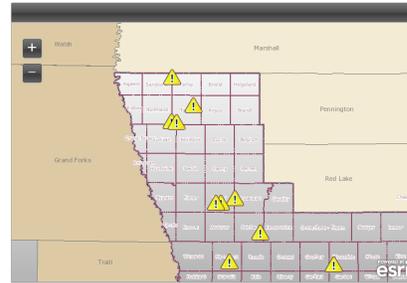
This process was repeated dozens of times each spring. On many occasions, citizens downloaded the PDF and failed to retrieve subsequent updates from the County website, leaving them with out-of-date information.

With a long-standing relationship with Polk County and a proven ability in working with ArcGIS Online, the County selected Pro-West to define a superior solution that would better inform citizens and streamline the process for Public Works, GIS, and IT staff.

2014 Flood Location Map



Click on the triangle in the interactive map below to review current road closures and flood issues within Polk County.



"We decided to take advantage of Pro-West's knowledge in order to make the best use of our ArcGIS Online account. In a single day with Pro-West, we had our account set up and an app developed that would let us track overland flooding and provide the public with access to a map with real-time updates. This gave us the confidence to expand our use of ArcGIS Online, and we have since set up several more data collection apps."

- Rick Thompson, GIS Coordinator, Polk County



## THE SOLUTION

Pro-West Solution Specialists trained the County's GIS staff on the basics of ArcGIS Online, covering user management, organization management, group management, branding, and the basics of building and sharing maps and apps. To ensure the training was relevant and practical, Pro-West delivered hands-on training which included implementing a working solution to the flood map problem.

The solution included equipping Public Works staff with an iPad and Collector for ArcGIS. A feature service for the road closure locations was created and shared, with ArcGIS for Server hosted at the County. This feature service was edited via Collector for ArcGIS and included drop-downs and attachments, enabling pictures of the closures to be documented.

A second web map was created using ArcGIS Online and embedded into the County's website.

The County was able to significantly improve the process of reporting closures as a result of deploying these two tools:

1. Public Works staff drive to the site to investigate. When they determine that a road should be closed, they collect a point and record pictures and video on their iPad using Collector for ArcGIS. As soon as the point is collected it becomes available on the County website, accompanied by pictures of the site.

## ADDITIONAL BENEFIT

With the new solution in place and the ability to record information - including pictures - in the field, Polk County is also able to use this information in reports it produces for FEMA.

### TECHNOLOGY

- ArcGIS Online
- Collector for ArcGIS
- ArcGIS for Server

