

Data Sharing/Hoarding

Bill Carr- EJ Water Coop

EJ Water Cooperative

- Located in Dieterich, Illinois, EJ Water Cooperative, Inc. was incorporated in June of 1989.
- The first phase built in 1993, served 480 households, and involved construction of 100 miles of water mains.
- Currently has 8,900 connections with over 2,100 miles of line.
- 5 full time service technicians maintain a service area of over 2,000 square miles.
- Provides wholesale water to 9 villages and manages 3 local water coops.

EJ Water's "Modern Day" GIS

- Started in June 2013 with 2 interns collecting GPS points and plotting them in QGIS.
- Digitizing as-builts
- Update/Build database
- Upgrade to cellular read meters.
- Disseminate data and maps to office and field personnel .

Share or not?

- We typically share data with:
 - Fire Depts.
 - Local Utilities
 - Oil Pipelines
 - Fiber Optic Cable
 - Our Members
- We are hesitant to share with:
 - Everyone else

No Data = Manual Workaround

- Create database of easement records with polygons
- Had *hoped* to procure a parcel map then add fields for easement information and update records
- Except parcel data either didn't exist (in GIS), existed but couldn't be exported (stolen), or existed but cost too much
- Interns!
- It took extra time, but the interns were able to add this information during their digitizing and was able to get 90% of available information in during their time.
- Outcome:
 - Functional
 - Unattractive
 - Displays only past easements, not useable for future projects

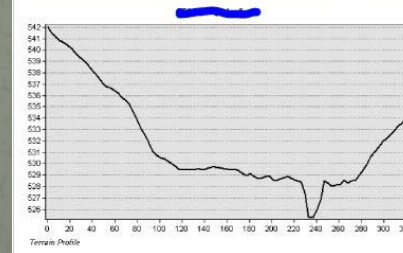
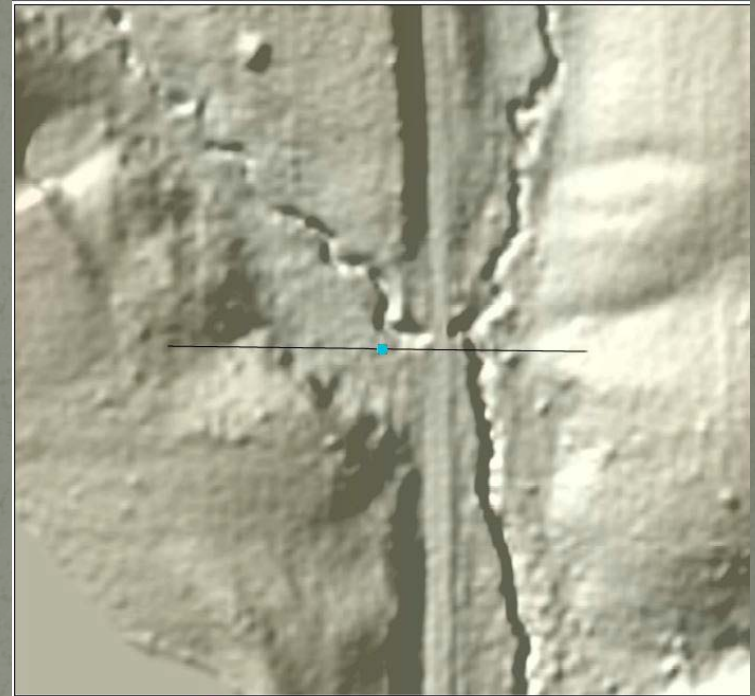
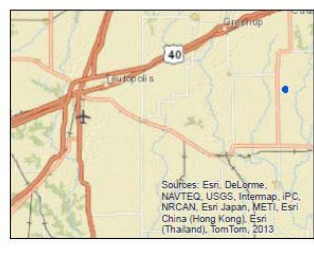
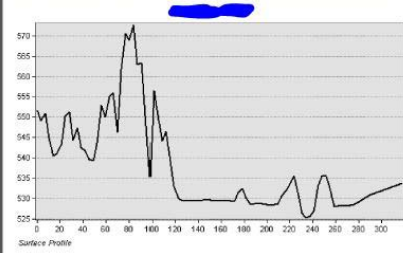
No Data = Hindered Project

- Cellular read meters were not reading :
 - Elevation/Terrain
 - Vegetation...CORN.
 - Structures
 - Cell service area
- Overall project goals:
 - Find cause of failure
 - Develop a process for evaluating future locations
 - STOP COUNTER PRODUCTION

No Data = Hindered Project

- ISGS LiDAR Surface and Terrain Model(Shared Data) – Worked great observing direct obstructions/elevation issues.
- Project was in dire need of accurate cell signal areas in order to use distance/line of sight tools.
- DENIED! Any public data looked sketchy and dated and couldn't be exported.
- Manually procuring data seemed to costly
- Had to go with what information we had

Shared Data is Beneficial



Benefits of Shared Data - Customer

- New customer maps save a trip
- Free Lobbying!
 - Members in need of water rally new member signups
- Beacon meter gives customer better insight into usage.
 - Customers can monitor their own usage-better understand
 - Customers can detect their own leaks-troubleshoot
 - Saves time in the office, saves time in the field

Benefits of Shared Data -JULIE

- 2014 – Began sending line locations to JULIE
- Julie tickets decreased by about 20%.
- New clearing process in the office clears an additional 20% before reaching the field.
- Field dispatcher clears 10% more before reaching the field
- Service guys drive out to 10 - 30% less locations
- Best fit extent – 15 seconds!

Questions?