Deploying an Agile Utility Wide Location Platform

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White House Utility District, TN

Agenda

- Process
- Portal Deployment
- Solutions Approach
- Demos

Challenges

- Water Loss / Pressure / Outages
- Aging Infrastructure
- Growth and demand
- Outdated Business Process
- Older technologies
- All Staff used same MXD
- Limited Access to Real-Time Spatial data
- Old or no integration of large systems

“What Esri has developed is more than just GIS. At its core, ArcGIS is a vehicle that can transform a utility’s culture in such a way that it can mirror sound business practice.”

Bill Thompson
General Manager
White House Utility District
Esri Water / Wastewater Brochure

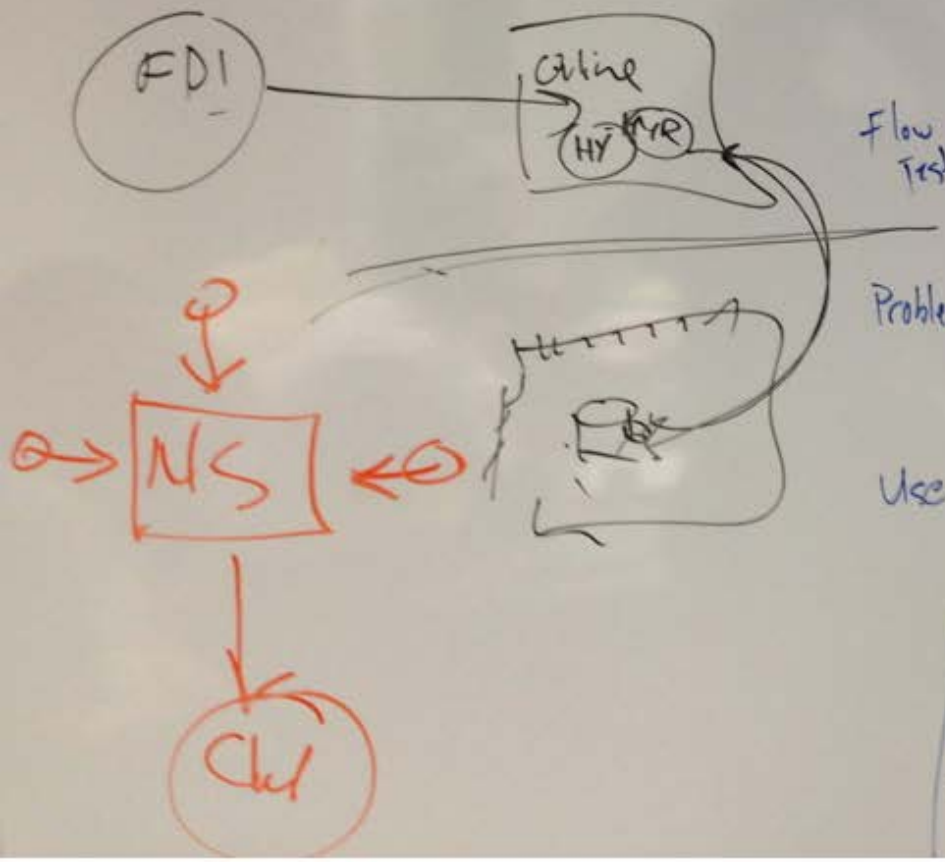
Collaboration / Partnerships

Top "X"

road closure
outage customers
outage area
add pressure

Web trace → CSR Outage map → public facing map → Dashboard

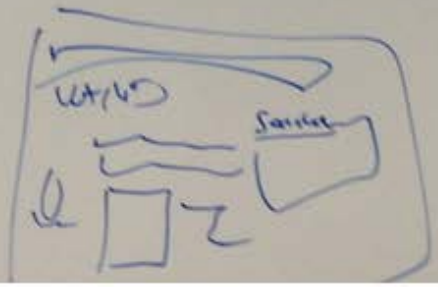
Hydrants → map of hydrants (operable inoperable) / submit hydrant issue / submit usage /

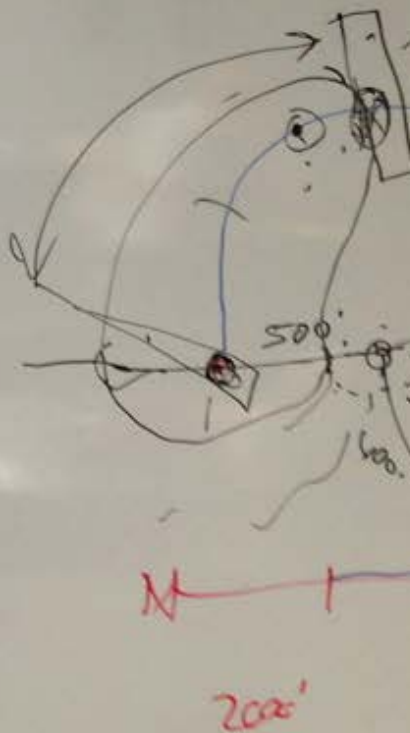


Flow Test
- Date
- Flow GPM
- Static PSI
- Residual PSI

Problem
- Date
- Problem Description
- Contact Name
- Contact Number
- Operable Yes/No (req)

Use
- Type
- Date
- Gallons Used



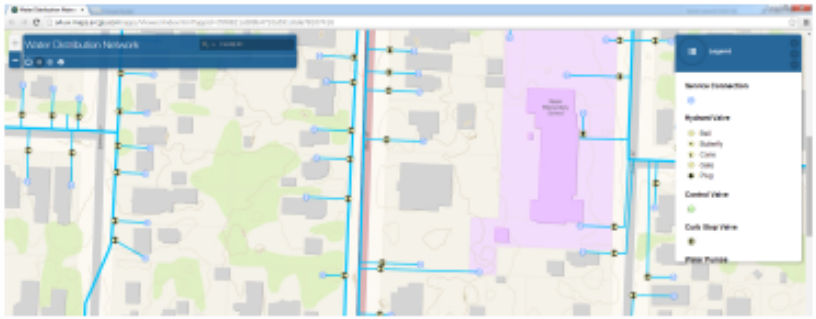


Configure Esri Solutions

- Water Distribution Network
- Sanitary Sewer Network
- Water Utility Network Editing
- Data Reviewer for Water Utilities
- Map Change Request
- Utility Isolation application
- Outage Viewer
- Valve Exercise
- Night-time Flow Analysis
- Fire Hydrant Flow Inspection
- Water Utility Capital Planning

Foundational Solutions

A collection of services and maps to get started with ArcGIS for Water Utilities.



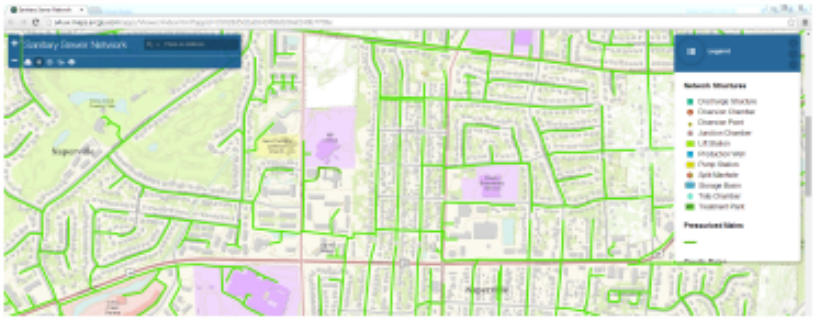
Water Distribution Network

The Water Distribution Network map provides information about water distribution network assets.

Download

Try it Now

Learn More



Sanitary Sewer Network

The Sanitary Sewer Network map provides information about separated and combined sanitary sewer network assets.

Download

Try it Now

Learn More

Fully Deploy Mapping Portal

- Let mapping portal be tool to deliver your GIS
- Let AGOL host data for you
- Use the entire platform
- Give Everyone Access

Groups

CSRs (6), Cityworks/Incode
↳ Billing (1) Consumption Reports, re-reads

Field Op Assi. (1) Esc. custom issues (Dispatcher
Engineering (4)

Field Meter (2) SR/WO on meters
field Managers (3)
Water Quality (2) Sampling/Flushing

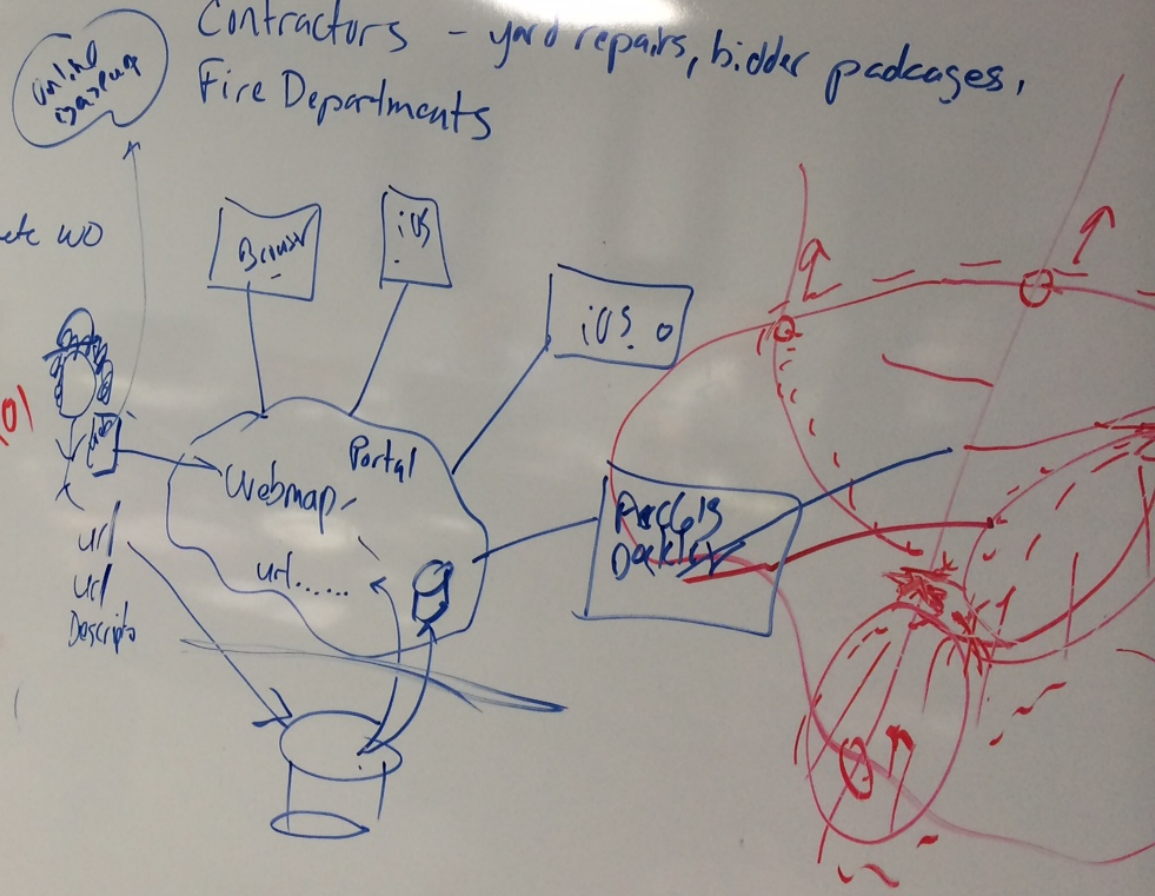
Field Tech (4) SR inspections, Create Complete WO

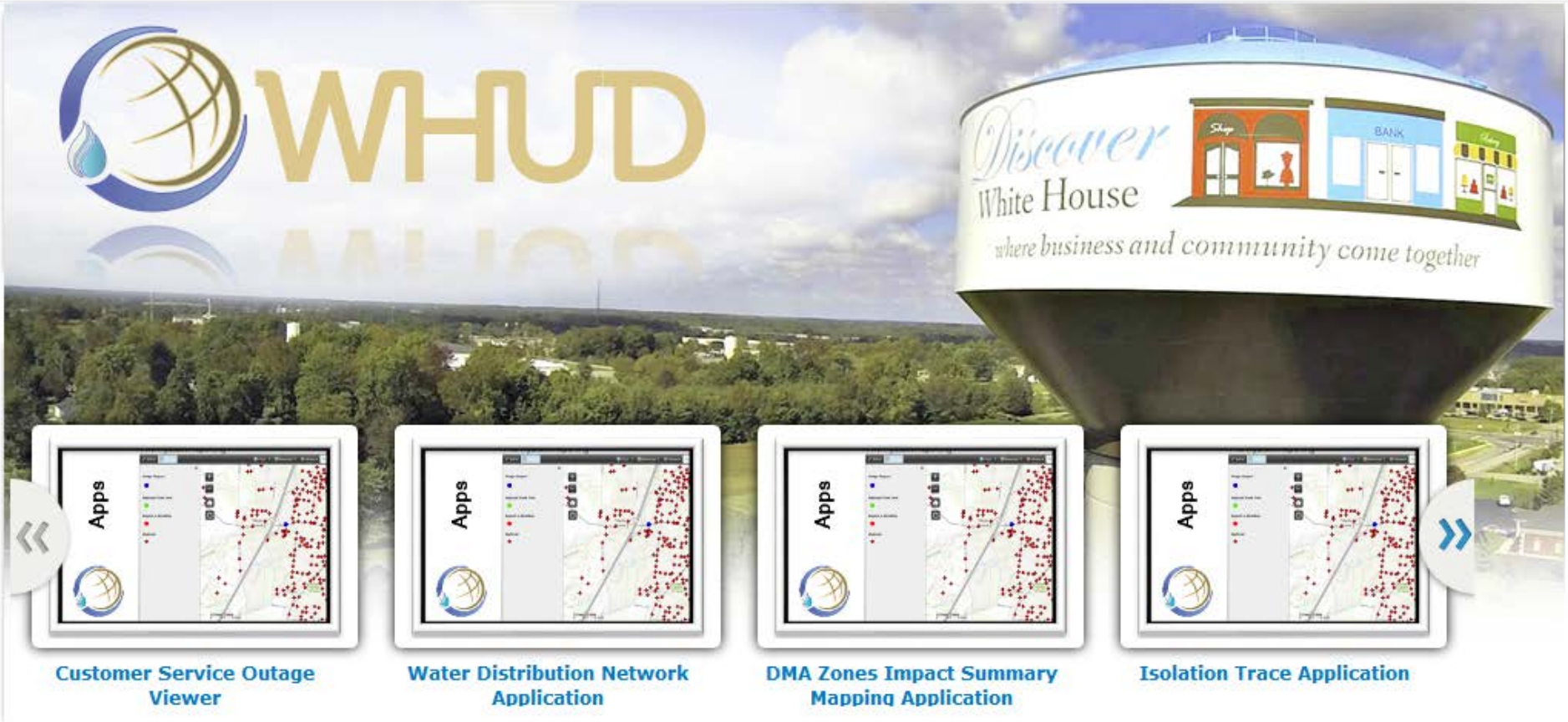
Backhoe Crews (12-4 crews) Complete WOs
Cross Connection (3) SR (incode)
* Leak Detection (2) CW
Inspectors (3) Inspect New Construct. CW
Maintenance (4) Preventative Maint./Repair (plant, facilities)
Treatment Plant (9) Operators
Inventory (1) storeroom
GIS (5) - CIS/GPS/CW
Management (6)
Finance (3)
Water meter (1) Manager

Building Facility Maintenance (2)
Manual Meter Readers (3) - Meter Finder

Microsoft

Contractors - yard repairs, bidder packages,
Fire Departments





Customer Service Outage Viewer

Water Distribution Network Application

DMA Zones Impact Summary Mapping Application

Isolation Trace Application

Create Solutions

- COTS Approach
- Configure first
- Limit Integrations
- Modify Workflows based on technology
- Quickly deliver apps to staff
- Approach is iterative

Mapping Portal Content

300 +

Maps, Layers, and Apps on WHUD Mapping Portals

Demonstrations

- I & I with contractors Using AGO
- Water Loss Dashboard

Value

- Map change request solution
  - Over 400 request
- Logger Planner and Valve Inspection Solutions
  - Save staff several hours a day for each
- Water Loss
  - See huge returns on quickly addressing leaks

Closing

- Find your organizations needs & utilize the Esri solutions meet them
- Fully Deploy your portal entire Utility
- Quickly role out your own solutions to staff & outside agency

Other WHUD Presentations

GeoEvent Processor for Water and Sewer Utilities
Tuesday, 8:30 AM
Carl Alexander, GIS Director

White House Utility District's Use of Esri ArcGIS for DMA Workflow Management
Map Gallery, Map ID 824
Pat Harrell, District Engineer