ArcGIS for Water Utilities Update

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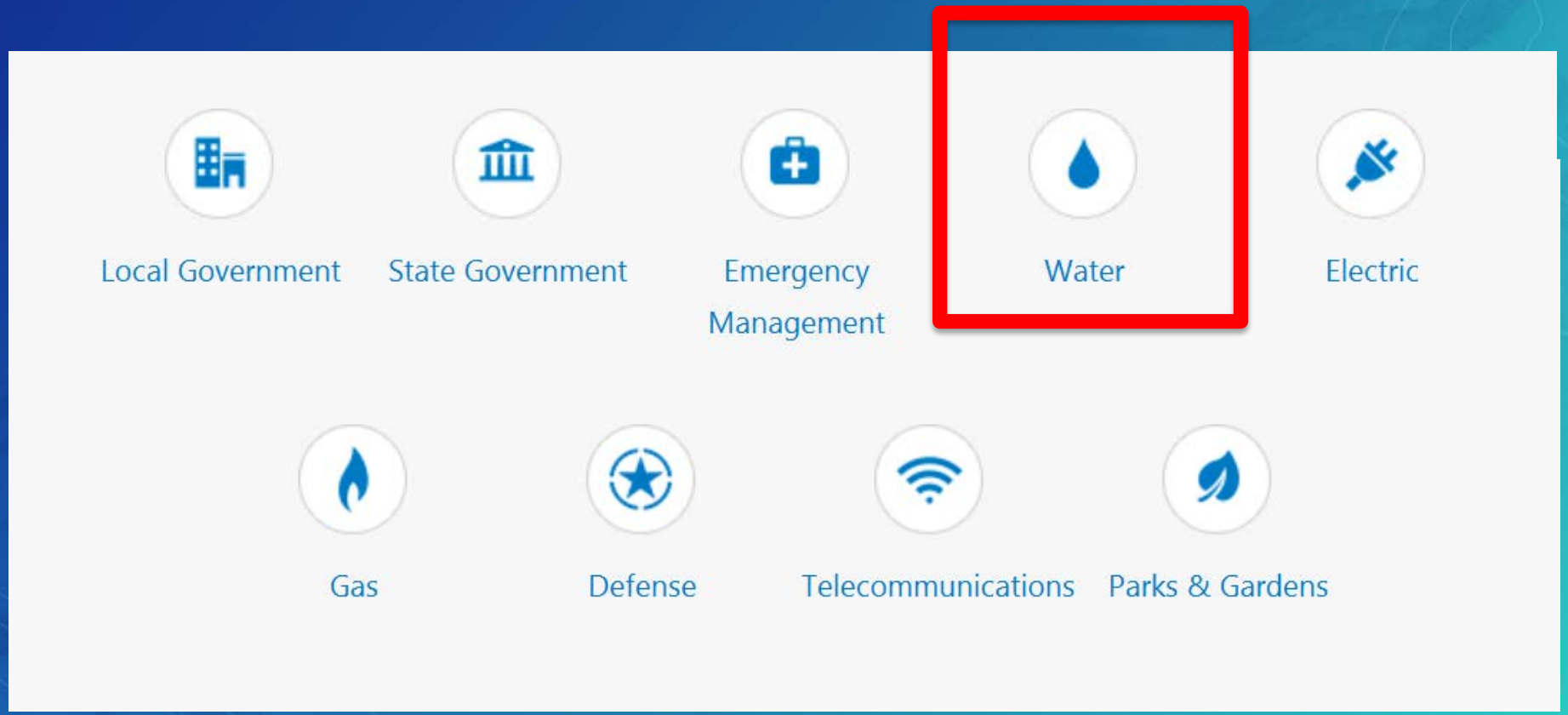
ArcGIS Includes 450+ Industry Specific Configurations

Collectively Referred to as ArcGIS Solutions

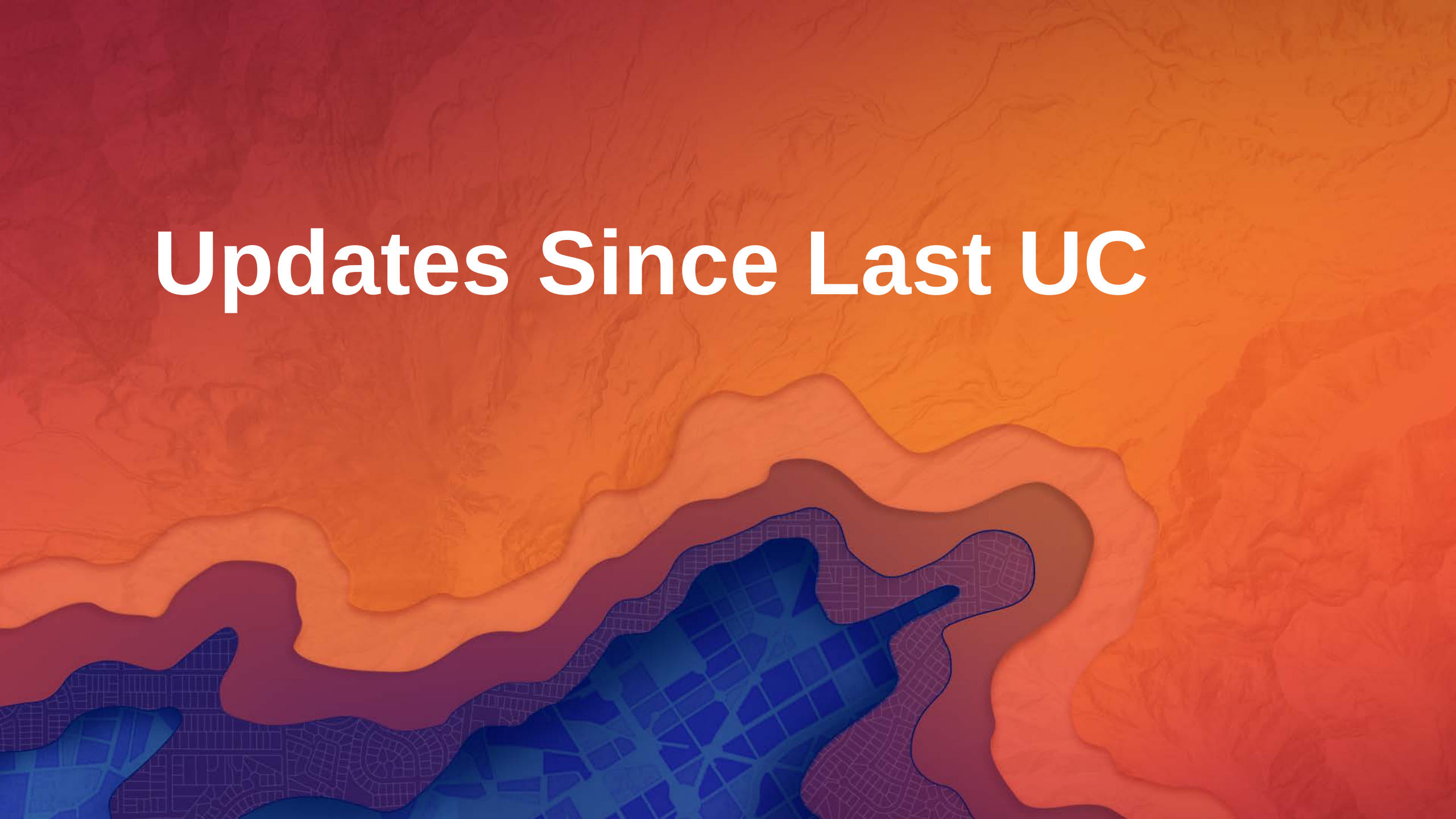


ArcGIS Solutions

A Core part of ArcGIS

- Free
- Supported
- Updated and enhanced
- Well documented
- Open source

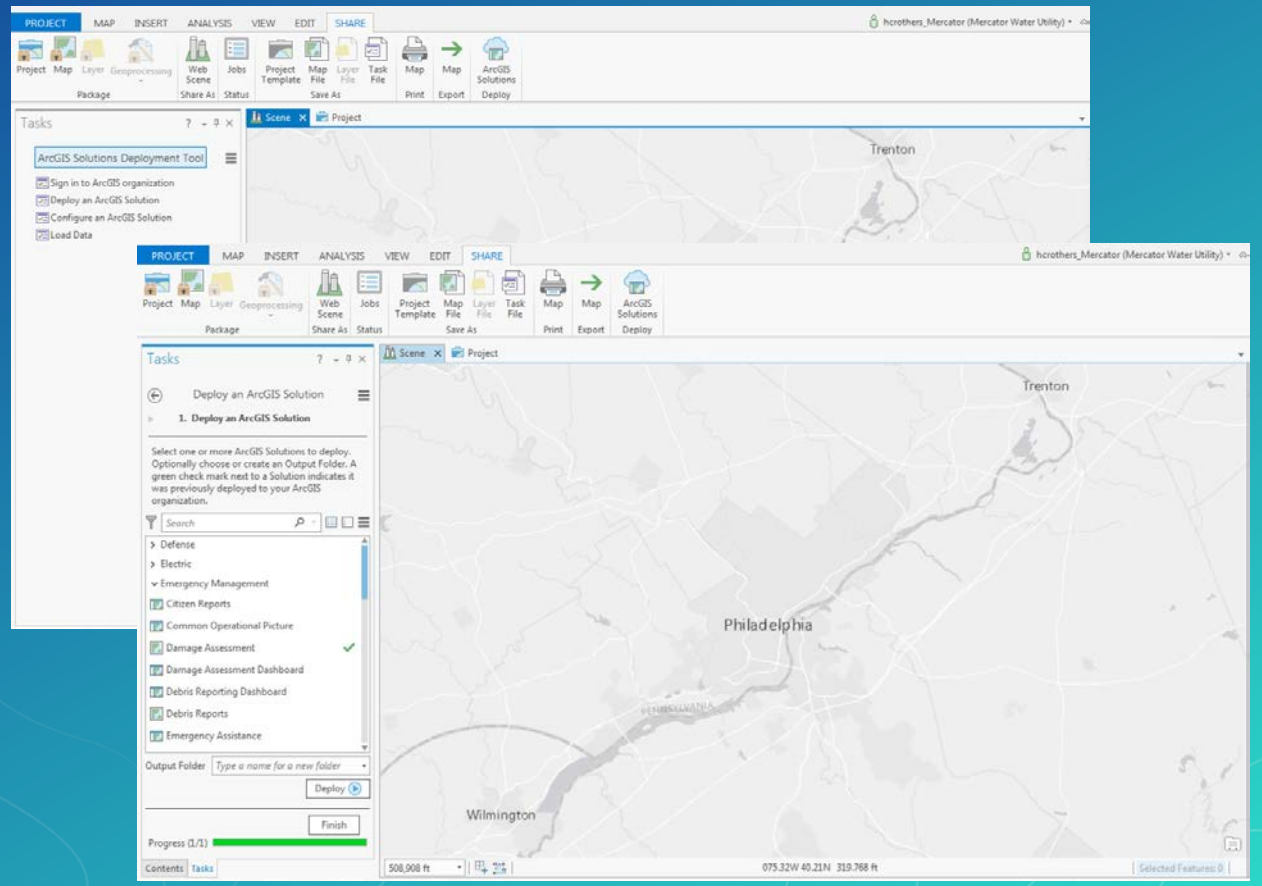
Updates Since Last UC



ArcGIS Solutions Deployment Tool

Automatically Deploy ArcGIS Solutions

- Deploy ArcGIS Solutions using ArcGIS Pro to ArcGIS Online or Portal for ArcGIS
- Currently includes 228 Solutions
- Has tasks to assist with configuration and data loading
- Delivered as an ArcGIS Pro Add-in



Removing Datasets from the Local Government Information Model

- March 2017 removed water, sewer and stormwater datasets from the LGIM
- Moved to series of geodatabases included with individual ArcGIS Solutions
  - Water Utility Network Editing and Analysis includes WaterUtilities.gdb & ReferenceData.gdb
  - Capital Planning Improvement includes WaterUtilties.gdb & CapitalImprovmentPlanning.gdb
  - Etc.
- Data Dictionary
  - http://solutions.arcgis.com/utilities/water/help/network-editing/DataDictionary/DataDictionary.Htm

Why Remove Water, Sewer & Stormwater from the LGIM?

- Simplify implementation
  - Most water utilities don’t use majority of LGIM
- Most water utility implementations use a mix of hosted feature layers and GDB(s)
  - The LGIM promoted storing data in a GDB
  - Many ArcGIS Solutions use hosted feature layers
- Reduce download size
  - LGIM sample data resulted in very large downloads
- Make implementation more modular
  - Laying groundwork for the utility network

Building New Stormwater Solutions

- Requirements:
  - Support both planned and ad-hoc asset inventory and inspection
  - Enable everyone in organization to view assets in a web browser
  - Enable select people to edit assets in a browser
  - Information model supports NPDES/MS4 compliance and includes natural and man-made assets
  - Fully leverage ArcGIS
  - Modernize use of services to power maps and apps
  - Simplify deployment and management

Stormwater Inventory and Inspection

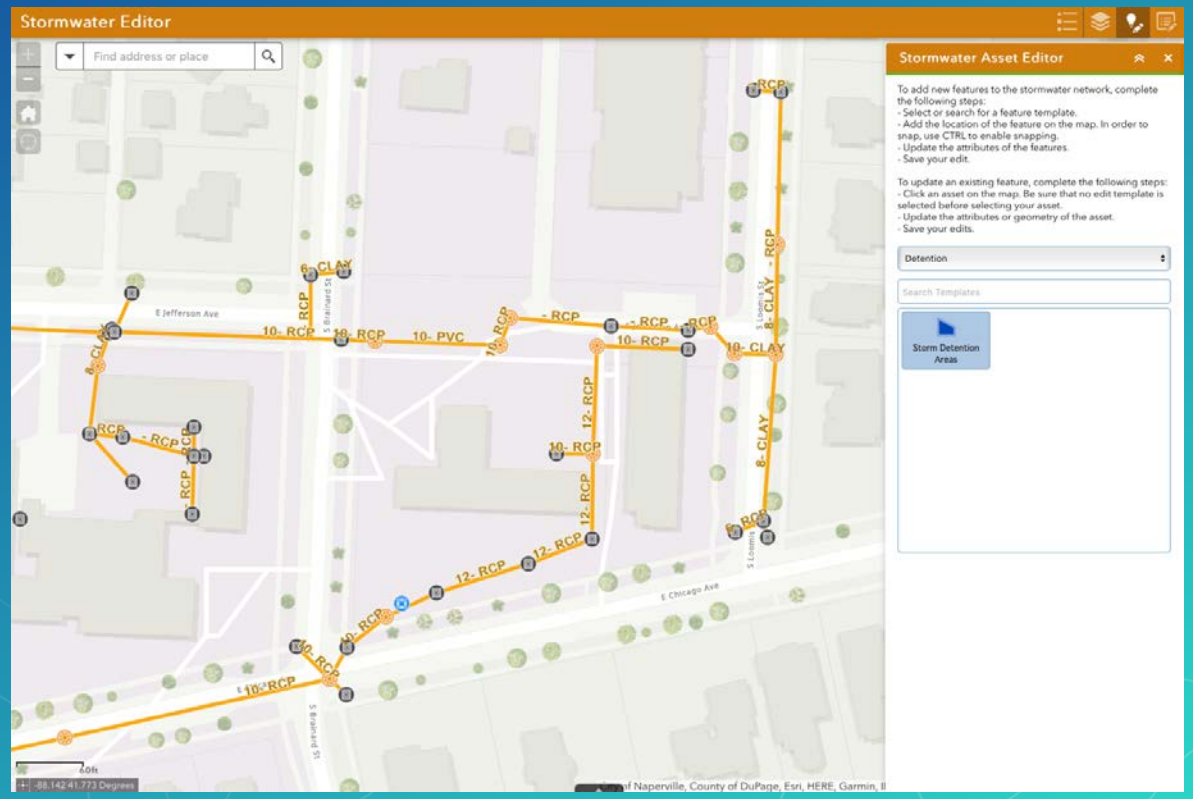
Deploys Set of Maps and Apps to Support Stormwater Field Inventory and Inspection Workflows

- Includes configurations for:
  - Best Management Practices (BMPs)
  - Culverts
  - Inlets
  - Manholes
  - Open Channels
  - Outfalls

Stormwater Viewer and Editor

Deploys Set of Maps and Apps for Viewing and Editing Stormwater Assets and BMPS in a browser or mobile browser

- Includes Configurations For:
  - Web applications
    - Stormwater Viewer
    - Stormwater Editor
  - Mobile web applications
    - Stormwater Mobile Viewer
    - Stormwater Mobile Editor
  - Survey123
    - Stormwater Map Change Request



Under the Hood of the New Stormwater Solutions

- A feature layer for each asset type including:
  - The asset layer
  - A 1:m relationship to either an asset specific inspection table or a generic inspection table
- No more “mega services” for the stormwater network that include all assets
  - Was too easy to break your maps and apps
- Easier for you to use multiple ArcGIS Apps
  - Web, Collector & Survey123
- Simple to deploy using the ArcGIS Deployment Tool
- Results in a more modular deployment
- Plan to update Water Distribution and Sewer Solutions to use same approach by end of year

Other Notable Changes

- A new geoprocessing process for Utility Isolation Trace
- Redesign of the abandon and un-abandon tools in Water Utility Network Editing and Analysis
- Capital Improvement Planning can use a geodesic length calculation

Demonstration

Plans

- Cost Analysis Widget for Web AppBuilder
- Under the hood updates to Water Distribution and Sewer Solutions
- Add additional Solutions to the ArcGIS Solutions Deployment Tool
- Utility Network Asset Packages:
  - Water
  - Sewer
  - Stormwater
- Update Solutions to support the Utility Network

Want more information?

- Explore solutions.arcgis.com
- Visit us in the UC Expo Utility Neighborhood

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