# The Geographic Approach to Infrastructure Resilience

Sunny Fleming

esri THE SCIENCE OF WHERE

# ArcGIS Enterprise

## The Toolbox for Infrastructure Resilience

### Establish a Baseline

- White House CMRA
- Climate Resilience Toolkit
- EPA Creating Resilient Water Utilities (CRWU)
- ArcGIS Field Mobility
- ArcGIS Pro

### Design Your Strategy

- ArcGIS Pro
- ArcGIS Business Analyst

### Communicate Priorities

- ArcGIS Hub
- ArcGIS Story Maps
- ArcGIS Dashboards

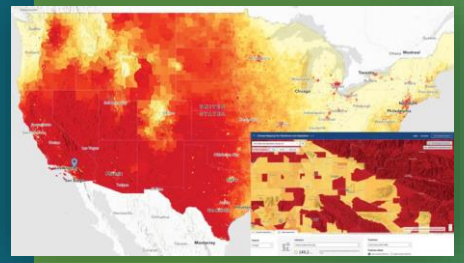
### Measure & Report Outcomes

- ArcGIS Dashboards
- ArcGIS Story Maps
- ArcGIS Hub Premium

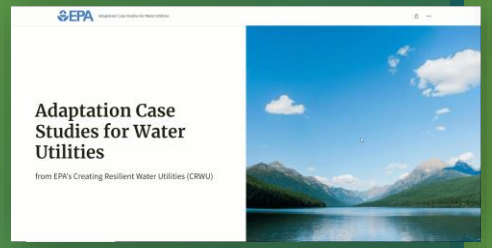
# Resilience and Adaptation

## Community Examples

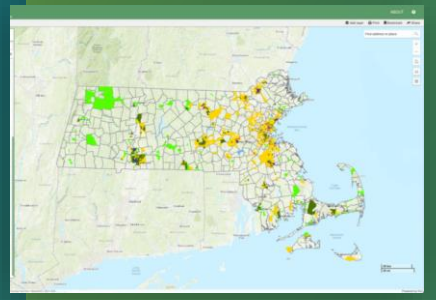
### Establish a Baseline



White House Climate Mapping Resilience and Adaptation




EPA Climate Resilient Water Utilities

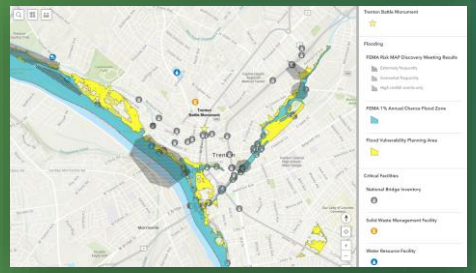


Resilient Massachusetts ArcGIS Hub

### Develop a Strategy

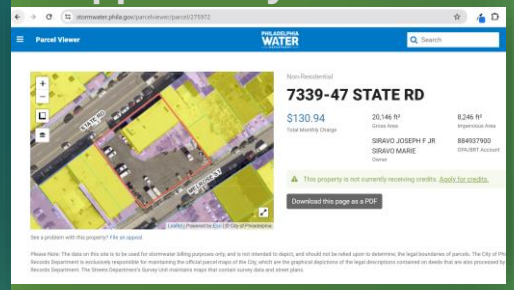
Florida EMA Hazard Mitigation Plan

Kaua'I Flooding Hazards & Parcel Viewer



City of Trenton, NJ Climate Hazard Experience Builder

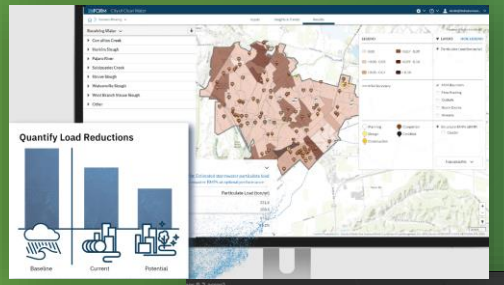
### Communicate Risk & Opportunity

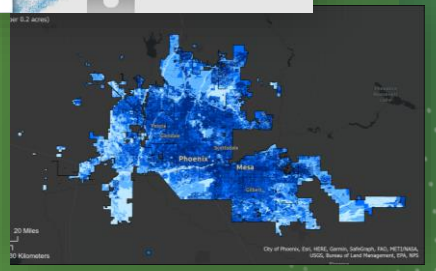



City of Philadelphia Green Stormwater Management Initiative

City of Tucson Climate Action ArcGIS Hub + Million Trees Initiative

### Measure & Report




2ND Nature CDOT MS4 Inspection (link above)

City of Phoenix Stormwater Runoff Potential (link below)

# Getting Started

## ArcGIS Solutions – “The Easy Button”

Contact Info
sfleming@esri.com

### Water Distribution Management

**Streamline creation and management of water distribution assets**

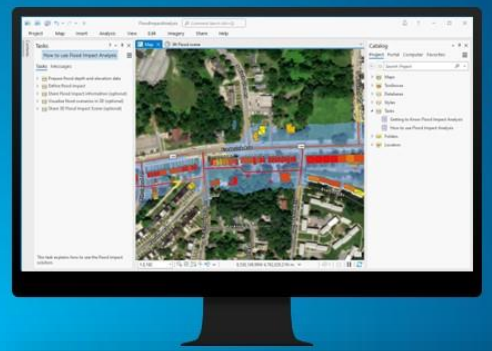
A series of apps help you develop an inventory from as-builts, cad files, and field data collection so you can develop a single digital record of assets and keep system information up to date.

**Improve asset management decisions**

A single digital source of truth that is up to date provides a better understanding of assets enabling the organization to make optimal asset management decisions.

### Flood Impact Analysis

**Visualize the impact of flood events**



An ArcGIS Pro project package used by GIS analysts to analyze the impact of flooding on critical infrastructure.

### Lead Service Line Inventory

**Streamline service line inventories**

An ArcGIS Pro project used by mapping technicians to capture service line information.

**Streamline service line inventories**

An ArcGIS Field Maps map used by a fieldworker to capture service line information.

Copyright © 2023 Esri. All rights reserved.