

GIS Tools in the Emergency Operations Center (EOC)

SDRGC Meeting 1/15/2025

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Presentation Agenda


County OES


**Emergency Operations
Center (EOC)**


GIS Tools
San Diego County
Emergency Map
Situational Awareness
Monitor
Power Outage
Dashboard
EOC Story Map
EOC GIS Project
Template (ArcGIS Pro)


Looking Forward


Questions

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County of San Diego Office of Emergency Services

Mission Statement:

- Coordinate all-hazard planning, mitigation, response, and recovery to foster strong, capable, and prepared communities.

What We Do:

- Coordinate the overall county response to disasters:
 - Alert and notify appropriate agencies when disaster strikes and coordinate all responding agencies.
 - Ensure resources are available and mobilized in times of disaster.
 - Develop plans and procedures for response to and recovery from disasters.
 - Provide preparedness materials for the public.
- Staff the Operational Area **Emergency Operations Center**, a central facility providing regional coordinated emergency response, and act as staff to the Unified Disaster Council.

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Emergency Operations Center (EOC)

- Provides centralized coordination for an effective response to disasters affecting a jurisdiction.
- Allows government to provide interagency coordination and executive decision making to support the incident response.
- The EOC does not command or control the on-scene response.



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Hallmarks of an EOC and Examples

- The EOC coordinates support through:
 - Information collection and evaluation
 - Priority setting and policy direction
 - Plans and determines current and future needs
 - Resources management
- Examples of OA EOC Activations in the last few years:
 - 2024 Atmospheric River
 - Numerous Wildfires (Border 32, Valley, West, ...)
 - 2022 Tsunami Advisory
 - 2021 Orange County Oil Spill
 - Covid-19 Pandemic



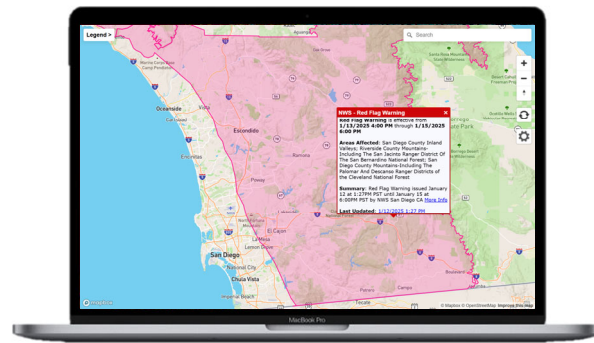
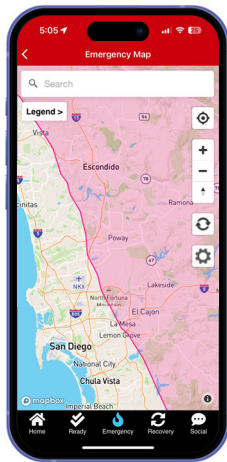
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GIS Tools in the EOC



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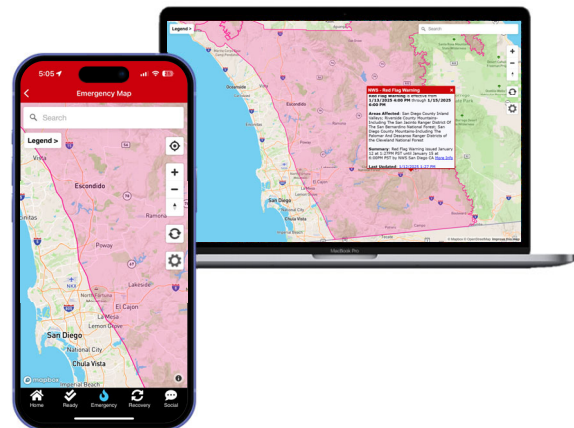
San Diego County Emergency Map



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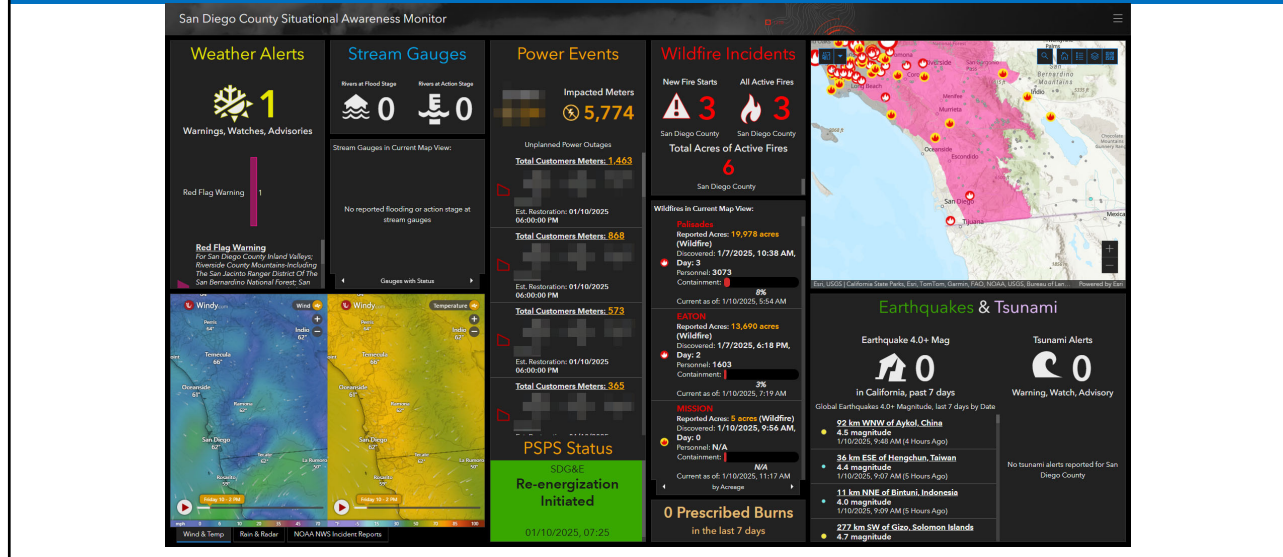
San Diego County Emergency Map

- Emergency Public Information
- Aggregated, vetted, and verified information:
 - Hazard location
 - Temporary evacuation points
 - Shelters
 - Evacuation Orders/Warnings & Shelter-in-place
 - Hazard-related road closures
 - Selected weather alerts



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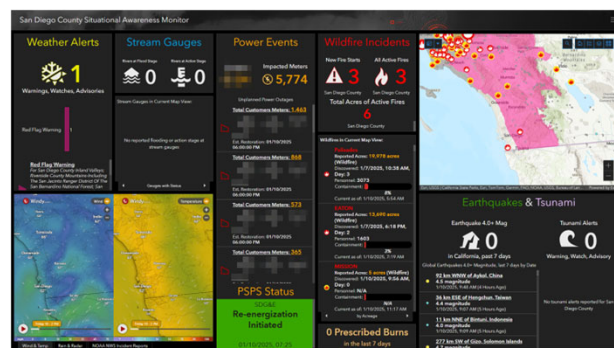
Situational Awareness Monitor



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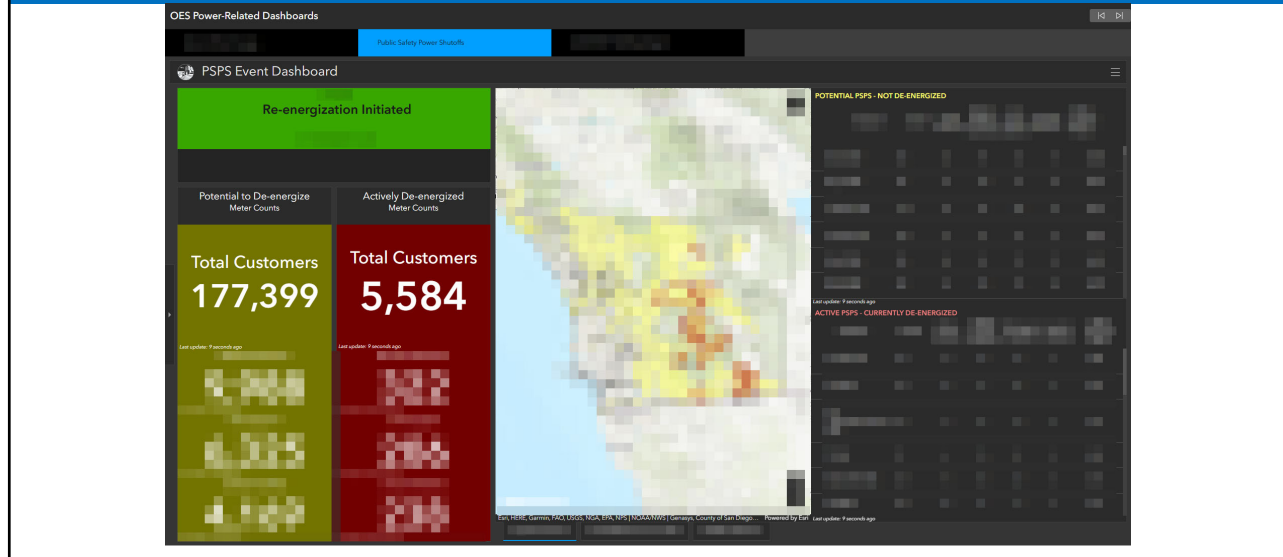
Situational Awareness Monitor

- Purpose: Situational Awareness; monitoring multiple data feeds before disaster strikes
- Highlights:
 - compilation of public and secure data feeds
 - ArcGIS Living Atlas / Live Feeds
 - Utility Outage feeds
 - Arcade expressions for custom display and visualization
 - Links to multiple other websites and applications



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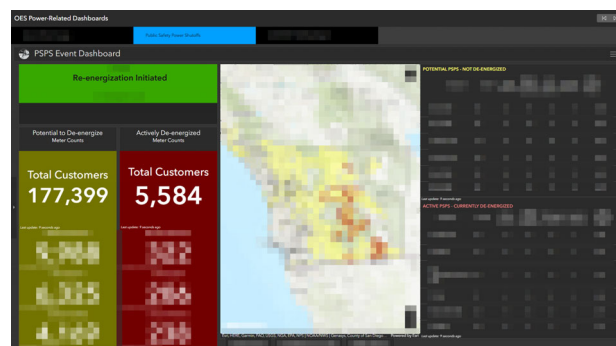
Power Dashboards – Public Safety Power Shutoffs



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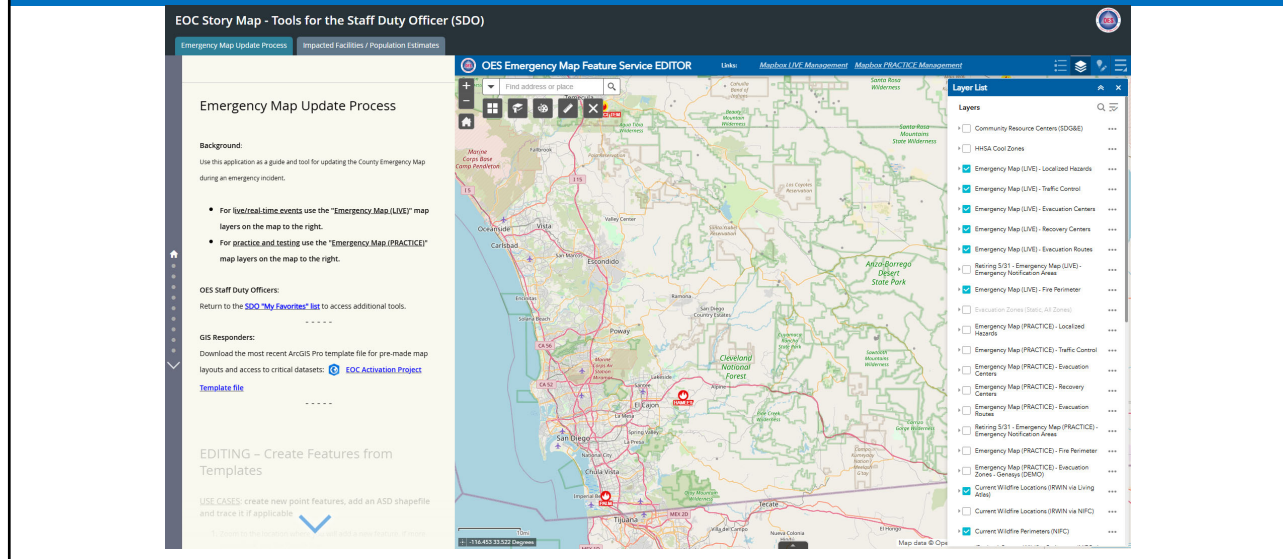
Power Dashboards – Public Safety Power Shutoffs

- Purpose: Tracking and awareness of PPS events during dangerous fire weather
- Highlights:
 - Compilation of partner feeds, ArcGIS Living Atlas, County and SanGIS data
 - Provides method for OES staff to view details of utility notifications



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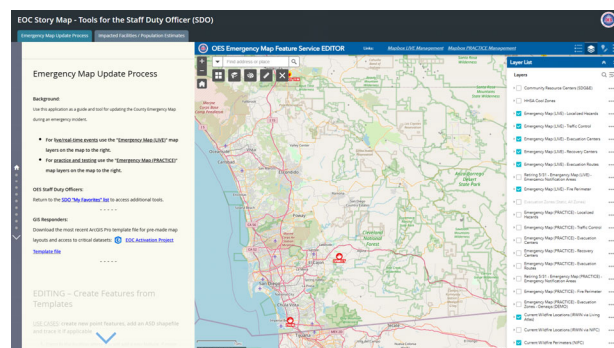
EOC Story Map – Tools for the SDO



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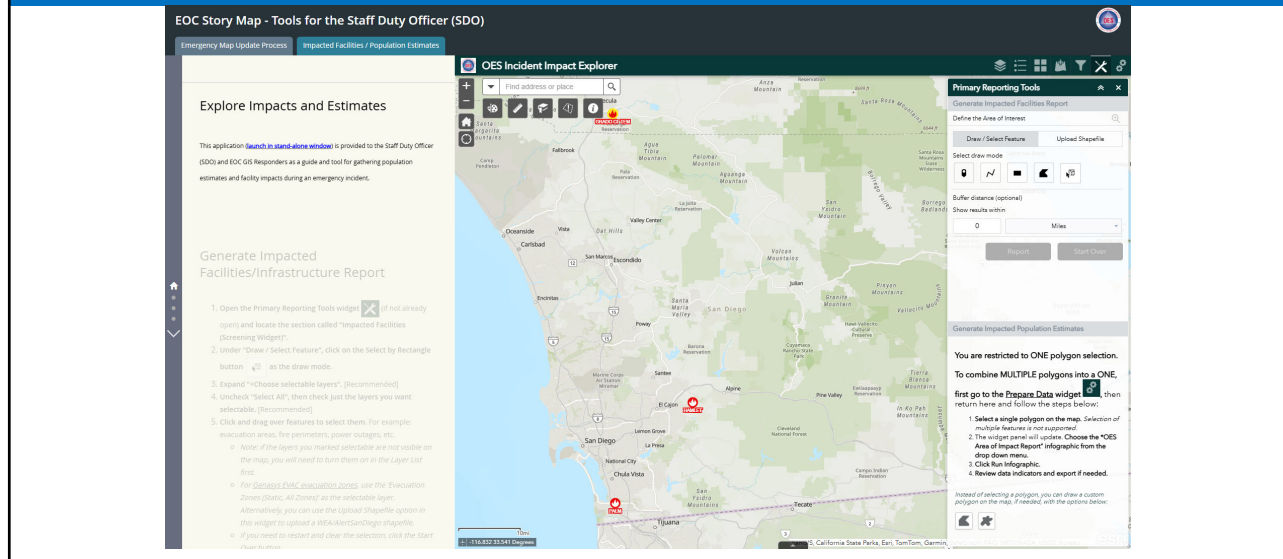
EOC Story Map – Tools for the SDO

- Purpose: Playbook-style, interactive application of common GIS workflows
- Tab#1: Emergency Map Editing
 - Highlights:
 - Identifies sample use cases to select appropriate workflows
 - Panel contents links guide user between sections
 - Practice layers are available for training and onboarding



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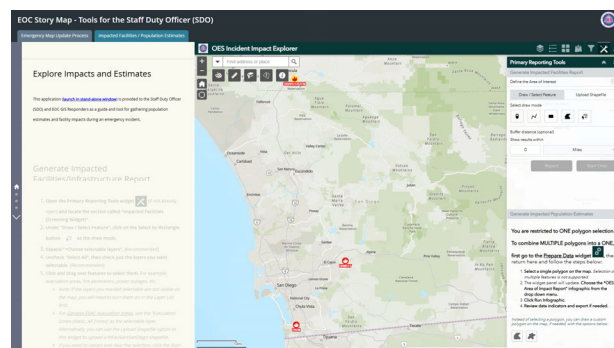
EOC Story Map – Tools for the SDO



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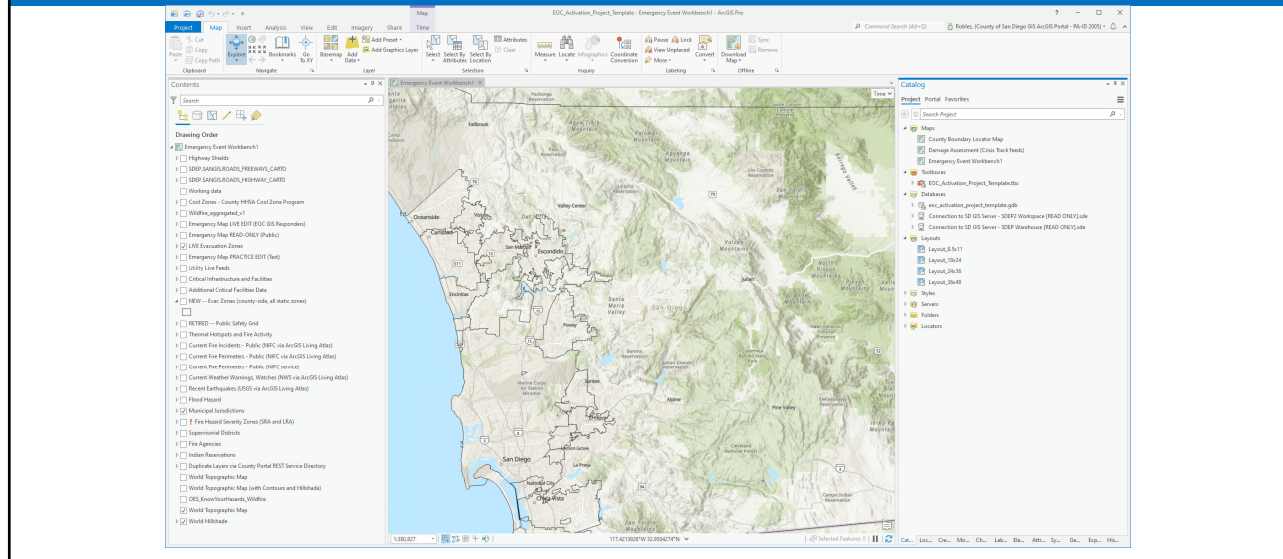
EOC Story Map – Tools for the SDO

- Purpose: Playbook-style, interactive application of common GIS workflows
- Tab #2: Impact Facilities and Populations
 - Highlights:
 - Use of ArcGIS Online feature services and secure County Portal feature services
 - Variety of inputs (i.e. hazard areas) can be used to create reports of intersecting facilities and infrastructure
 - Leverages custom population infographics via ArcGIS Business Analyst to understand unique populations



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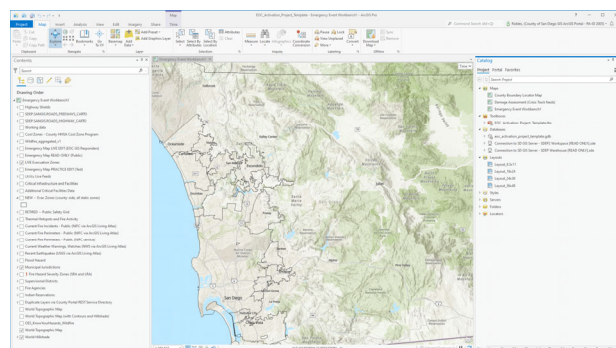
EOC GIS Project Template (ArcGIS Pro)



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EOC GIS Project Template (ArcGIS Pro)

- Purpose: Provides EOC GIS Unit with a method of quickly creating a new incident Project file
- Highlights:
 - Connections to live data feeds and reference layers
 - Pre-built layout templates
 - Custom toolbox for EOC tools/models



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Looking Forward



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Looking Forward

- EOC Story Map redesign using Experience Builder application
 - Improved functionality, plus utilization of newer browser technology
 - Transition away from depreciated tabbed Story Map template (Retiring Fall 2025)
 - Transition away from depreciated Web AppBuilder (Retiring Q4 2025)
- Emergency Map updates
 - Automating more processes to reduce manual steps
- Continued system integrations and automations, where feasible
- Continue to apply lessons learned from previous disasters

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