



ENVIRONMENT AND NATURAL RESOURCES WEBINAR SERIES

IMPROVING ENVIRONMENTAL PERMIT COMPLIANCE AND INSPECTION THROUGH GIS

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NIKKI GOLDING

ENVIRONMENT AND NATURAL RESOURCES

Webinar Series

GIS Trends in Environment and Natural Resources

May

Improving Environmental Permit compliance and Inspection through GIS

Today

Improving Civic Engagement with GIS

August 3

Understanding Environmental Impacts through GIS

September – TBD

Water Quality Inspections

October - TBD

TRENDS



#1 Mobile Internet



#2 Automation of
knowledge work



#3 Internet of Things



#4 Cloud



#5 Advanced robotics

McKinsey and Company

MISSION

To help environment and natural resource agencies leverage location-based information to:

1. Deliver improved service,
2. Make better decisions, and
3. Effectively engage citizens.

Spatial enablement of the permitting process. Reporting to EPA.

PROCESS

Air and Remediation, Water, Land

Determine Approvals Necessary for Activity

- General Permits

—————> Issued within Days

- Public Hearing

—————> Notice of Public Hearing

—————> Draft Approval – Models, Env. Polices, Regulatory Req., Scientific Input

—————> Additional Hearings? Feedback Review? Appeals?

—————> Redraft as required for Approval

—————> Permit

EPA Reporting

Citizen Engagement

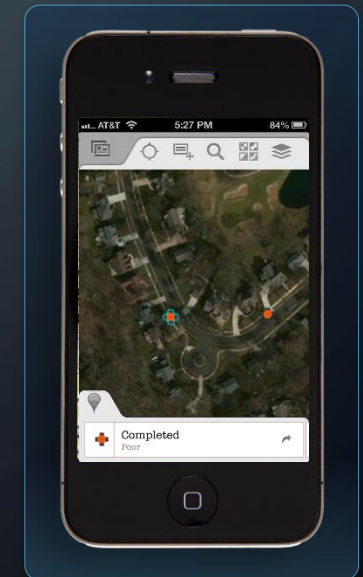
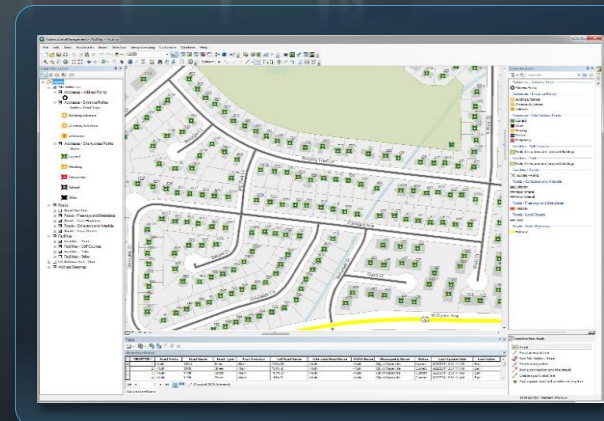
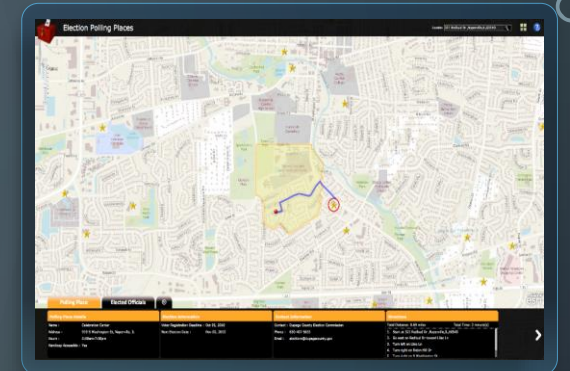
CHALLENGES

- Increased demands (invasive species, oil and gas, water quality, development etc)
- Doing more with less and Retiring workforce
- Data Quality, timeliness
- Legacy solutions and workflows (creating inefficiencies, limiting engagement and input from the public, inefficiencies in the field)
- Limited visibility in to operations

LOCATION FOR THE ORGANIZATION

Business Value

- Improved decision making
- Improve timeliness and accuracy of data
- Streamline field operations
- Increase operational awareness
- Improve service to business community
- Increase community engagement and feedback

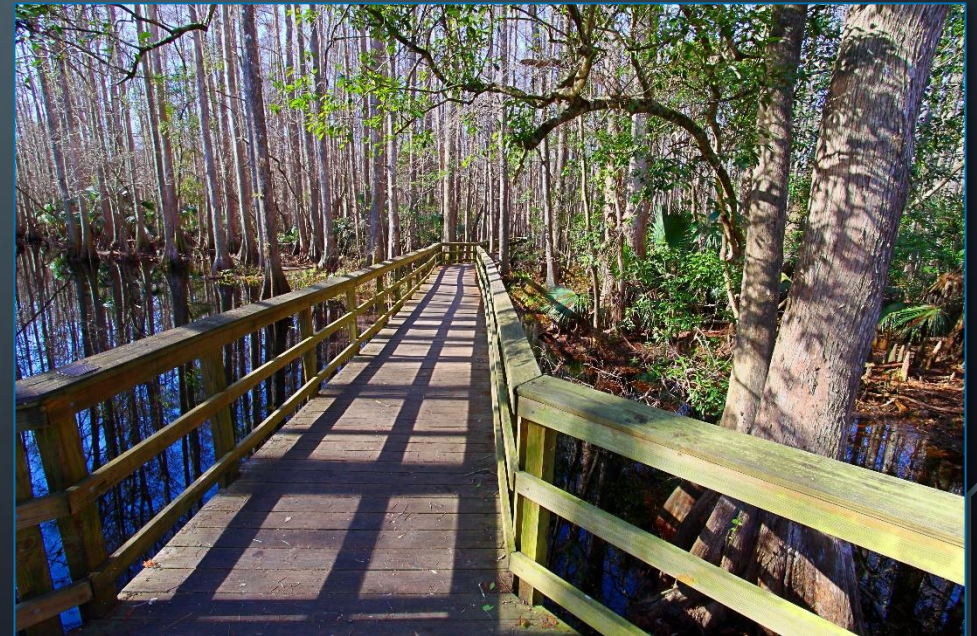
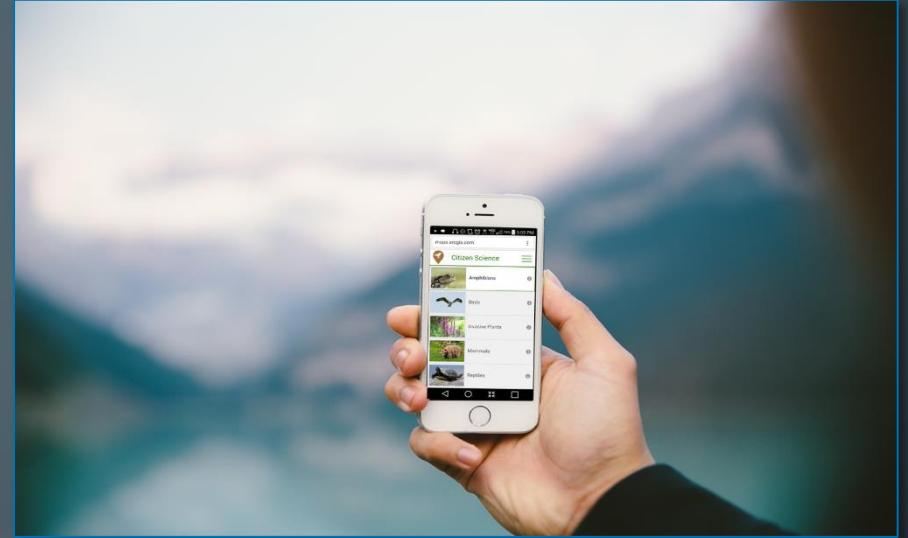




APPLYING WEBGIS TO IMPROVE ENVIRONMENTAL PERMIT COMPLIANCE AND INSPECTION

A COMMON EXPERIENCE....

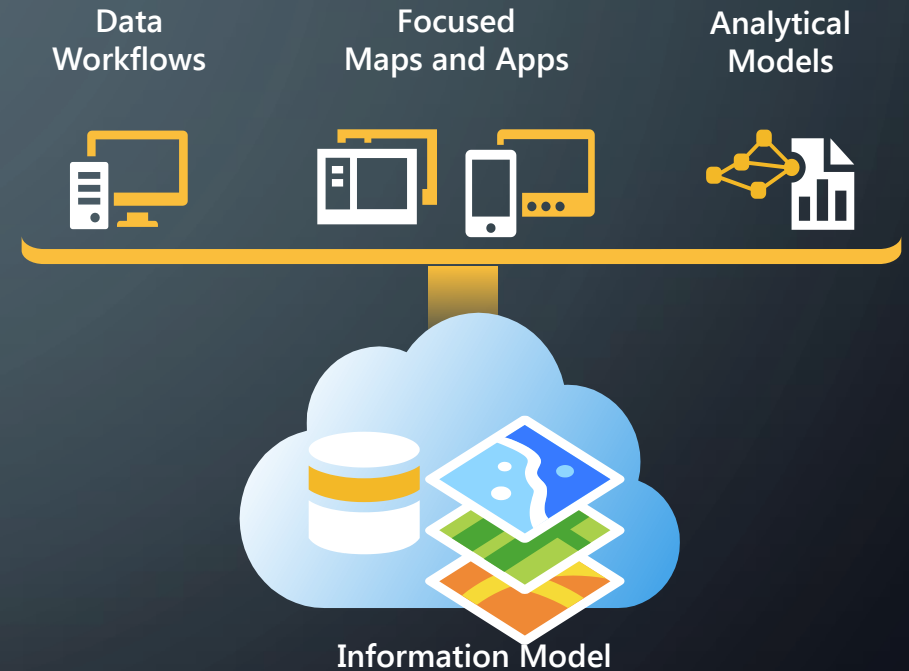
- Management and protection of natural resources
- Land management and recreation
- Ecosystem restoration
- Species and habitat mapping / conservation
- Public engagement



ARCGIS FOR STATE GOVERNMENT

Esri solutions for government customers

- Series of useful maps and apps focused on government work
 - Configurable and extensible
 - Freely available and fully supported
- Community of users
 - Best Practices / Implementation Support
- Network of Esri Services and Partner offerings
 - Help users implement, sustain and enhance



.....Available on-premise or in the cloud

ARCGIS FOR STATE GOVERNMENT

Our mission is to help you.....

- Deliver maps and applications quickly throughout your organization
- Stay current with future releases / avoid legacy technology
- Deploy a geospatial platform that can be leveraged by many
- Leverage the collective knowledge of the entire community
- And do this with....less staff, budget, and technical expertise



Transportation



- Railroad Crossing Inspection
- Road Closures
- Bridge Inventory
- Environmental Screening
- Crash Analysis
- Guardrail Inventory
- Pavement Marking Inventory
- Sign Inventory
- Signal Inventory
- Transportation 511

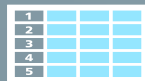
Public Health

- Beach Monitoring
- Water Quality Monitoring
- Restaurant Inspection
- Restaurant Inspection Results
- My Health Services
- Birth Outcomes
- Birth Outcomes Briefing
- Model Organization



Secretary of State

- Early Voting
- Polling Place Locator
- Election Results
- My Elected Representative



Emergency Management

- Situational Awareness
- Flood Planning
- Special Event Planning
- Emergency Assistance
- Evacuation Zones
- Road Closures
- Damage Assessment
- My Hazard Information
- EM Maps
- Model Organization
- Briefing Book
- Citizen Reports
- Common Operational Picture
- Incident Analysis Viewer
- Operations Response
- Photo Survey
- Shelter Locator



- Public Information Map
- Local Impact Map
- Road Closures
- CAMEO Tools
- Incident Briefing
- Health and Safety Reports
- Debris Reporting
- Floodplain Inquiry
- Emergency Assistance
- Evacuation Zone
- Incident Status Dashboard
- Logistics Planning

Environment and Fish and Wildlife



- Permit Status
- Permit Inspection
- Hunting License Locator
- Water Access Locator
- Wildlife Management Area Locator
- Environmental Screening
- Environmental Impact Polling
- Trail Locator
- Citizen Science Reporter
- Citizen Science Manager
- Model Organization
- Impact Briefing
- Water Quality Inspections
- Water Quality Results
- Park and Recreation Locator

Economic Development

- Live, Work, and Locate
- Incentive Zones
- Site Selector
- Event Locator



GIS/IT

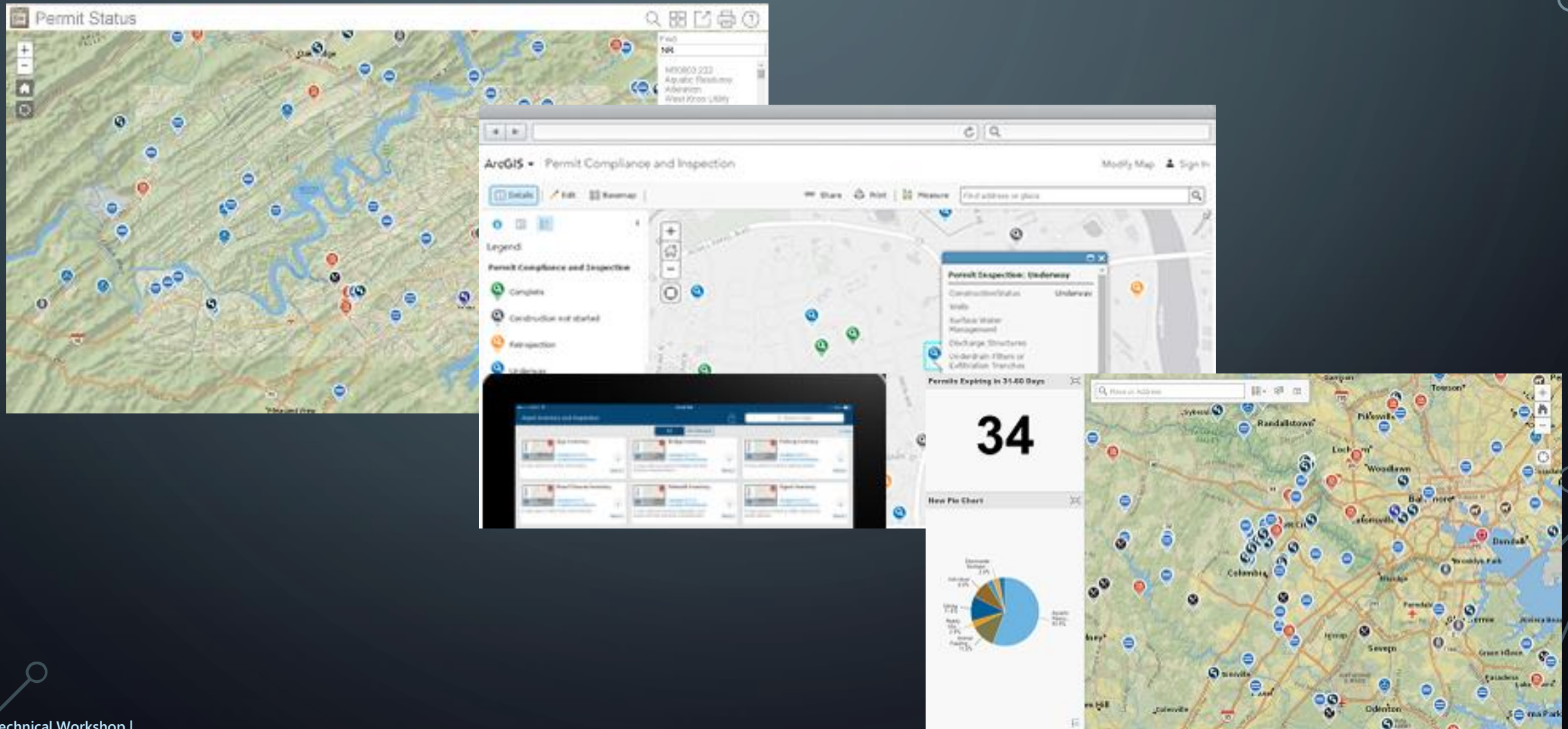
- Executive Dashboard
- Briefing Book
- Community Parcels
- Community Addresses
- Maps and Apps Gallery
- Crowdsourcing Manager
- Crowdsourcing Reporter
- Service Catalog/Hosted Services
- Model Organization
- PLSS



ARCGIS FOR STATE GOVERNMENT

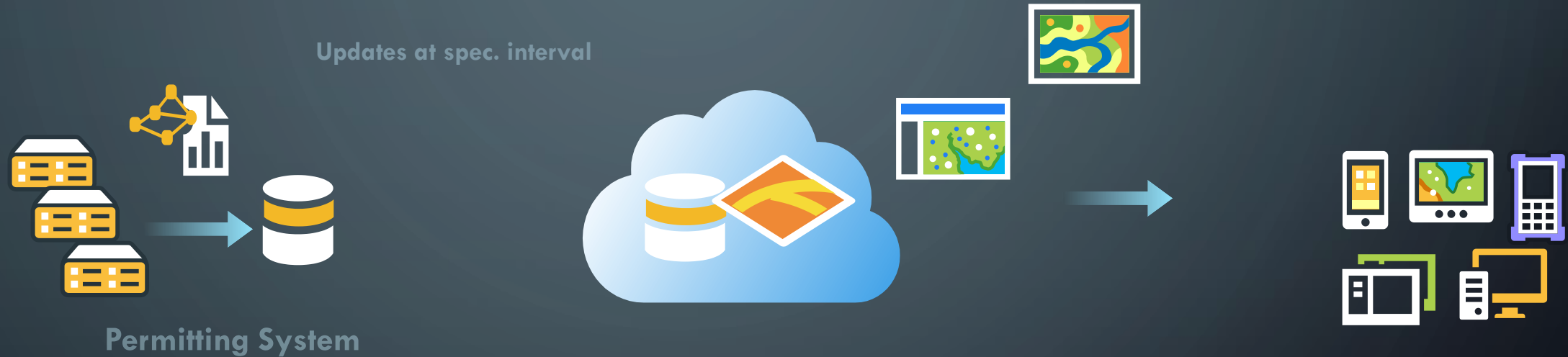
PERMITTING SOLUTIONS

A collection of applications to support the permitting process



PERMITTING SOLUTIONS

Scripting and Publication Workflow



Leverages feature collections to scale...

...and supports automated updates

The background is a dark blue gradient. In the corners, there are white, stylized circuit board traces. These traces consist of straight lines that turn at right angles, ending in small circles, resembling a PCB layout. The traces are located in the top-left, top-right, bottom-left, and bottom-right corners.

GETTING STARTED. NEXT STEPS.

Environment and Natural Resources

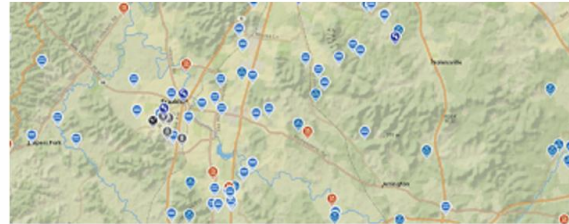
Enable constituents to discover timely information around permitted activities, understand the water quality landscape in the state, and provide a means to discover recreational activities in the state.



Facilitate Permit Inspection

An application configuration that enables people to collect permit compliance information in the field. The information can be quickly submitted back to the office in support of reporting compliance status surrounding development activities.

[Download](#)



Determine Permit Status

Permit Status is an application that allows stakeholders to search for permitted activities, determine the status of permits, and find out what type of activity is going on close by.

[Download](#)
[Try it Now](#)

Get Started

Learn how to leverage your geographic information and the ArcGIS Platform to improve state activities.

[GET STARTED](#)

Online Mapping Platform

Our ArcGIS Online model implementation helps you organize your geographic information and promote collaboration in your organization.

[LEARN MORE](#)

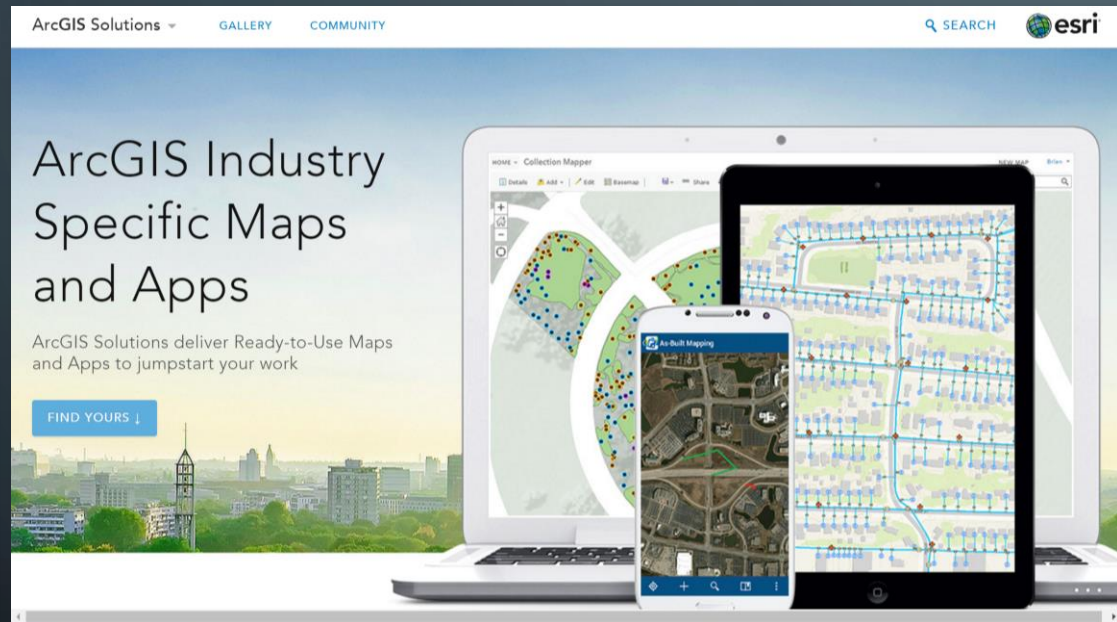
From our Blog

[Community Contributions Update](#)

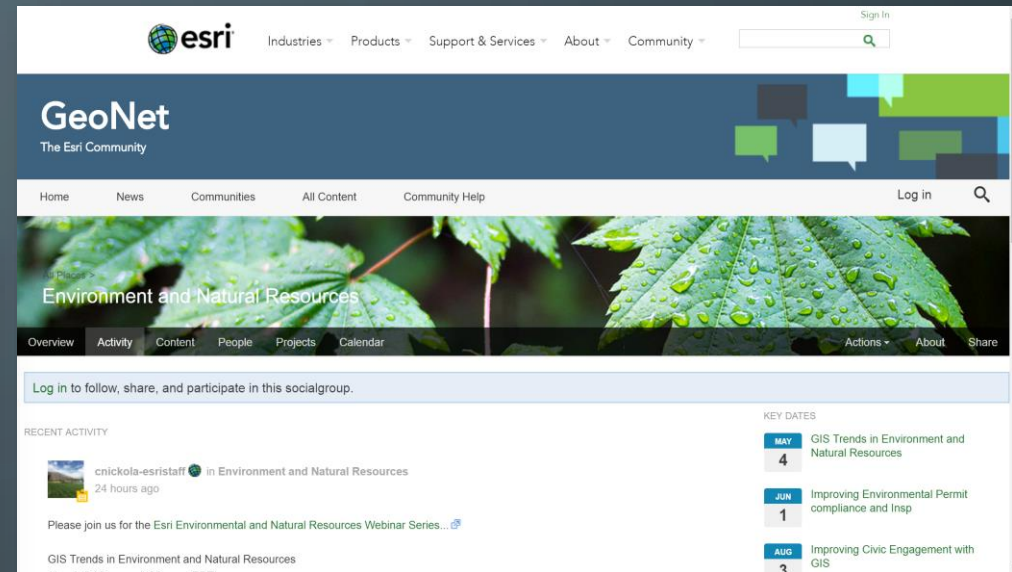
[What's New in ArcGIS Online](#)

THE COMMUNITY

It's not just about the technology



Destination where organizations can collaborate



Have ongoing dialog, share success stories and learn from others

Questions

Please enter in Question form

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Thank You



<http://solutions.arcgis.com>



<https://geonet.esri.com/groups/env>



@ArcGISStateGov



<http://esri.github.com>



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