



EPA GeoPlatform: Increasing the Value of Monitoring and Modeling at EPA

Environmental Measurement Symposium
August 7, 2012



GeoPlatform Goals

- Share data
- Collect data and products from users
- Collaborate around maps
- Grow a community
- Provide better solutions



Monitoring, Modeling and Mapping

Monitoring

- Most monitoring data is location specific
- Much is tied up in tabular formats
- Maps often only used to show location
- Bringing the two together is becoming easy



Monitoring, Modeling and Mapping

Modeling

- Many EPA modeling efforts are spatially explicit
 - Chemical exposure models
 - Air dispersion models
 - Stream loading models
- Monitoring data as inputs to models
- Monitoring data as validation of models



Monitoring, Modeling and Mapping

Mapping

- Mapping interfaces are great integrators
- EPA modelers expressed interest
- Model results as context for monitoring data
- GeoPlatform can meaningfully combine these data
 - Easy to use
 - Find data for download & find locations for action
 - Tell effective stories



What is a GeoPlatform?

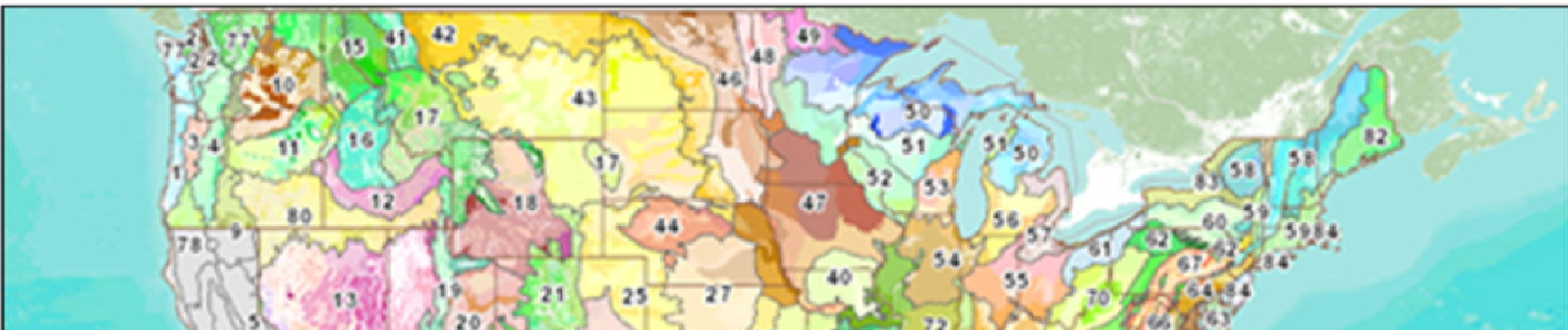
ONE EPA
Workplace

EPA Geo Resources

EPA GeoPlatform

Enterprise Licenses

GIS Community



EPA's GeoPlatform is now available!

Maps, data, services, software, and infrastructure at your fingertips.
Check out the [Map Gallery](#).



What is a GeoPlatform?

- Evolution of catalogs for immediate use of data
- Hosting environment for preferred data sets
- Scalable for a wide variety of needs
 - individual work
 - small or large groups
 - public access
- Fusion of internal and external data and services



EPA GeoPlatform

- Infrastructure for sharing geospatial information
 - One size does not fit all... but one size fits “most”
- Foster innovation with rapid prototyping
 - Develop operational capabilities for pilot applications
 - Continually enhance the solution over short iterations
- Reuse of services and code
- Work with our partners
 - Federal GeoPlatform, state, local and academic



Current Status

- Over 300 registered users
- Over 1,000 items
- Round 1 pilots nearing completion
 - Oil and gas enforcement targeting
 - Community grants
 - Environmental justice screening tool
- Additional pilots in planning stages
- Access to EPA staff via intranet
- Anticipating broader access in the FY 2013



GeoPlatform Interface

Most Visited | EPA E-Mail | EPA GeoPlatform | EPA GIS | EAD Project Tracker | Google Docs | EDG | EPA Geo Data and Ser... | How's My Waterway | ArcGIS - Community-F... | C-FERST

Show 858 results

Relevance Title Owner Rating Views Date

Nutrients Success Story Map
Nutrient Success Stories
Web Map by tkerchko
Last Modified: June 8, 2012
★★★★☆ (1 rating, 1 comment, 11,112 views)

Concluded Enforcement Cases FY 2011
Concluded EPA Enforcement Cases: FY 2011
Web Map by USEPA.AGOLP
Last Modified: April 25, 2012
☆☆☆☆☆ (0 ratings, 0 comments, 6,720 views)

Energy Extraction Map for Enforcement Pilot
Energy Extraction Map for Enforcement Pilot
Web Map by landsman.allison_EPA
Last Modified: July 23, 2012
☆☆☆☆☆ (0 ratings, 4 comments, 1,110 views)

Oil and Gas Wells
This map shows the cumulative and yearly production at wells in the United States of gas, oil and water. The production totals can be viewed at the state and county levels, and in ...
Web Map by raff.zach_EPA
Last Modified: May 15, 2012
☆☆☆☆☆ (0 ratings, 0 comments, 1,088 views)

NWQI_HU12s
NRCS identified 12 digit HUC priority watersheds through the help of local partnerships and state water quality agencies. NRCS will continue to coordinate with local and state agencies, conservation districts, nongovernmental organizations and others to implement this initiative. This strategic approach will leverage funds and provide streamlined assistance to help individual agricultural producers take needed actions to reduce the flow of sediment, nutrients and other runoff into impaired waterways.
Feature Service by purify.johnnie_EPA
Last Modified: July 23, 2012
☆☆☆☆☆ (0 ratings, 0 comments, 861 views)

EPA International Programs

More Information
What is a map?
Learn how to make a Web map.
Create your own Web map and save it online.

Left Sidebar:
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Packages
Other Map and Layer files
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Related Searches



GeoPlatform Gallery

US EPA GeoPlatform | EPA Geo Resources

www.geoplatform/

EPA GeoPlatform Enterprise Licenses GIS Community Policies Get Help

Featured Applications

- All EPA Grants
- Community Based Grants

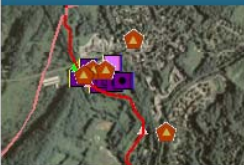
Categories

- Agriculture
- Air
- Boundaries & Base Data
- Climate Change
- Ecological
- Emergency Response
- Energy
- Enforcement
- Grants
- Land & Cleanup
- Pilots
- Regulated Facilities
- Waste
- Water

Map Gallery: Featured Content on EPA's GeoPlatform

Search maps


EN2012 Demo



Demo

[Show more...](#)


Region 2 NPL vs Township ...



This map service compares 2008 NPL contamination boundaries to Final NPL ...

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Koppen-Geiger Observed ...



This time-enabled Map displays observed and predicted climate shifts from

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Natural Gas Mining



Map of the DOE & EPA Top 100 Gassy Coal Mines in the US, Coalbed Methane ...

[Show more...](#)


National Wetlands ...



Map showing status and detail of the National Wetlands Inventory

[Show more...](#)


Soil Survey Map




Map showing U.S. Soil Survey Data including SSURGO and STATGO

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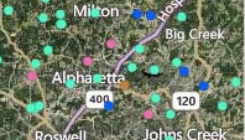
Priority Watersheds, EPA ...



U.S. Census 2010 ...

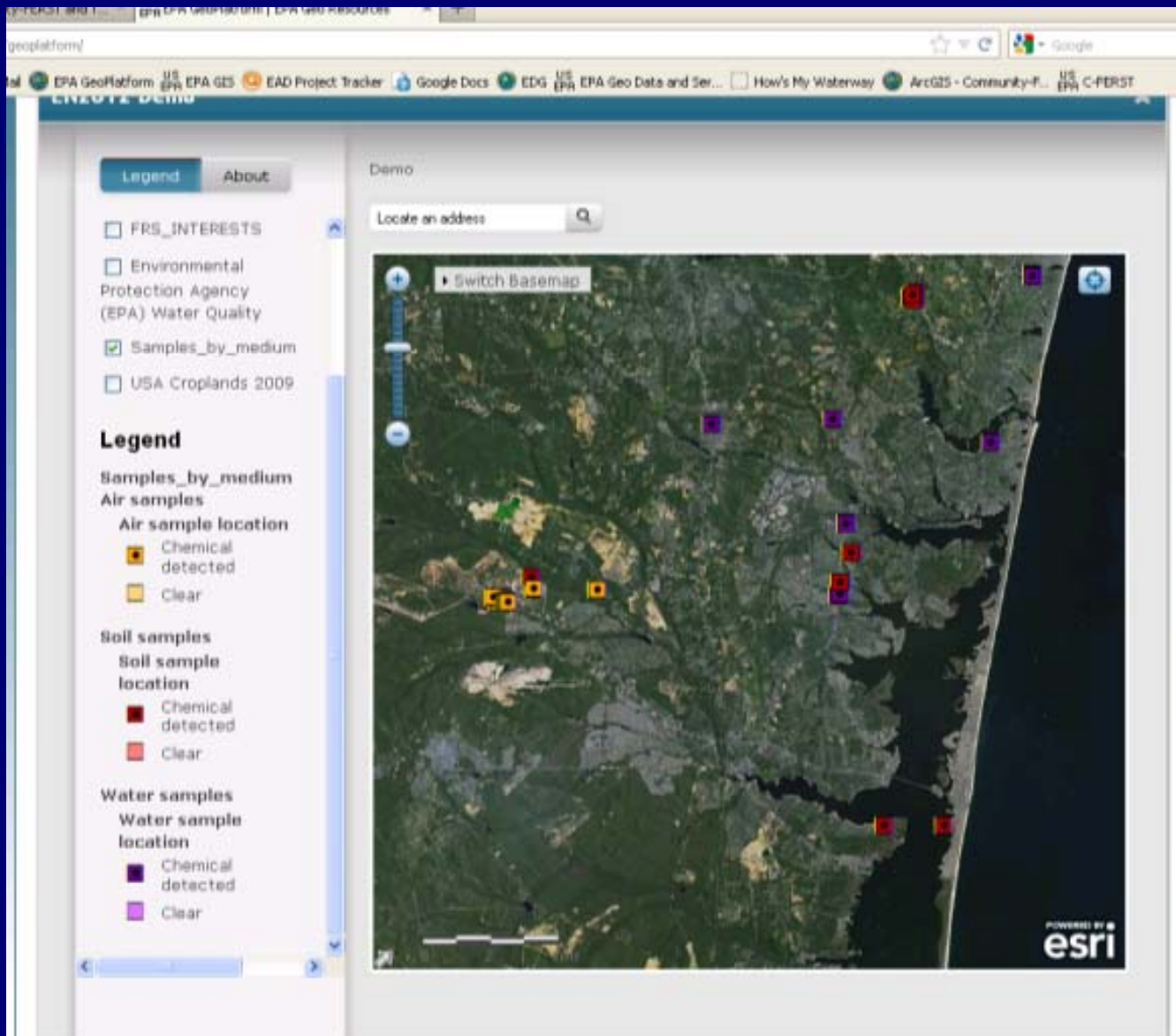


Dun & Bradstreet Crop ...



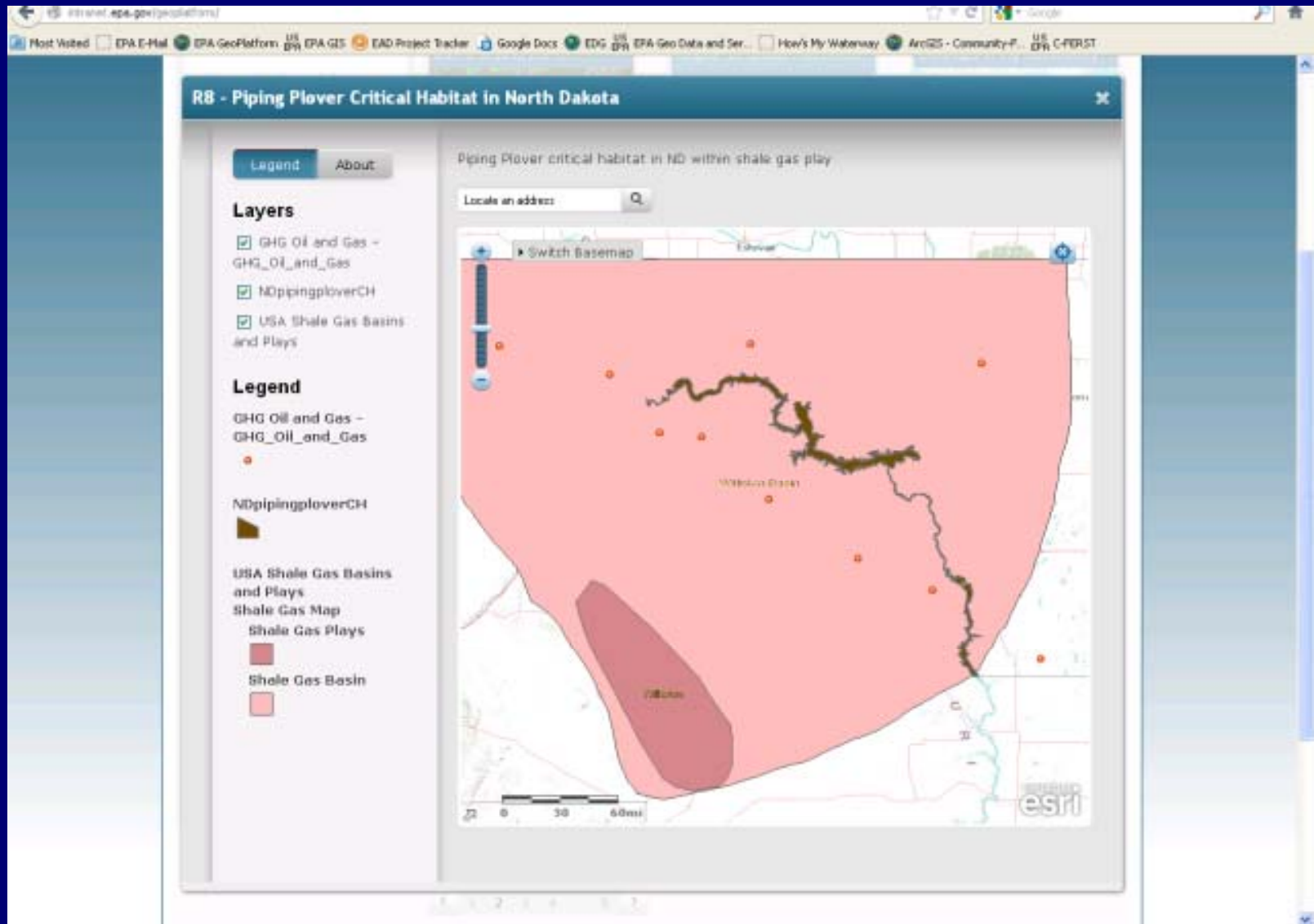


NJ Air Samples



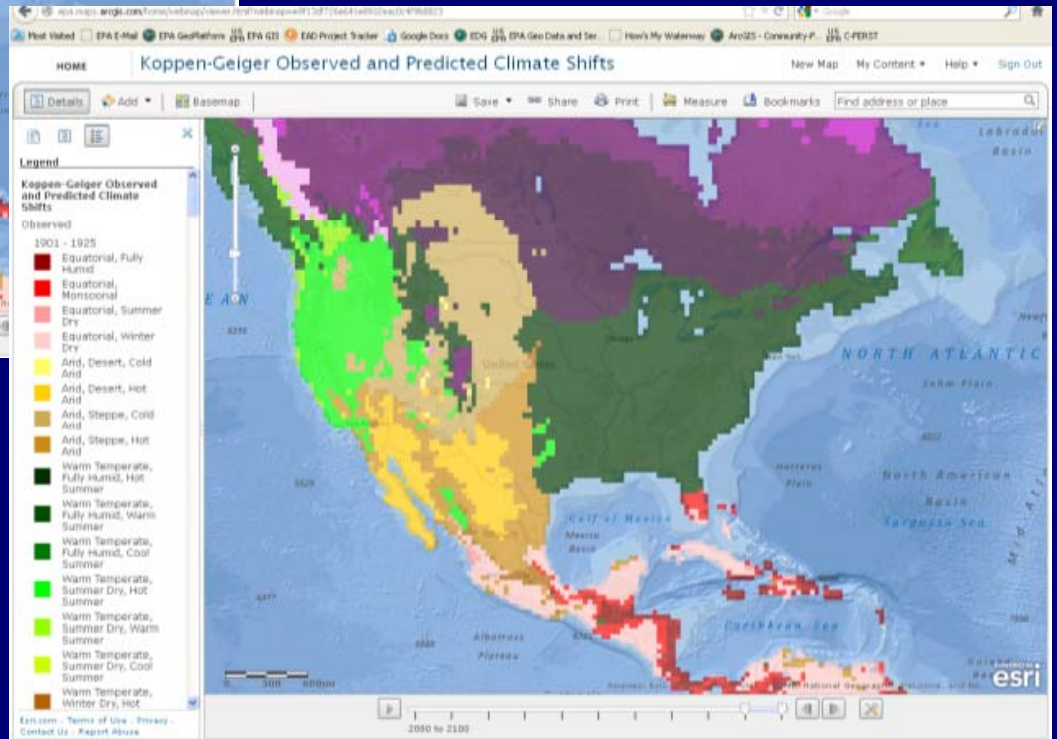
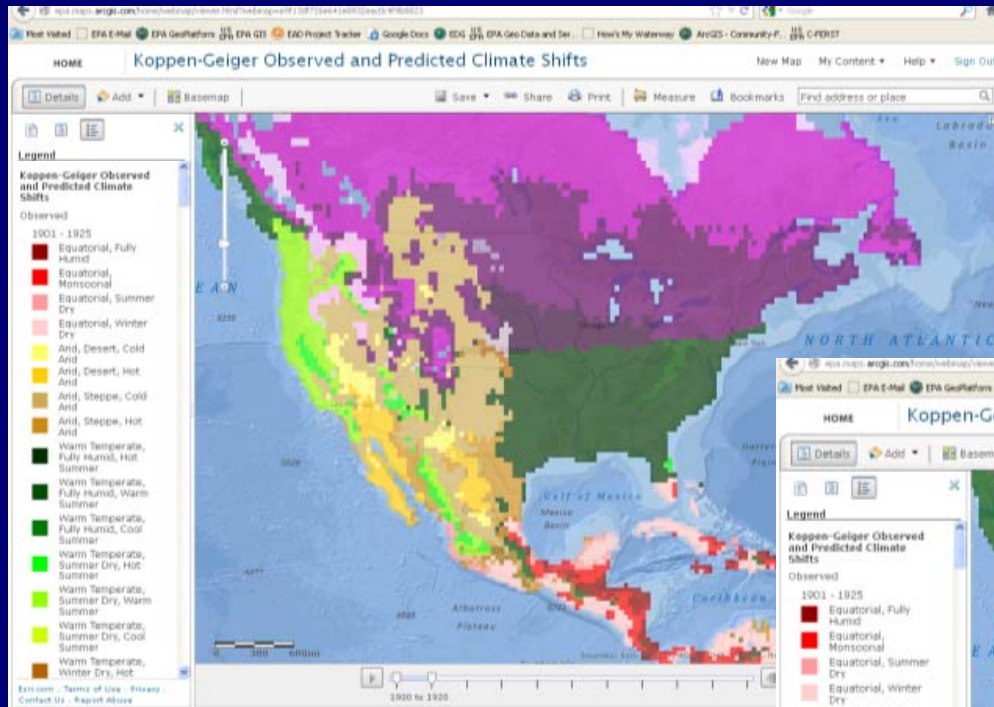


Endangered Species



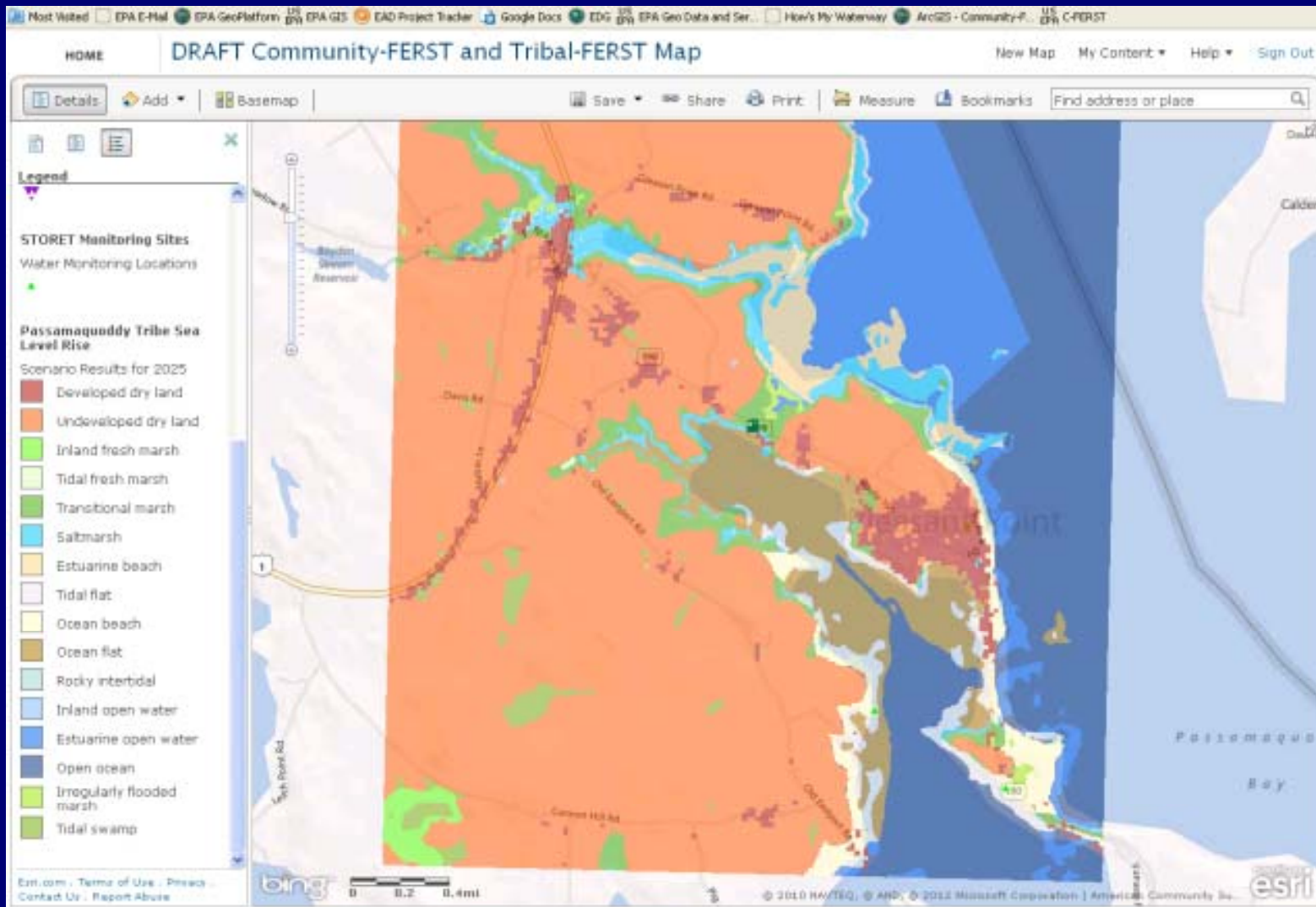


Climate Change



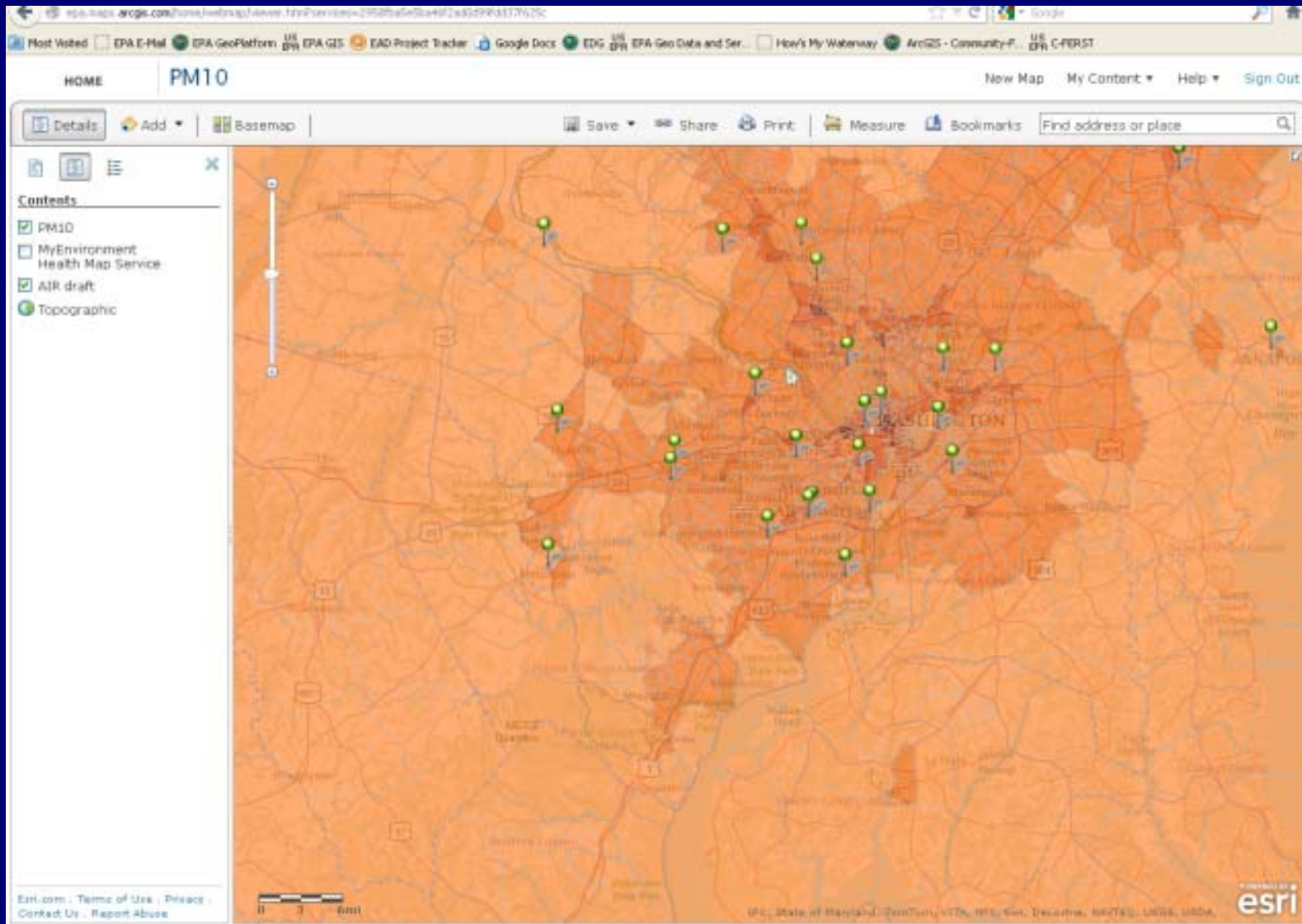


Climate Change



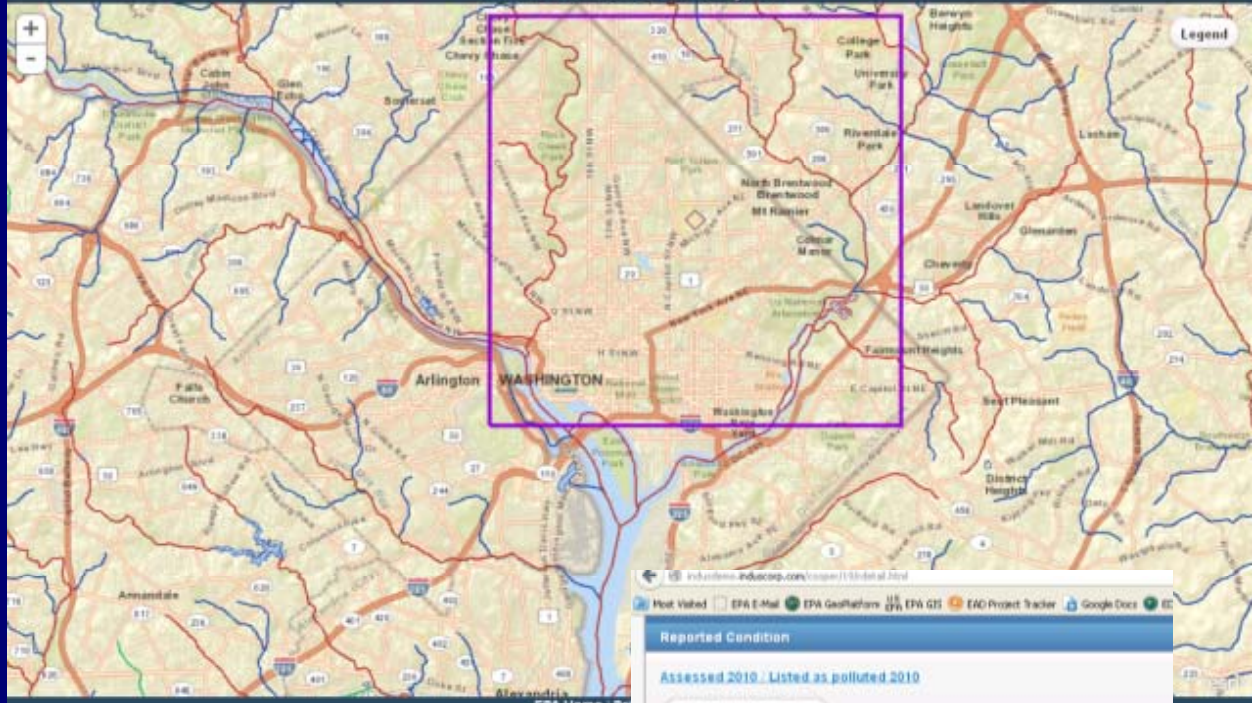


Modeled Air Risk



How's My Waterway?

Waters Nearest 20064, DC



Northwest Branch Anacostia River	ASSESSED 2002 / POLLUTED 2002
Sligo Creek	ASSESSED 2002 / POLLUTED 2002
Unnamed Waters	UNASSESSED / CONDITION UNKNOWN
Rock Creek	ASSESSED 2010 / POLLUTED 2010
Broad Branch	ASSESSED 2010 / POLLUTED 2010
Anacostia River	ASSESSED 2010 / POLLUTED 2010
Unnamed Waters	ASSESSED 2010 / POLLUTED 2010
Northeast Branch Anacostia River	ASSESSED 2002 / POLLUTED 2002
Unnamed Waters	ASSESSED 2010 / POLLUTED 2010
Unnamed Waters	ASSESSED 2010 / POLLUTED 2010
Watts Branch	

[Not Visited](#)
[EPA E-Mail](#)
[EPA GeoPlatform](#)
[EPA GIS](#)
[EAD Project Tracker](#)
[Google Docs](#)

Reported Condition

Assessed 2010 / Listed as polluted 2010

[Technical Reports](#)

Pollution Categories

CAUSE UNKNOWN

[Technical Reports](#)

DEGRADED AQUATIC LIFE

[Technical Reports](#)

ABNORMAL FLOW

[Technical Reports](#)

EXCESS SEDIMENT

[Technical Reports](#)



What is to Come

- Building a store of preferred data sources
 - Versions of monitoring and modeling data abound
 - Authoritative sources are essential
- Sharing data services with the Federal GeoPlatform
- Sharing experience and development
- Expansion – state, local, tribal and academic
- Future looks bright for sharing data



Story Mapping

- Highly effective means of information delivery
 - Understandable by a broad audience
 - Captures interest
 - Logically connect information
- Story map templates are in development
- Integration into platform soon (FY 2013?)



Future Vision

- Ecosystem of people sharing data and services
- Continual development of software for:
 - Ease of use
 - Ability to move data and secure data
 - Add demanded features
- Mobile platforms
 - Data into central stores
 - Data delivery to the field



Questions?

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