

# Geospatial Platform Update

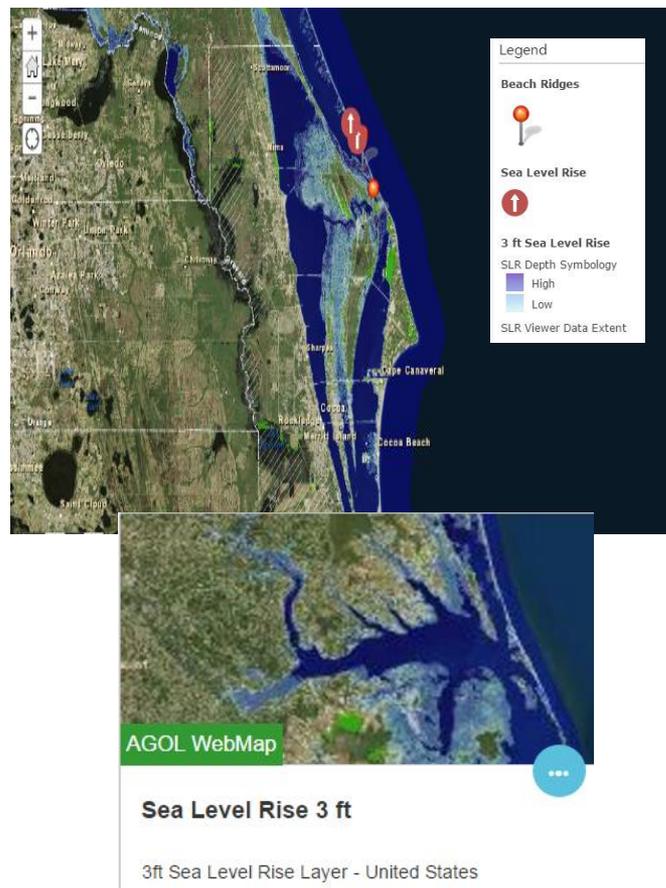


Jerry Johnston  
Department of the Interior  
NGAC Meeting  
April, 2016



# Value Proposition

- Streamlines access and use of National Geospatial Data Assets and reduces data duplication
- Reduces data acquisition costs using a collaborative Marketplace
- Supports better decision making
- Maximizes the reuse of open services, tools, data and knowledge





# Investment Efficiency

## ❖ GeoPlatform Marketplace

- ❖ Quickly post and easily search for planned data acquisitions
- ❖ Publish and find planned data collection projects
- ❖ Expand opportunities to partner on data acquisitions (reducing costs and duplicate efforts)
- ❖ Major changes and improvements [coming soon](#)

## Geospatial Platform Marketplace

Search data that is "Planned" for collection and development.

Welcome to the Geospatial Platform Marketplace. Here you will find a listing of datasets that are planned for acquisition by one or more of the FGDC member agencies. You can use this listing to determine whether a potential partner is already trying to acquire data that you have an interest in. As time goes on, we will be expanding the functionality of the Marketplace to help federal agencies and their partners get their geospatial data needs met in the most time and cost effective manner possible -- so stay tuned for enhancements to this part of Geoplatform.gov!

Search datasets... Search Footprints

Order by: **Popular** ▾

**43 datasets found**

Dataset Type: **geospatial** ✕ Status: **planned** ✕

### National Geospatial Data Asset (NGDA) NAIP Imagery - 201 Acquisition 🔥

Farm Service Agency, coverage being determined. Acquisition is acquired and funding provided.

Filter By Location Clear

New York County, New York

Map data CC-BY-SA by OpenStreetMap  
Tiles by MapQuest



Dataset Type Clear All

**A-Z** **1-9**

# Open Standards



## ❖ GeoPlatform Implements Open Standards:

❖ Leveraging National / International geospatial and information technology standards

❖ Providing open geospatial data/tools/services

❖ Maximizing reuse and Interoperability

### Exploit Data with Open Application Services

Web services play a key role in any open platform experience. GeoPlatform.gov provides this experience in two ways:

1. Application services (tools) that run in your browser, which you can use to perform useful tasks; and
2. Web services that a developer integrates into their own application, through standards-based application program interfaces (APIs).

We have several [application services](#) in this new version GeoPlatform.gov. In the near future, we will be launching a new Developer's Portal so that national geospatial resources are available to any application.



[Learn More](#)

### Metadata Standards & Tools

Since the mid-1990s, the [Content Standard for Digital Geospatial Metadata \(CSDGM\)](#) has been the U.S geospatial metadata standard. But, as the amount of geospatial data continues to increase, International metadata standards are emerging in the geospatial community. The FGDC has endorsed a number of [ISO metadata standards](#) in an effort to encourage federal agencies to transition to [ISO metadata standards](#) over the next few years.

There are a wide variety of metadata tools available to support the development and management of geospatial metadata. Before choosing a metadata tool, you may want to consider these [evaluation questions](#) to help determine the best metadata tool for you. Once you've determined your needs, select your metadata tool for [creating and editing geospatial metadata](#) as well as additional tools for [validating metadata](#) for compliance with the CSDGM standard.

**FGDC.GOV**  
FEDERAL GEOGRAPHIC DATA COMMITTEE



# GeoPlatform Target Audiences

- ❖ FGDC members
- ❖ FGDC partners
  - ❖ A-16 data stewards
    - ❖ Coordination Group
    - ❖ Steering Committee
    - ❖ SAOGIs
    - ❖ Stakeholders (States, Tribes, local gov't, orgs (COGO, NSGIC, NGAC))
  - ❖ Other federal, state and local agencies





# Release Schedule

## Recent and Near Term Releases

- ❖ Release 2: October 2015 (Done)
- ❖ Release 3: February 2016 (Done)
- ❖ Release 4: May 2016 (Next)
- ❖ Release 5: June 2016 (Planning)
- ❖ Release 6: September 2016 (Planning)



# Current GeoPlatform

- ❖ What's New:
  - ❖ Look and feel
  - ❖ Additional map viewer functionality
  - ❖ Improved integration and account sharing with Esri ArcGIS Online
  - ❖ Create and embed Map Galleries into external sites
  - ❖ Portfolio management capabilities to measure and manage national geospatial data assets
  - ❖ Enriched geospatial marketplace
  - ❖ Secure scalable Amazon Web Service infrastructure

**GEOPLATFORM.gov** Federal Geographic Data Committee fgdc

Overview | Data | Maps | Communities/Agencies | Resources | Marketplace | Dashboards

Sign In | Help

Search Data Catalog

130,003 Datasets  
Search geospatial datasets by terms above...  
Learn More

News & Blogs - What's in the news and the latest information about Geoplatform

Site Statistics & Data  
Metrics - site usage, popular pages, organizational dataset counts and updates.

**Featured Applications**

**GeoPlatform - Climate Resources**  
Find data and tools related to climate change and its impacts that can help inform, prepare, and strengthen America's communities. This resource area is focused on providing easy access to data and resources related to coastal flooding, sea level rise, and their impacts. Over time, this area will expand to include additional data and tools relevant to other important climate-related impacts, including risks to human health, the food supply, and energy infrastructure.

**Trending Data**

**U.S. Hourly Precipitation Data**  
Hourly Precipitation Data (HPD) is digital data set DSI-3240, archived at the National Climatic Data Center (NCDC). The primary source of data for this file is approximately 5,500 US National...

**Military Installations, Ranges, and Training Areas**  
This dataset, released by DoD, contains geographic information for major installations, ranges, and training areas in the United States and its territories. This release integrates site inf...

**USGS National Elevation Dataset (NED)**  
The National Elevation Dataset (NED) is a seamless raster product primarily derived from USGS 10- and 30-meter Digital Elevation Models (DEMs). NED data are available from The National Map...

**Featured Maps**

**Sea Level Rise Planning Tool - New Jersey and New York State**  
NOAA, in partnership with FEMA, USACE, USGCRP, and CEQ has created a set of map services and related tools to help communities, residents, and other stakeholders consider risks...

**Exploring Ocean Wind Energy**  
Offshore Wind is a viable source of energy capable of providing 900,000 megawatts (MW) of electricity—almost enough energy to power the entire country.

View Details  
View more applications



# Release 2 & 3 Accomplishments

- ❖ Landing Page
- ❖ Web Map Viewer 2.0
- ❖ AGOL Map Harvester
- ❖ Map Manager, Phase I
- ❖ NGDA Survey Tool
- ❖ 3DEP Project Tracker
- ❖ Performance Dashboard, Phase I
- ❖ IDM/IDP Replacement
- ❖ Service Desk process defined and implemented
- ❖ O&M/DevOps fully implemented
- ❖ 90% in-the-cloud

**GEOPLATFORM.gov** Federal Geographic Data Committee

Navigation: Overview | Data | Maps | Communities/Agencies | Resources | Marketplace | Dashboards

**Explore**  
**Develop**  
**Publish**

**The Geospatial Platform Releases New Data Viewer**  
Your taxpayer investment in environmental data just got a lot more valuable. Now instead ...

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**Great Chile Earthquake of May 22, 1960 - Anniversary Edition**  
May 22, 1960 (19:11 UTC), a Mw 9.5 earthquake in southern Chile (39.5 S, 74.5 W). This was the earthquake ever instrumentally recorded. (It was not

**Featured Maps**

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Search: [Search] 22, 1960 (19:11 UTC), a Mw 9.5 earthquake in southern Chile (39.5 S, 74.5 W). This was the earthquake ever instrumentally recorded. (It was not

Sign In | Help

**GEOPLATFORM.gov** Federal Geographic Data Committee

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Search Data Catalog

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[Learn More](#)

**News & Blogs** - What's new and the latest information about Geoplatform

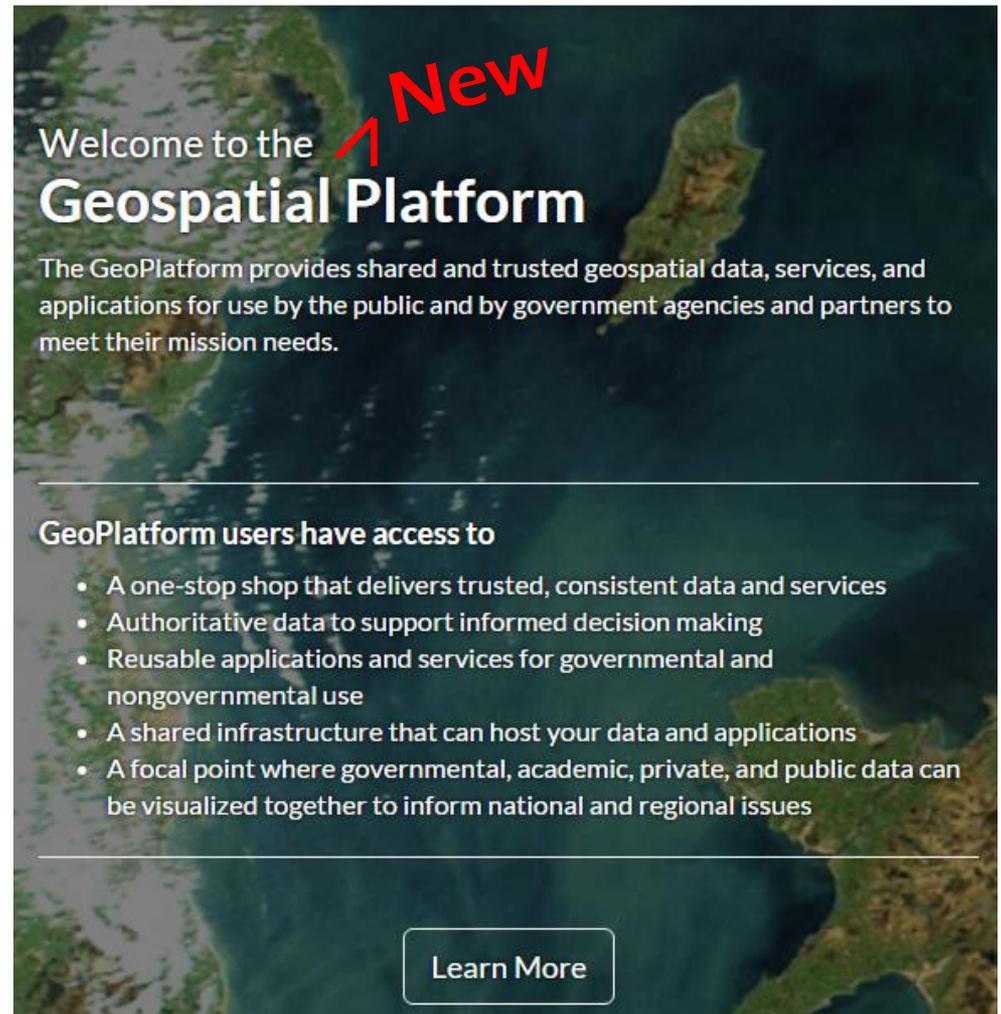
**Site Statistics & Data Metrics** - site usage, popular pages, organizational dataset counts and updates.

**Datasets Published per Month**  
Data last updated on 10/13/2015 12:27 AM

Agency Name	Number of Datasets published by month												Total in the Past 12 Months	
	Feb '15	Mar '15	Apr '15	May '15	Jun '15	Jul '15	Aug '15	Sep '15	Oct '15	Nov '15	Dec '15	Jan '16		
Department of Agriculture	11	10	3	7	9	1	7	23	-	-	-	-	-	71
Department of Commerce	3	1	1	-	48	30	17	61325	574	-	-	-	-	61999
Department of Homeland Security	-	-	1	-	6952	1159	-	-	-	-	-	-	-	8112
Department of State	-	-	-	-	15	5	2	2	1	-	-	-	-	25
Department of the Interior	119	41	107	103	105	249	284	39	46	-	-	-	-	1093
Department of Transportation	-	-	-	-	-	57	-	-	-	-	-	-	-	57
Environmental Protection Agency	-	-	618	48	371	29	639	518	16	-	-	-	-	2239
National Aeronautics and Space Administration	2035	-	-	-	-	14567	-	-	-	-	-	-	-	16602
<b>Total</b>	<b>2168</b>	<b>52</b>	<b>730</b>	<b>158</b>	<b>7500</b>	<b>16097</b>	<b>949</b>	<b>61907</b>	<b>637</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>90198</b>

# Release 3 Overview

- ❖ “Go Live” date Feb 2016
- ❖ Enhanced user experience and navigation for both first-time and frequent users
- ❖ New Homepage and overall responsive site design
- ❖ Interactive browse / view / mashup of all geospatial web services in Geoplatform.gov catalog with service quality indicators



The screenshot shows the GeoPlatform homepage. At the top right, there is a globe icon. Below it, the text 'GeoPlatform' is displayed in green. To the right of the logo are the words 'Menu' and 'Sign In'. The main content area features a satellite map background. A large red 'New' label with a white arrow points to the text 'Welcome to the Geospatial Platform'. Below this, a paragraph describes the platform's purpose: 'The GeoPlatform provides shared and trusted geospatial data, services, and applications for use by the public and by government agencies and partners to meet their mission needs.' A section titled 'GeoPlatform users have access to' lists five bullet points: 'A one-stop shop that delivers trusted, consistent data and services', 'Authoritative data to support informed decision making', 'Reusable applications and services for governmental and nongovernmental use', 'A shared infrastructure that can host your data and applications', and 'A focal point where governmental, academic, private, and public data can be visualized together to inform national and regional issues'. At the bottom right, there is a 'Learn More' button.



# GeoPlatform R3 Overview (con't.)

## ❖ Web Map Viewer Phase II:

- ❖ Map saving and sharing
- ❖ Map Knowledge Graph prototype

## ❖ Map Manager, Phase II with AGOL Harvester

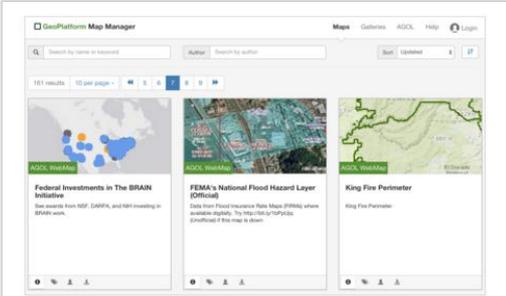
## ❖ Performance Dashboard, Phase II:

- ❖ Service Checker
- ❖ NGDA Metadata Viewer
- ❖ Batch Selections

## ❖ Registry prototype

## ❖ Mobile Observation Services

What's New



**Featured App: GeoPlatform Map Viewer**  
Browse thousands of WMS and ESRI-hosted map layers, construct maps, and more with the new and improved GeoPlatform Map Viewer! [Launch >](#)

**Map Collaboration**  
Learn how to compose and share maps using open services with GeoPlatform. [Learn more >](#)

**ArcGIS Online Integration**  
Quickly and easily integrate existing ArcGIS Online maps into your GeoPlatform pages using the Map

**Featured: GeoPlatform Release Preview**  
GeoPlatform will soon provide a new look and feel in addition to offering many new services. Check out a preview of these new features in this inside look. [Learn more](#)

## First Time Here?

Sign up to access thousands of datasets uploaded by others and contribute your own data to the world! You can also share your expertise and find experts to help with your geospatial data needs by joining one of our [Communities](#). Submit your metadata to [Data.gov](#) and we'll add it to GeoPlatform so others can use it.

Register

or

Sign In





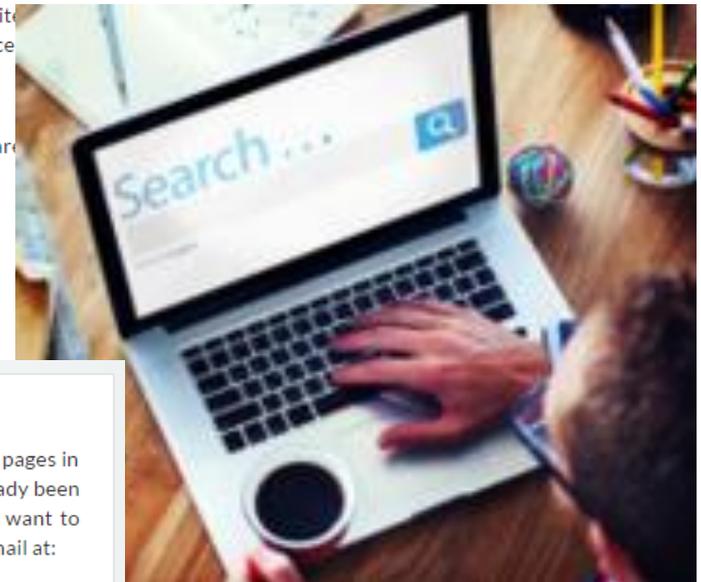
# New User Benefits

- ❖ Enhanced navigation to quickly direct users to specific areas of interest
- ❖ Account registration and management for added access and functionality
- ❖ Tutorials and training opportunities
- ❖ Help tools
- ❖ Dedicated and responsive Service Desk

## About GeoPlatform

GeoPlatform.gov was created to enhance geospatial resource sharing across the U.S. Government and the world, and to allow users like you to participate in an online geospatial services experience. Whether you want to discover and use up-to-date National Geospatial Data Assets (NGDAs), make a shared gallery of maps for your website, or more, GeoPlatform.gov is a place to connect and share in a geospatial ecosystem.

*Tip: Access any of the GeoPlatform's ar*



### Contact Us

Please check out our [Help](#) and [FAQ](#) pages in case your question or issue has already been addressed. If you still need help or want to report an issue, please send us an email at:

[servicedesk@geoplatform.gov](mailto:servicedesk@geoplatform.gov)

For questions about the federal government not related to GeoPlatform, visit [USA.gov](http://USA.gov) or call 1 (800) FED INFO (1-800-333-4636) (8am - 8 pm ET Monday - Friday).



# Web Map Viewer

- ❖ Multiple data browse, filter, and sort features
- ❖ Dataset preview
- ❖ Add user content: Digitize features or Upload .KML, GeoJSON, .CSV, or shapefiles (in .ZIP) to extract features
- ❖ Gazetteer and Geolocation support
- ❖ Control layer ordering, visibility, opacity
- ❖ Save and share maps (Web Map Context)
- ❖ Publish composed maps

**GeoPlatform Map Viewer**

**Browse Layers**

Search Layers  
Search for layers by name  
Q Search layers

**Sort Layers**

Name

**Layer sources**

- AssistedHousing
- BISON
- Cropland Data Layer WMS Se
- EPA Facilities US, 2012, US E
- ESI
- EnviroAtlas
- FWS Critical Habitat Mapper

**Layer types**

- All Amphibians (Amphibia)
- All Gymnosperms (Gymnospermae)
- All Mammals (Mammalia)
- All Mustards (Brassicaceae)
- All Oaks (Quercus)
- All Reptiles (Reptilia)

**Available Layers**

Select layers below to view them on the preview map at right.

9293 results 10 per page 1 2 3 4 5

- 10-digit HU WMS, NSDA
- 114th Congressional Districts NSDA, NTAD
- 12-digit HU WMS, NSDA
- 12NM Territorial Sea Maritime Limits and Boundaries of the United States (Version 4.1), marine boundaries, marine jurisdiction
- 2-digit HU WMS, NSDA
- 200NM EEZ and Maritime Boundaries Maritime Limits and Boundaries of the United States (Version 4.1), marine boundaries, marine jurisdiction
- 2012 Image Dates imagery, ncep, aphs, date, NSDA
- 2012 National Anthropogenic Barrier Dataset (NABD) Other
- 2013 Image Dates imagery, ncep, aphs, date, NSDA
- 2014 Image Dates imagery, ncep, aphs, date, NSDA

**Preview**

Apply selected la

Leaflet | Map data (c) OpenStreetMap contributors  
may take several seconds to appear.

**Layer Legend**

Percent potentially restorable wetlands

- 0
- 1 - 2
- 3 - 7
- 8 - 22
- 23 - 100



# Map Manager

- ❖ Browse harvested AGOL maps by search filters or organization
- ❖ Create map galleries with maps from WMV and AGOL
- ❖ Share maps and galleries via email
- ❖ Embed map blocks and curated gallery pages into other websites
- ❖ Customize gallery page with community and keywords
- ❖ Manage gallery pages
- ❖ Permissions-based access and use

The screenshot displays the GeoPlatform Map Manager interface. At the top, there are navigation tabs for 'Maps', 'Galleries', 'AGOL', and 'Help', along with a user profile for 'Test Tester'. Below this, three map thumbnails are shown: 'Virginia for the Birds' (WMV), 'Sea Level Rise 3 ft' (AGOL WebMap), and 'Heating and Cooling Degree Days' (AGOL WebMap). A search bar is visible with filters for 'Name', 'Author', and 'Community'. Below the search bar, there are pagination controls showing '18 results' and '10 per page'. Three gallery cards are displayed: 'Create a Gallery', 'Ecosystem Map Gallery', and 'Climate Change Gallery'. A second screenshot below shows search results for 'hazards' by 'NOAA GeoPlatform', displaying 45 results. Three map thumbnails are shown: 'Short-Duration Hazards - Warnings', 'Recent Weather Radar Imagery', and 'Long-Duration Hazards - Watches, Warnings, & Advisories'. Each map has a brief description below it.



# ArcGIS Online Integration

❖ Harvest maps from ArcGIS online organizations and publish them to the GeoPlatform

❖ Search and Discover maps by search filters or organization

❖ Unlimited publishing of data and maps to AGOL\*

❖ Create map galleries with maps from WMV and AGOL

Sign in to **esri**  
**GEOPLATFORM.gov**

USING YOUR GEOPLATFORM.GOV ACCOUNT

OR

USING YOUR ARCGIS ACCOUNT

The GeoPlatform enables you to view map layers and a whole lot more. Follow the links below to find useful, authoritative data layers that you can use to make your own mashups, run analysis, and view in 3D. Also, check out the [ArcGIS Online blog](#) for great ideas, tips and tricks and the [ArcGIS Online help](#) for detailed how-tos.

Biota

Cadastral

Climate & Weather

Cultural Resources

Home - Great Thicket LPP

Legend

- NEC\_RAFA
- NEC\_Focus\_Areas
- TNC\_Secured\_Lands - TNC Ranked Secured Lands
  - 0
  - 0.01
  - 0.02
  - 0.03
  - 0.04
  - 0.05
  - 0.06
  - 0.07
  - 0.08
  - 0.09
  - 0.1
  - 0.11

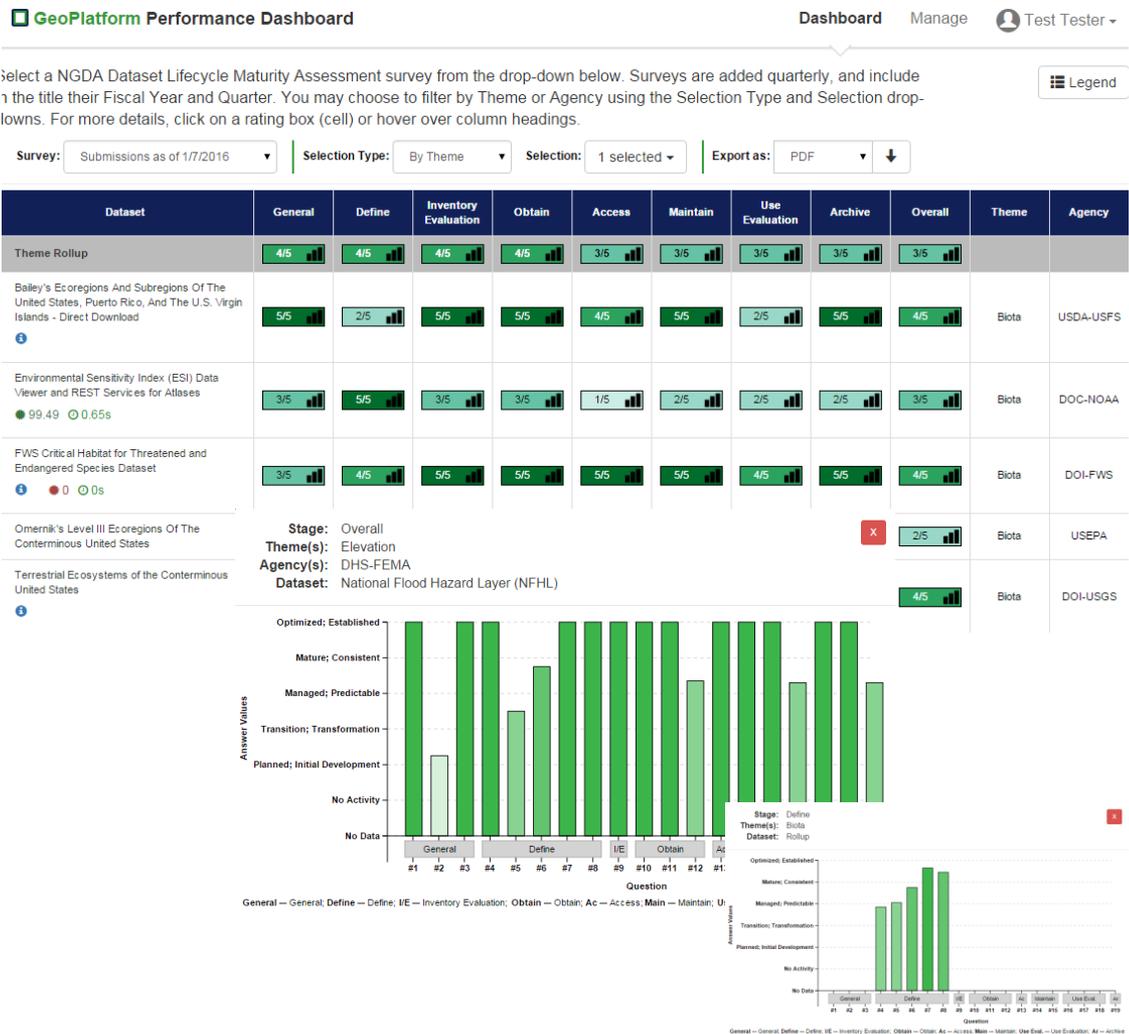


# Performance Dashboard

❖ Tools to measure, monitor, and report on NGDAs and services

❖ NGDA Dataset Lifecycle Maturity Assessment survey tools

❖ Service Checker



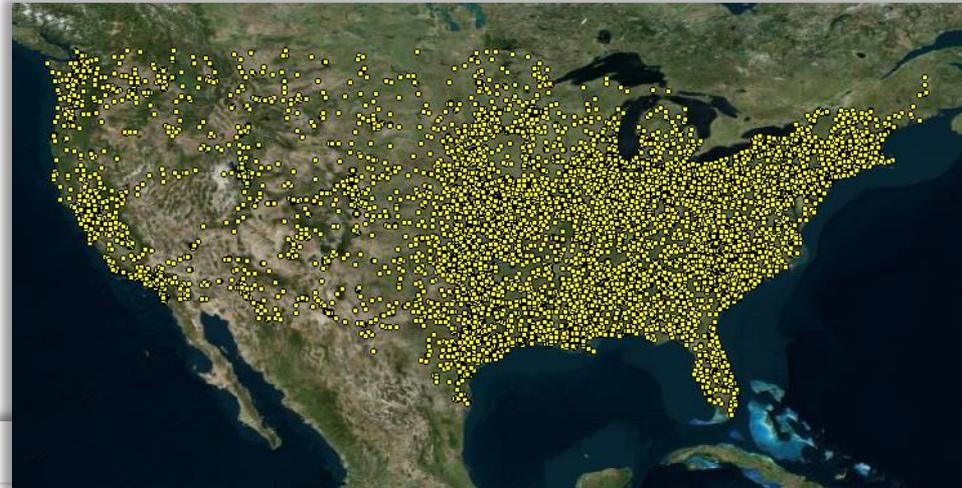
# Performance Dashboard - Reliability



## GeoPlatform Performance Dashboard

Dashboard Manage Help Jeff Harrison

Protected Areas Database of the United States (PADUS) - Combined: Version 1.3	2/5	5/5	5/5	5/5	5/5	1/5	4/5	2/5	4/5	Cadastre	DOI-USGS
Shuttle Radar Topography Mission (SRTM)	5/5	5/5	5/5	4/5	5/5	4/5	5/5	5/5	5/5	Elevation	DOI-USGS
Terrestrial Ecosystems of the Conterminous United States	4/5	4/5	5/5	4/5	5/5	2/5	3/5	5/5	4/5	Biota	DOI-USGS
U.S. Geological Survey Gap Analysis Program Species Distribution Models	4/5	4/5	5/5	3/5	4/5	1/5	4/5	2/5	3/5	Biota	DOI-USGS
U.S. Geological Survey Gap Analysis Program Species Ranges	4/5	4/5	5/5	3/5	4/5	1/5	4/5	2/5	3/5	Biota	DOI-USGS
USGS National Geologic Map Database Collection	3/5	4/5	5/5	3/5	5/5	4/5	4/5	3/5	4/5	Geology	DOI-USGS
USGS National Structures Dataset	4/5	5/5	5/5	4/5	5/5	5/5	5/5	0/5	4/5	Real Property	DOI-USGS
Watershed Boundary Dataset (WBD)	2/5	5/5	5/5	5/5							



## GeoPlatform Performance Dashboard

### Service status : USGS National Structures Dataset

Start Date:

02/06/2016

End Date:

03/07/2016

99 results

5 per page

1

2

3

4

5

»

Sort

Timestar

↓

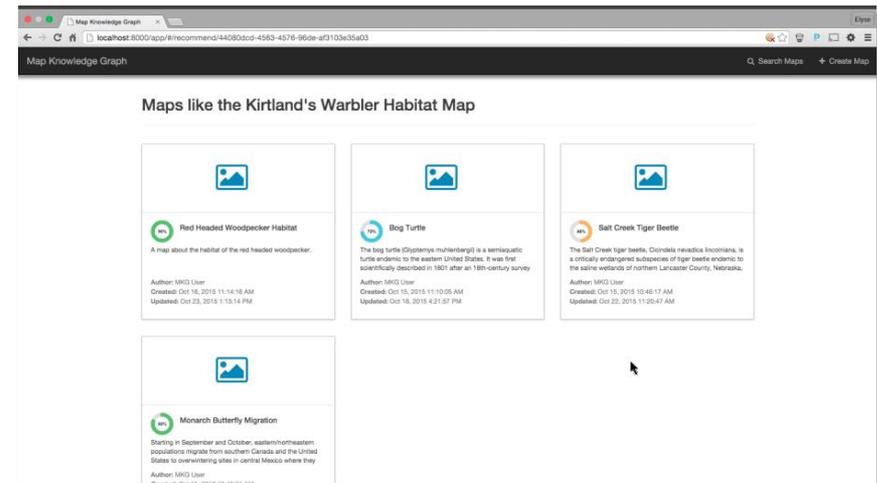
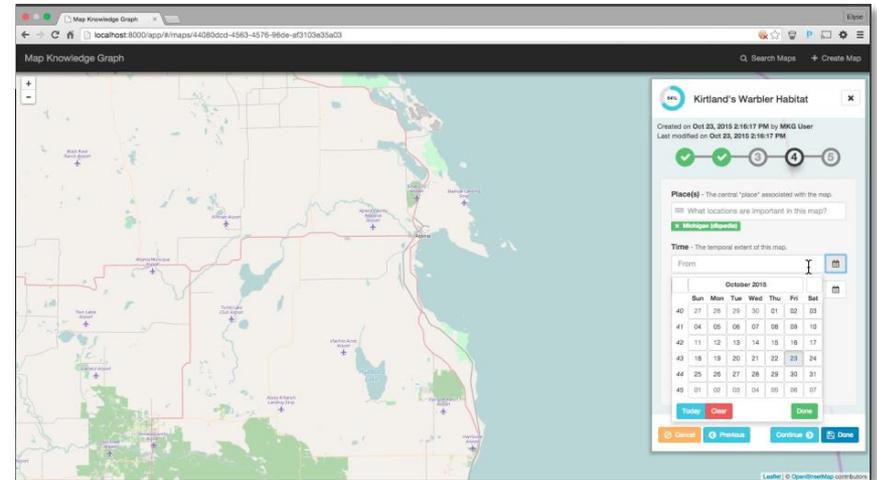
Timestamp	● Reliability	○ Speed
03/07/2016 02:31:10 PM	99.8	0.26s
03/07/2016 10:48:22 AM	99.8	0.26s
03/07/2016 10:21:49 AM	99.8	0.26s
03/07/2016 02:21:46 AM	99.84	0.2s
03/06/2016 06:21:41 PM	99.84	0.2s

## Reliability of USGS National Structures Service



# What are we working on?

- ❖ Map Knowledge Graph and enhanced Registry services
- ❖ Layer recommendation service
- ❖ More NGDAs available via reliable services
- ❖ Additional Marketplace functionality
- ❖ APIs for Developers



# Conclusion



GeoPlatform is helping advance the NSDI by enabling users to:

- ❖ *More easily find existing maps and data:* Semantic search / Knowledge graphs will help users surface the right content more quickly and easily
- ❖ *Get access to more high quality NSDI services:* Cloud hosting offerings have the ability to change the game in terms of making high quality data available
- ❖ *Understand (and improve!) the quality of the NSDI services:* Service status checker and performance dashboard can continuously monitor the component services of the distributed NSDI
- ❖ *More easily share data, tools, maps and collaborate:* GeoPlatform offerings bring collaboration and analytics tools at scale to end users in all sectors

Thank you

