

ArcGIS 10 and REST Services Technology

Presented by:

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Indiana Geological Survey

IMCC Benchmarking Workshop on Mine Mapping

February 15 - 16, 2012



ArcGIS Rest Services in ArcMap

ArcGIS Online Demo

ArcGIS Online - Overview

ArcGIS Online is a cloud-based geospatial content management system for storing and managing maps, data, and other geospatial information. Built on Esri's cloud infrastructure, it gives you access to geographic content shared and registered by Esri and GIS users around the world.

With ArcGIS Online, you can

- Create and share maps that can be accessed by anyone through a browser, a mobile device, ArcGIS for Desktop, or a custom application.**
- Access and discover thousands of free maps, datasets, services, tools and other geospatial content.**
- Manage geospatial content through an easy-to-use catalog of items or groups.**
- Share your content publically, with specific groups, or keep it private.**

ArcGIS Online

Find, Create and Share GIS Data

GIS for everyone

Empowering the non-GIS expert!

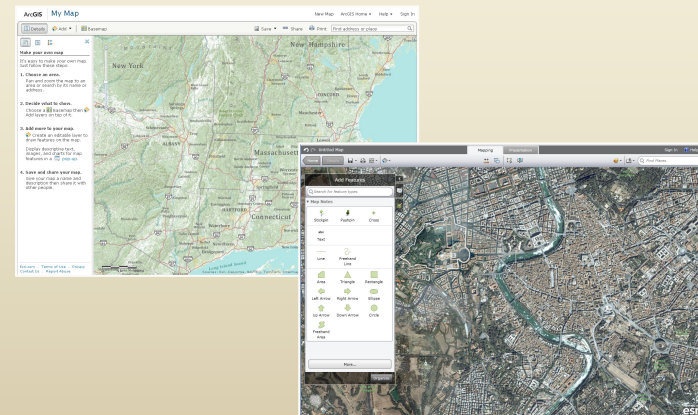
Public and Private Groups

Hosted Web applications:

ArcGIS.com Viewer

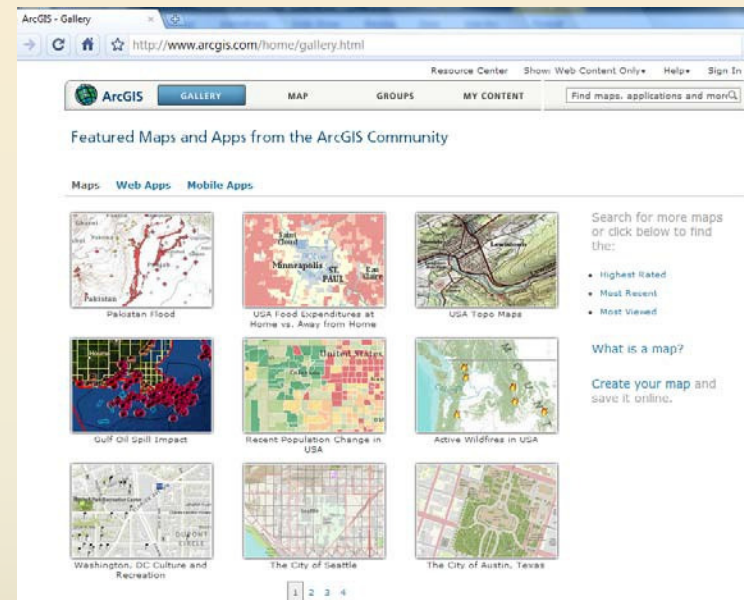
ArcGIS Explorer Online

Map templates



Leveraging ArcGIS Online

- **Maps**
 - Basemaps
 - Services
 - Layer/Map packages
- **Applications**
 - Mashup & presentation tools
 - Web and mobile applications
 - Templates
- **Resources**
 - Online storage
 - Sharing
 - Groups/Collaboration

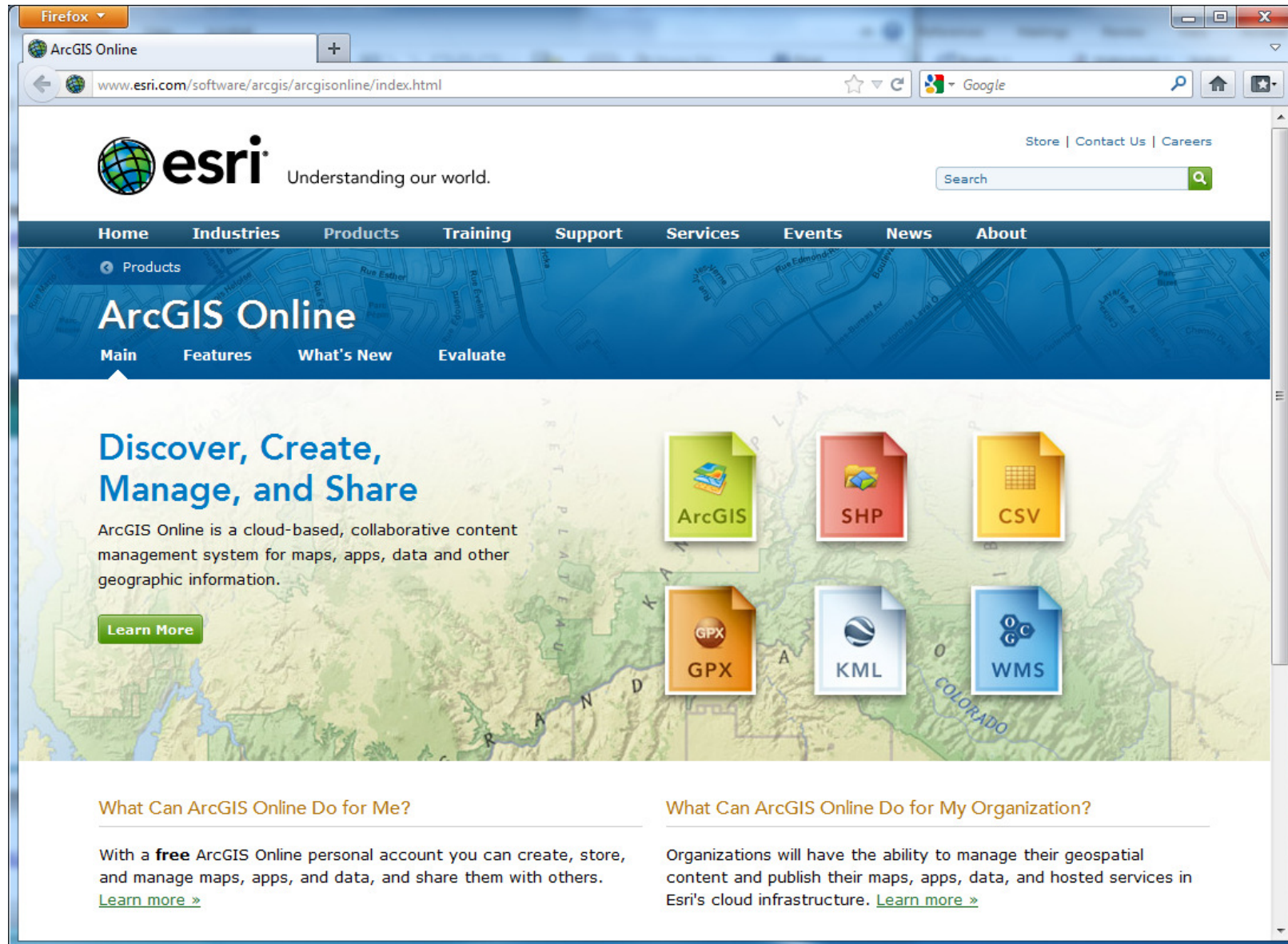


ArcGIS Online

ArcGIS Online Demo

ArcGIS Online

<http://www.esri.com/software/arcgis/arcgisonline/index.html>



The screenshot shows the ArcGIS Online website in a Firefox browser window. The browser's address bar displays the URL www.esri.com/software/arcgis/arcgisonline/index.html. The website header features the Esri logo with the tagline "Understanding our world." and a search bar. A navigation menu includes links for Home, Industries, Products, Training, Support, Services, Events, News, and About. Below the navigation menu, the main heading "ArcGIS Online" is displayed, with sub-links for Main, Features, What's New, and Evaluate. The central content area is titled "Discover, Create, Manage, and Share" and describes ArcGIS Online as a cloud-based, collaborative content management system. It features six icons representing different file formats: ArcGIS, SHP, CSV, GPX, KML, and WMS. Below this section, there are two columns of text. The left column is titled "What Can ArcGIS Online Do for Me?" and describes the benefits for individual users, including the ability to create, store, manage, and share maps, apps, and data with a free personal account. The right column is titled "What Can ArcGIS Online Do for My Organization?" and describes the benefits for organizations, including the ability to manage geospatial content and publish maps, apps, data, and hosted services in Esri's cloud infrastructure.

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Home Industries Products Training Support Services Events News About

Products

ArcGIS Online

Main Features What's New Evaluate

Discover, Create, Manage, and Share

ArcGIS Online is a cloud-based, collaborative content management system for maps, apps, data and other geographic information.

[Learn More](#)

ArcGIS SHP CSV GPX KML WMS

What Can ArcGIS Online Do for Me?

With a **free** ArcGIS Online personal account you can create, store, and manage maps, apps, and data, and share them with others. [Learn more »](#)

What Can ArcGIS Online Do for My Organization?

Organizations will have the ability to manage their geospatial content and publish their maps, apps, data, and hosted services in Esri's cloud infrastructure. [Learn more »](#)

ArcGIS Online

<http://www.esri.com/software/arcgis/arcgisonline/features/personal-use.html>

The screenshot shows the ArcGIS Online website for Personal Use. The browser is Firefox, and the address bar shows the URL: www.esri.com/software/arcgis/arcgisonline/features/personal-use.html. The page features the Esri logo and tagline "Understanding our world." at the top left. A navigation menu includes Home, Industries, Products, Training, Support, Services, Events, News, and About. A search bar is located in the top right corner. The main content area is titled "ArcGIS Online" and includes sub-navigation for Main, Features, What's New, and Evaluate. The primary heading is "What Can You Do with ArcGIS Online for Personal Use?". Below this, a paragraph explains that users can create, store, and manage maps, apps, and data. A prominent green button says "Sign-up for a free account". To the right, a "Features" section lists "Features", "For Personal Use", and "For Organizations". The "Discover thousands of free maps, datasets, and tools" section describes geospatial content and provides links for "Content published by Esri" (2:23), "Featured content in the galleries" (1:00), and "Searching for content" (1:56). A "Soil Map Hydric Classification - Presence" map is displayed, showing a legend with categories like "HydroReferenceOverlay_HKO" and "Hydric Classification - Presence". The "Create maps and apps" section describes using the built-in map viewer and APIs to build custom web applications. At the bottom, a "Share" section titled "Make a Web Application" shows four templates: "Basic Viewer", "Chrome", "Chrome - Header & Footer", and "Chrome - Identity".

ArcGIS Online


www.arcgis.com

The screenshot shows the ArcGIS Online homepage in a browser window. The address bar displays www.arcgis.com/home/. The page features a navigation bar with links for ArcGIS, GALLERY, MAP, GROUPS, and MY CONTENT, along with a search box. The main header includes the ArcGIS Online logo and the Esri logo. A large blue banner on the left contains the text "Maps and Apps for Everyone" and "Easy online discovery, access, visualization, and dissemination of geospatial information." Below this is a "VIEW NOW" button. To the right of the banner is a large map of a campus area. Below the banner is a "Featured Maps" section with four map thumbnails: "Spain Imagery", "World Bank Pump Price, Diesel and Gasoline", "Mobile Cell Subscriptions", and "Ocean Basemap". Below the featured maps is a "Make a Map" section with a "Sign-up now" button and a "Featured Videos" section. To the right of the "Make a Map" section is an "Ocean Basemap Update" section with a date of November 29, 2011, and a description of the update. At the bottom of the page, there is a footer with the URL <http://www.arcgis.com/home/#> and links for Esri.com, Terms of Use, Privacy, Contact Us, and Report Abuse.

Resource Center Show: Web Content Only Help Sign In

ArcGIS GALLERY MAP GROUPS MY CONTENT Find maps, applications and more... Q

ArcGIS Online



Maps and Apps for Everyone

Easy online discovery, access, visualization, and dissemination of geospatial information.

[VIEW NOW](#)

Featured Maps

- [Spain Imagery](#)
- [World Bank Pump Price, Diesel and Gasoline](#)
- [Mobile Cell Subscriptions](#)
- [Ocean Basemap](#)

Make a Map »

Create a map that can be viewed in a browser, desktop or mobile device. Share it on a blog, via email, or embed it in a website.

[Sign-up now](#)

Get a free ArcGIS Online account and start making web maps today.

Featured Videos »

Watch these short videos to quickly get started making maps and apps.

Ocean Basemap Update

November 29, 2011

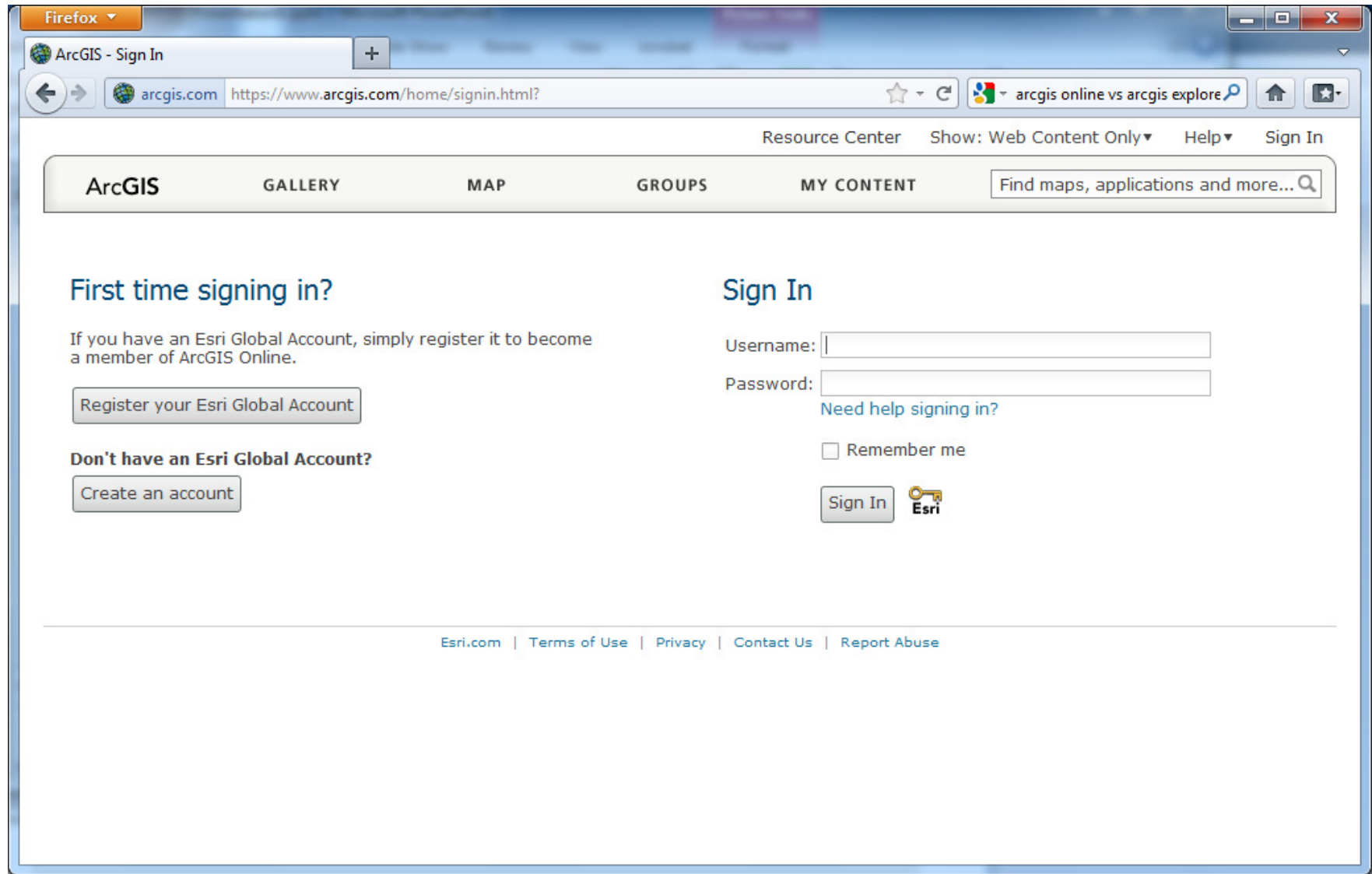
« Higher resolution bathymetry and other content were added. Land content was updated with DeLorme data. »

Start ArcGIS Explorer Online »

Use this rich application for transforming your data into beautiful maps and presentations that tell powerful stories.

<http://www.arcgis.com/home/#> Esri.com | [Terms of Use](#) | [Privacy](#) | [Contact Us](#) | [Report Abuse](#)

ArcGIS Online



ArcGIS Online

The screenshot shows a Firefox browser window with the address bar displaying "https://www.arcgis.com/home/createaccount.html". The page title is "ArcGIS - Create Account". The navigation bar includes "ArcGIS", "GALLERY", "MAP", "GROUPS", and "MY CONTENT", along with a search box containing "Find maps, applications and more...".

Create A New Esri Global Account

Complete the form below to create an Esri Global Account.

Username

Password

Confirm Password

First Name

Last Name

Organization

E-mail

Confirm E-mail

Phone Number

The following question and answer will help validate your identity in the event you forget your password.

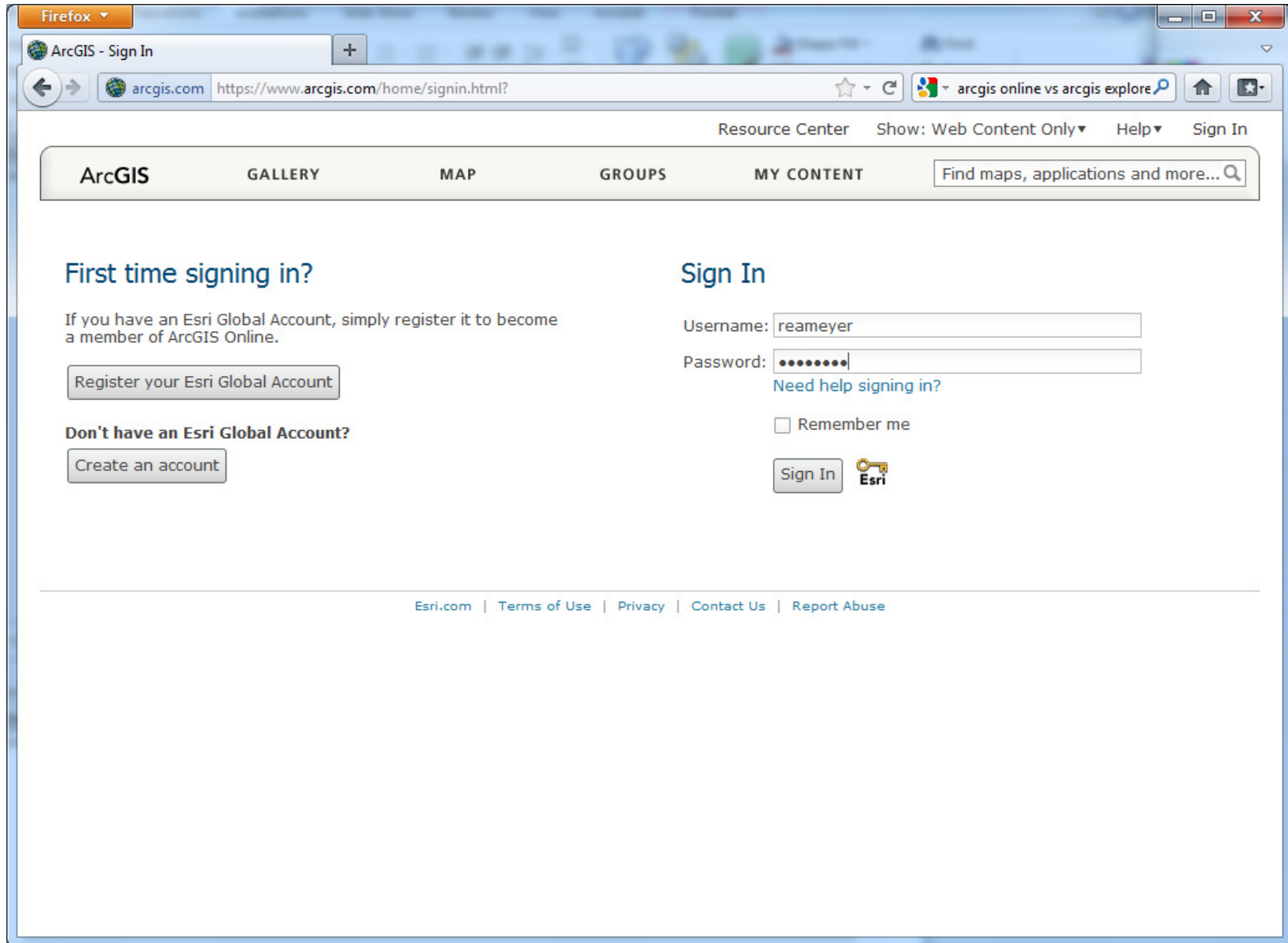
Identity Question - Choose a question -

Answer

Terms of Use Review and Accept the Terms of Use

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ArcGIS Online



ArcGIS Online

Resource Center Show: Web Content Only Becky Meyer Notifications Help Sign Out

ArcGIS GALLERY MAP GROUPS **MY CONTENT** Find maps, applications and more...

My Content

Using 0% of 2GB

<input type="checkbox"/>	▲ Title	Type	Modified	Shared	Size
<input type="checkbox"/>	AML Water Quality Sites	Web Map	Nov 27, 2011	Group	53 KB
<input type="checkbox"/>	Indiana AML Water Quality Sampling Sites	Web Map	Nov 29, 2011	Group	2 KB
<input type="checkbox"/>	Indiana Coal Mine (Basic)	Web Map	Nov 29, 2011	Not Shared	5 KB
<input type="checkbox"/>	Indiana Coal Mines	Web Map	Nov 27, 2011	Group	8 KB
<input type="checkbox"/>	Indiana Coal Mines - ESRI Basemap	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines By Coal Seam and Mine Permits	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines Over Time	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines, 2010	Web Mapping Application	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Surface Mines	Layer Package	Sep 7, 2010	Group	3 MB
<input type="checkbox"/>	Test Map	Web Map	Nov 22, 2011	Not Shared	18 KB
<input type="checkbox"/>	Underground Mines	Layer Package	Sep 7, 2010	Group	2 MB

ArcGIS Online

Firefox

ArcGIS - My Map

www.arcgis.com/home/webmap/viewer.html

ArcGIS My Map

New Map ArcGIS Home Help Sign Out

Details Add Basemap Save Share Print Measure Bookmarks Find address or place

Make your own map

It's easy to make your own map. Just follow these steps:

- 1. Choose an area.**
Pan and zoom the map to an area or search by its name or address.
- 2. Decide what to show.**
Choose a Basemap then Add layers on top of it.
- 3. Add more to your map.**
Create an editable layer to draw features on the map.
Display descriptive text, images, and charts for map features in a pop-up.
- 4. Save and share your map.**
Give your map a name and description then share it with other people.

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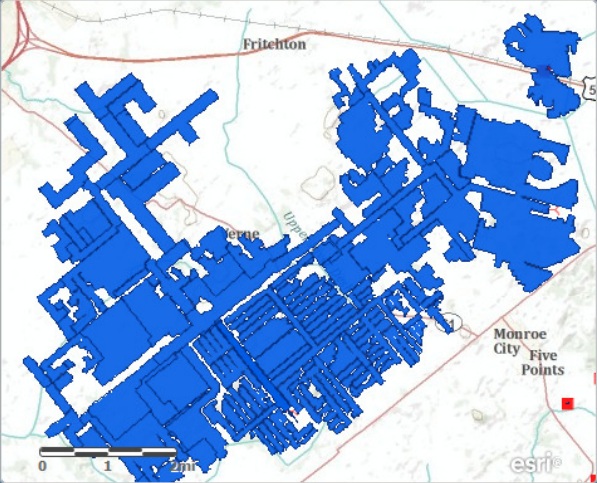
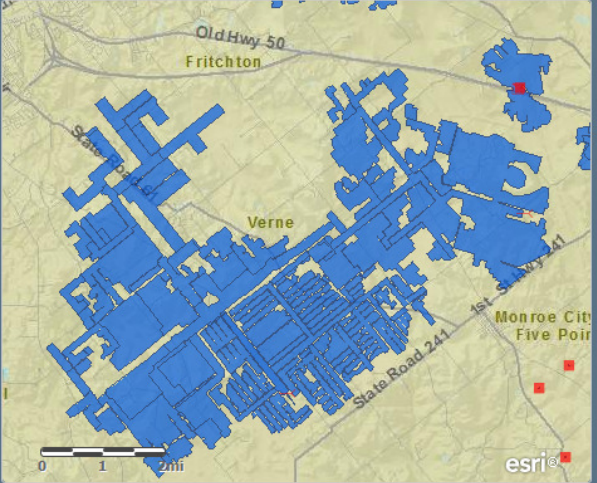
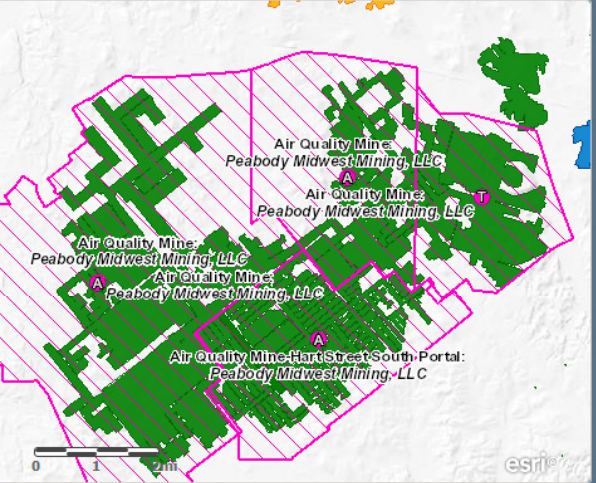
0 300 600mi Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, AND, USGS, NRCAN, Kadaster NL, and the GIS User Community

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ArcGIS Online

Firefox ArcGIS - Indiana Coal Mines, 2010 Compare Web Maps
 apps.arcgis.com/hosted/Compare/Configure/index.html?appid=5637c49a150a4669a8d3dc9f388a19ec

Compare Web Maps

Indiana Coal Mines - ESRI Basemap	Indiana Coal Mines	Indiana Coal Mines By Coal Seam and Mine Permits
		
Shows the locations and extents of coal mines in Indiana using ESRI Basemap	Shows the locations and extents of coal mines in Indiana using IGS Basemap and cached layers	Shows the locations and extents of coal mines in Indiana using IGS Basemap and dynamic layers

MAP INFORMATION:

- Description
- Content
- Legend

SYNCHRONIZE MAPS:

- Scale
- Location

ADDITIONAL INFORMATION:

[Use this tool to get retrieve additional information by clicking on any map...](#)

ArcGIS Online

Firefox

ArcGIS - My Map

www.arcgis.com/home/webmap/viewer.html

arcgis online vs arcgis explorer

ArcGIS My Map

New Map ArcGIS Home Help Sign Out

Details Add Basemap Save Share Print Measure Bookmarks Find address or place

Select a basemap

Bing Maps Aerial	Bing Maps Hybrid	Bing Maps Road
Imagery	Imagery with Labels	Streets
Topographic	Oceans	OpenStreetMap
Light Gray	Terrain with	Relief with

Make your own map

It's easy to make your own map. Just follow these steps:

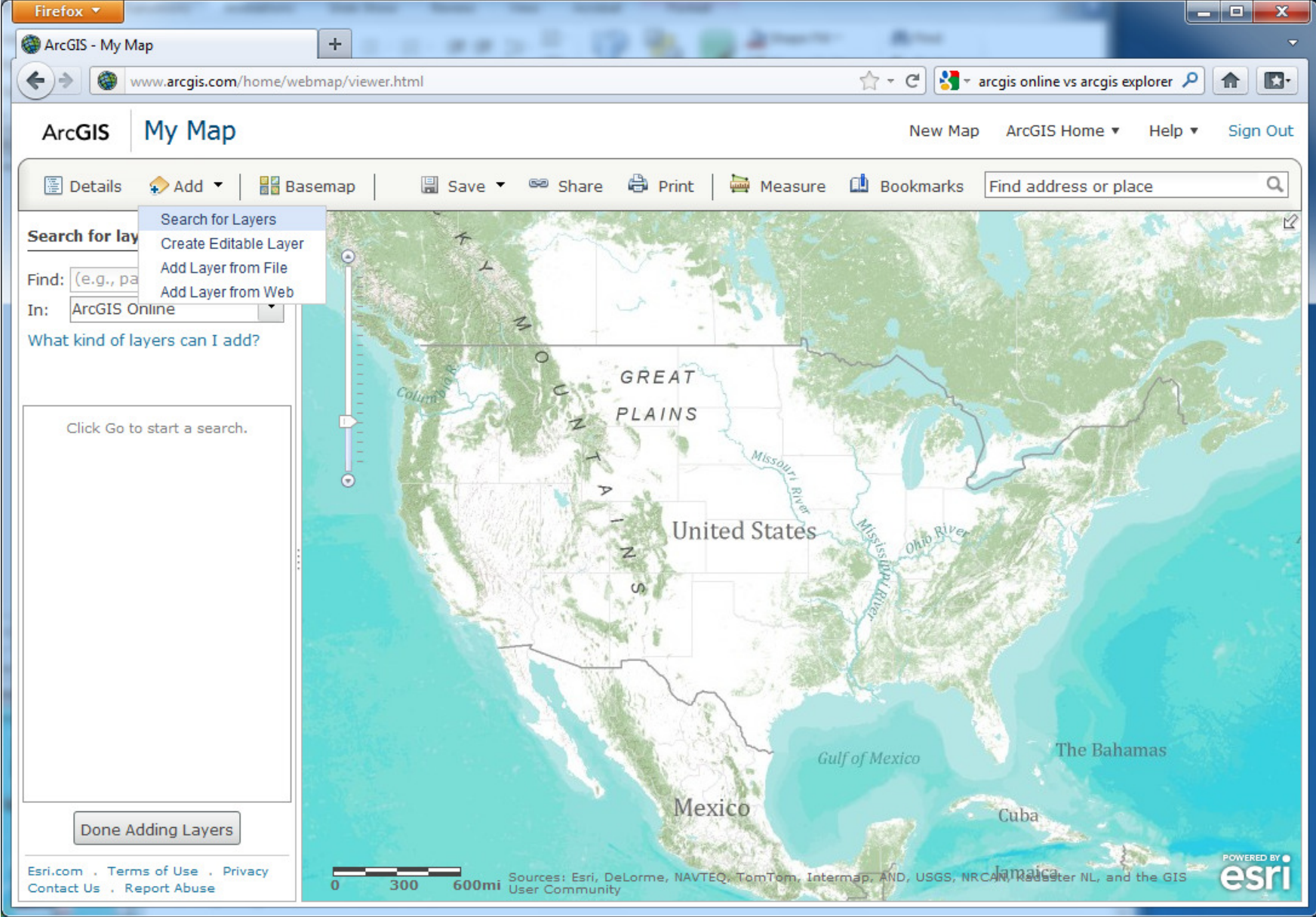
- 1. Choose an area.**
Pan and zoom the map to the area or search by its name or address.
- 2. Decide what to show.**
Choose a Basemap to use. Add layers on top of it.
- 3. Add more to your map.**
Create an editable layer to draw features on the map. Display descriptive text, images, and charts for map features in a pop-up.
- 4. Save and share your map.**
Give your map a name and description then share it with other people.

Esri.com Terms of Use Privacy Contact Us Report Abuse

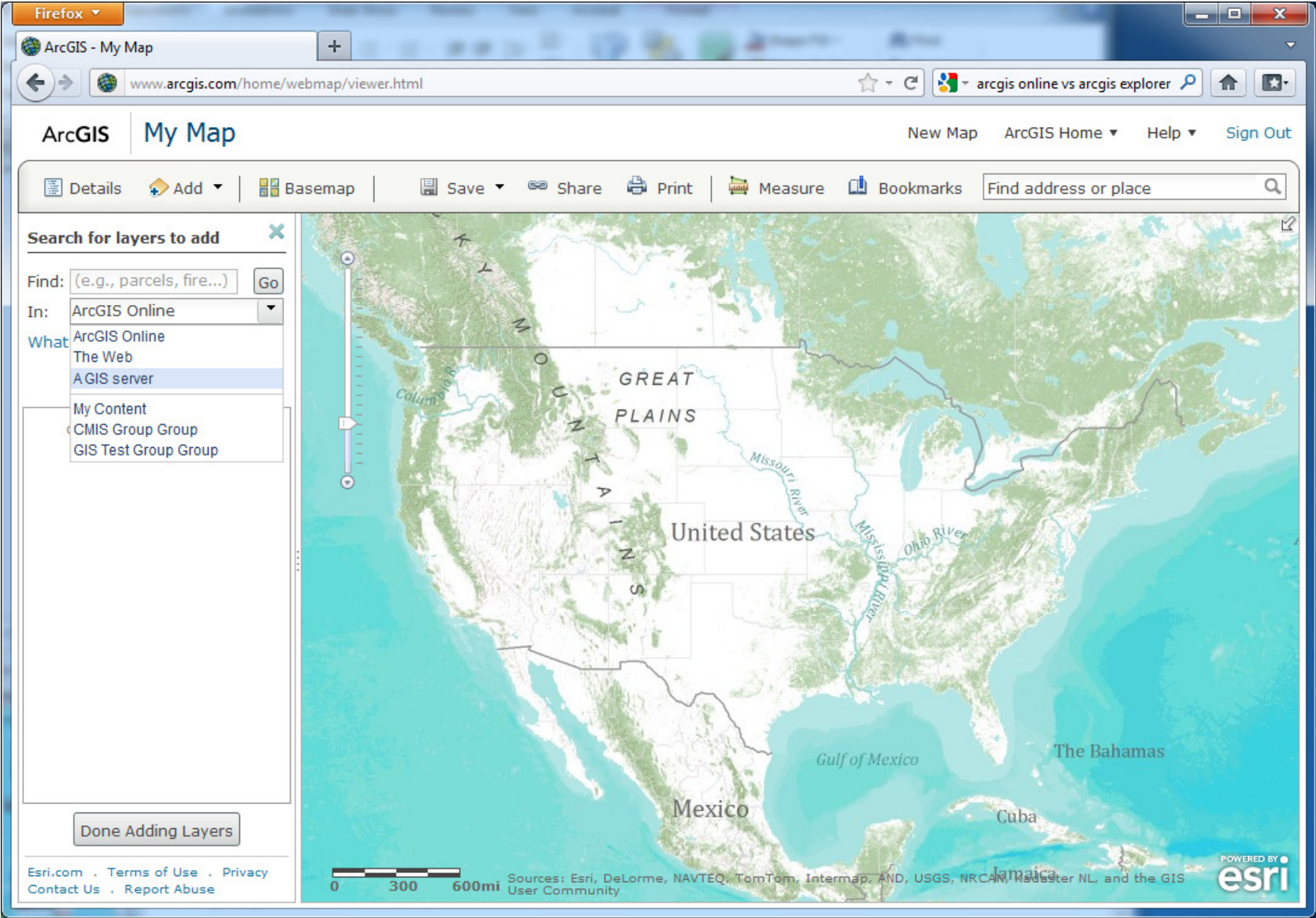
0 300 600mi Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, AND, USGS, NRCAN, GeBCO, Swisstopo, IGN, Esri, User Community

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ArcGIS Online



ArcGIS Online



ArcGIS Online

Firefox

ArcGIS - My Map

www.arcgis.com/home/webmap/viewer.html

arcgis online vs arcgis explorer

ArcGIS My Map

New Map ArcGIS Home Help Sign Out

Details Add Basemap Save Share Print Measure Bookmarks Find address or place

Search for layers to add

Find: (e.g., parcels, fire...) Go

In: A GIS server

URL: maps.indiana.edu/arcgis/re

What kind of layers can I add?

Specify an ArcGIS server URL.

Done Adding Layers

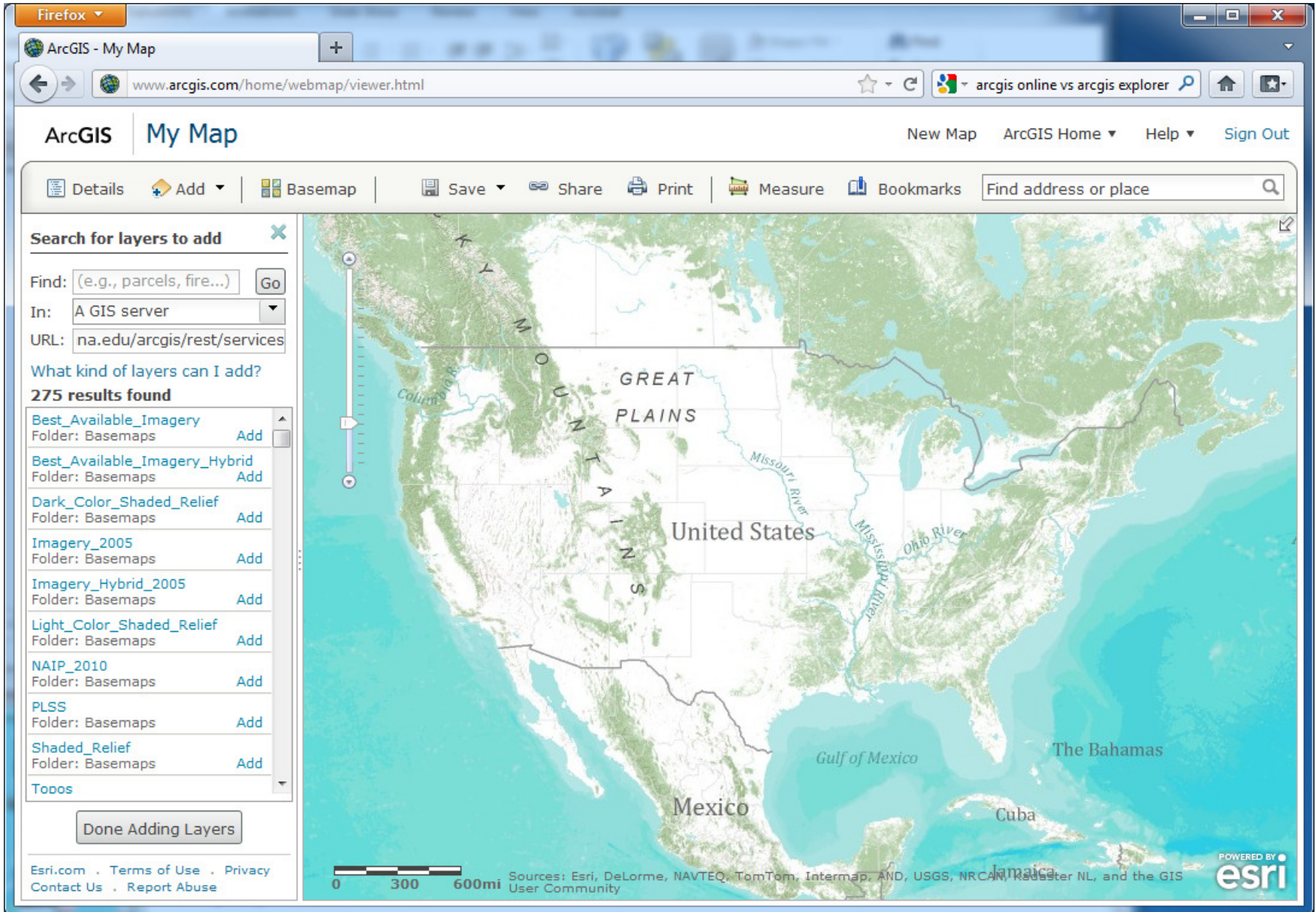
Esri.com Terms of Use Privacy Contact Us Report Abuse

0 300 600mi

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, AND, USGS, NRCAN, Reuters NL, and the GIS User Community

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ArcGIS Online



ArcGIS Online

Firefox

ArcGIS - My Map

www.arcgis.com/home/webmap/viewer.html

ArcGIS My Map

New Map ArcGIS Home Help Sign Out

Details Add Basemap Save Share Print Measure Bookmarks Find address or place

Search for layers to add

Find: (e.g., parcels, fire...) Go

In: A GIS server

URL: na.edu/arcgis/rest/services

What kind of layers can I add?
275 results found

- Best_Available_Imagery Folder: Basemaps Add
- Best_Available_Imagery_Hybrid Folder: Basemaps Add
- Dark_Color_S Folder: Basemaps Add
- Imagery_200 Folder: Basemaps Add
- Imagery_Hyb Folder: Basemaps Add
- Light_Color_S Folder: Basemaps Add
- NAIP_2010 Folder: Basemaps Add
- PLSS Folder: Basemaps Add
- Shaded Relief** Folder: Basemaps Add
- Topos Folder: Basemaps Add

Shaded Relief

Add to map
Service Details
Use as Basemap

Author: Indiana Geological Survey
Summary:

Done Adding Layers

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Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, AND, USGS, NRCAN, Register NL, and the GIS community

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javascript:dijit.byId('arcgisServerServicesGrid').hideTooltip('srv_maps.indiana.edu_81');

ArcGIS Online

The screenshot displays the ArcGIS Online web application interface. At the top, the browser window shows the URL `www.arcgis.com/home/webmap/viewer.html`. The page header includes the ArcGIS logo, the title "My Map", and navigation links for "New Map", "ArcGIS Home", "Help", and "Sign Out".

The main interface features a toolbar with options for "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks". A search bar is located on the right side of the toolbar, labeled "Find address or place".

On the left side, there is a "Search for layers to add" panel. It contains a search input field with the text "(e.g., parcels, fire...)", a "Go" button, and a dropdown menu for "In:" set to "A GIS server". The "URL:" field is populated with `na.edu/arcgis/rest/services`. Below this, it states "What kind of layers can I add?" and "275 results found". A list of layers is displayed, including:

- Best_Available_Imagery (Folder: Basemaps)
- Best_Available_Imagery_Hybrid (Folder: Basemaps)
- Dark_Color_Shaded_Relief (Folder: Basemaps)
- Imagery_2005 (Folder: Basemaps)
- Imagery_Hybrid_2005 (Folder: Basemaps)
- Light_Color_Shaded_Relief (Folder: Basemaps)
- NAIP_2010 (Folder: Basemaps)
- PLSS (Folder: Basemaps)
- Shaded_Relief (Folder: Basemaps)
- Topos (Folder: Basemaps)
- Coal_Mines_Entries (Folder: CMIS)
- Coal_Mines_Subsidence (Folder: CMIS)
- Coal_Mines_Surface (Folder: CMIS)
- Coal Mines Surface Coal Seam (Folder: CMIS)

A "Done Adding Layers" button is located at the bottom of the list. Below the list, there are links for "Esri.com", "Terms of Use", "Privacy", "Contact Us", and "Report Abuse".

The main map area shows a map of West Virginia with a network of red lines representing roads or infrastructure. The map includes a scale bar at the bottom left, indicating 0, 20, and 40 miles. The Esri logo is visible in the bottom right corner of the map area.

ArcGIS Online

The screenshot displays the ArcGIS Online interface in a Firefox browser window. The browser's address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS My Map".

The interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out" links. Below this is a toolbar with "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks" options. A search bar on the right contains the placeholder text "Find address or place".

The main map area shows a map of Indiana with several layers visible. The "Contents" panel on the left lists the following layers, all of which are checked:

- Coal_Mines_Underground
- Coal_Mines_Surface
- Coal_Mines_Subsidence
- Coal_Mines_Entries
- Shaded_Relief

The map displays a network of major highways (Interstates 65, 70, 74, 75, 90, 94, 465, 469, 489, 54, 69, 265, 275) and numerous red and blue markers representing coal mine locations. A scale bar at the bottom left indicates distances of 0, 20, and 40 miles. The bottom right corner features the text "Indiana Geological Survey | copyright 2011" and the "POWERED BY esri" logo.

ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS | My Map".

The interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out" options. Below this is a toolbar with "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks" icons, along with a search box labeled "Find address or place".

The main map area shows a map of Indiana with various mine-related data layers overlaid. A legend on the left side of the map provides the following information:

- Coal_Mines_Entries**
 - Mine Entries
 - Slope or Drift (represented by a red Y-shape)
 - Hoist Shaft (represented by a red square)
 - Air/Escape Shaft (represented by a red square with a diagonal line)
 - Unknown (represented by a red X-shape)
- Coal_Mines_Subsidence**
 - Mine Subsidence (represented by an orange square)
- Coal_Mines_Surface**
 - Mines - Surface (represented by a brown square)
- Coal_Mines_Underground**
 - Mines - Underground (represented by a blue square)

The map also features a scale bar at the bottom left indicating 0, 20, and 40 miles, and a scale slider on the left side. The bottom right corner of the map area contains the text "Indiana Geological Survey | copyright 2011" and the "POWERED BY esri" logo.

ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS | My Map".

The interface includes a top navigation bar with links for "New Map", "ArcGIS Home", "Help", and "Sign Out". Below this is a toolbar with icons for "Save", "Share", "Print", "Measure", and "Bookmarks", along with a search box labeled "Find address or place".

The main map area shows a map of Indiana with several layers. A red-shaded area represents coal mine entries. A context menu is open over the map, showing options: "Zoom to", "Transparency", "Move up", "Move down", "Rename", "Remove", and "Description". The "Transparency" option is selected, and a slider is visible, ranging from "0% Opaque" to "100% Transparent".

The left sidebar contains a "Contents" panel with the following layers checked:

- Coal_Mines_Entries
- Coal_Mines_Subsidence
- Coal_Mines_Surface
- Coal_Mines_Undergrou
- Shaded_Relief

At the bottom left, there is a scale bar showing 0, 20, and 40 miles. At the bottom right, the text "Indiana Geological Survey | copyright 2011" and the "esri" logo are visible.

ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS My Map".

The interface includes a navigation bar with options for "New Map", "ArcGIS Home", "Help", and "Sign Out". Below this is a toolbar with icons for "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks". A search bar is located on the right side of the toolbar with the placeholder text "Find address or place".

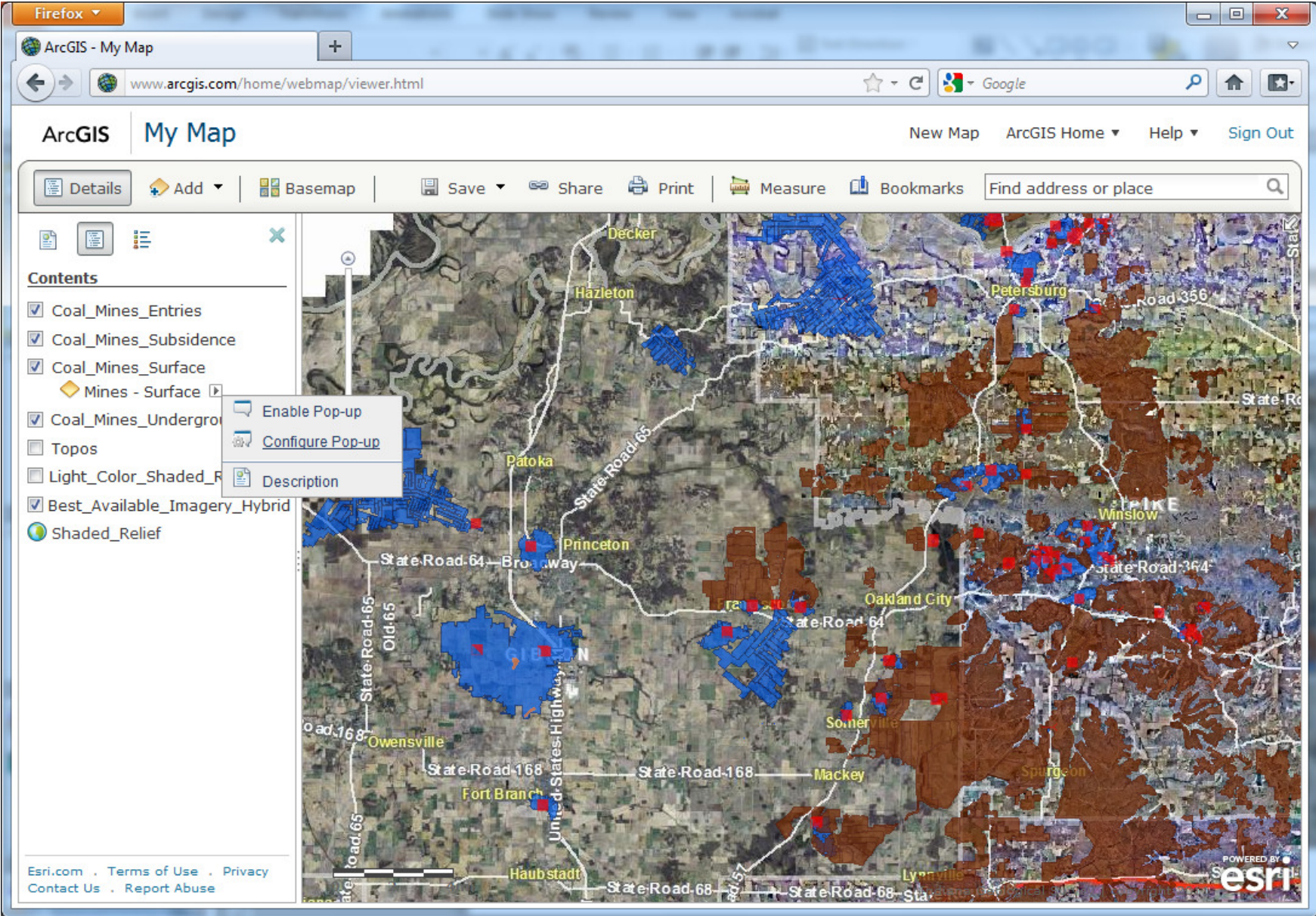
The main map area shows a satellite view of a region in West Virginia. Several areas are highlighted in blue, representing coal mines, and other areas are highlighted in brown, representing coal mine subsidence. Labels on the map include "White River", "East Mount Carmel", "Lyles", "Patoka", "Princeton", "Baldwin Heights", "Douglas", "Fort Gibson (historical)", "McGary", "Durham", "Fort Branch", "State Road 65", "State Road 64", "State Road 63", "State Road 62", "State Road 61", "State Road 60", "State Road 59", "State Road 58", "State Road 57", "State Road 56", "State Road 55", "State Road 54", "State Road 53", "State Road 52", "State Road 51", "State Road 50", "State Road 49", "State Road 48", "State Road 47", "State Road 46", "State Road 45", "State Road 44", "State Road 43", "State Road 42", "State Road 41", "State Road 40", "State Road 39", "State Road 38", "State Road 37", "State Road 36", "State Road 35", "State Road 34", "State Road 33", "State Road 32", "State Road 31", "State Road 30", "State Road 29", "State Road 28", "State Road 27", "State Road 26", "State Road 25", "State Road 24", "State Road 23", "State Road 22", "State Road 21", "State Road 20", "State Road 19", "State Road 18", "State Road 17", "State Road 16", "State Road 15", "State Road 14", "State Road 13", "State Road 12", "State Road 11", "State Road 10", "State Road 9", "State Road 8", "State Road 7", "State Road 6", "State Road 5", "State Road 4", "State Road 3", "State Road 2", "State Road 1".

On the left side, there is a "Contents" panel with the following items:

- Coal_Mines_Entries
- Coal_Mines_Subsidence
- Coal_Mines_Surface
- Coal_Mines_Underground
- Topos
- Light_Color_Shaded_Relief
- Best_Available_Imagery_Hybrid
- Shaded_Relief

At the bottom left, there are links for "Esri.com", "Terms of Use", "Privacy", "Contact Us", and "Report Abuse". At the bottom right, there is a "POWERED BY esri" logo.

ArcGIS Online



ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS My Map".

The interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out" options. Below this is a toolbar with "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", "Bookmarks", and a search box labeled "Find address or place".

The main map area shows a satellite-style view of a region with various mining sites. The sites are represented by blue and red polygons and points. Labels on the map include "Decker", "Hazleton", "Petersburg", "Patoka", "Princeton", "Oakland City", "Winslow", "Huntingburg", "Fort Branch", "Haubstadt", "Elberfeld", "Mackey", "Lynnville", "Holland", "Ferdinand", "Dale", and "Medcat". Major roads like "State Road 64", "State Road 65", "State Road 66", "State Road 68", "State Road 56", "State Road 356", "State Road 364", "State Road 168", "State Road 167", "State Road 166", "State Road 165", "State Road 164", "State Road 163", "State Road 162", "State Road 161", "State Road 160", "State Road 159", "State Road 158", "State Road 157", "State Road 156", "State Road 155", "State Road 154", "State Road 153", "State Road 152", "State Road 151", "State Road 150", "State Road 149", "State Road 148", "State Road 147", "State Road 146", "State Road 145", "State Road 144", "State Road 143", "State Road 142", "State Road 141", "State Road 140", "State Road 139", "State Road 138", "State Road 137", "State Road 136", "State Road 135", "State Road 134", "State Road 133", "State Road 132", "State Road 131", "State Road 130", "State Road 129", "State Road 128", "State Road 127", "State Road 126", "State Road 125", "State Road 124", "State Road 123", "State Road 122", "State Road 121", "State Road 120", "State Road 119", "State Road 118", "State Road 117", "State Road 116", "State Road 115", "State Road 114", "State Road 113", "State Road 112", "State Road 111", "State Road 110", "State Road 109", "State Road 108", "State Road 107", "State Road 106", "State Road 105", "State Road 104", "State Road 103", "State Road 102", "State Road 101", "State Road 100", "State Road 99", "State Road 98", "State Road 97", "State Road 96", "State Road 95", "State Road 94", "State Road 93", "State Road 92", "State Road 91", "State Road 90", "State Road 89", "State Road 88", "State Road 87", "State Road 86", "State Road 85", "State Road 84", "State Road 83", "State Road 82", "State Road 81", "State Road 80", "State Road 79", "State Road 78", "State Road 77", "State Road 76", "State Road 75", "State Road 74", "State Road 73", "State Road 72", "State Road 71", "State Road 70", "State Road 69", "State Road 68", "State Road 67", "State Road 66", "State Road 65", "State Road 64", "State Road 63", "State Road 62", "State Road 61", "State Road 60", "State Road 59", "State Road 58", "State Road 57", "State Road 56", "State Road 55", "State Road 54", "State Road 53", "State Road 52", "State Road 51", "State Road 50", "State Road 49", "State Road 48", "State Road 47", "State Road 46", "State Road 45", "State Road 44", "State Road 43", "State Road 42", "State Road 41", "State Road 40", "State Road 39", "State Road 38", "State Road 37", "State Road 36", "State Road 35", "State Road 34", "State Road 33", "State Road 32", "State Road 31", "State Road 30", "State Road 29", "State Road 28", "State Road 27", "State Road 26", "State Road 25", "State Road 24", "State Road 23", "State Road 22", "State Road 21", "State Road 20", "State Road 19", "State Road 18", "State Road 17", "State Road 16", "State Road 15", "State Road 14", "State Road 13", "State Road 12", "State Road 11", "State Road 10", "State Road 9", "State Road 8", "State Road 7", "State Road 6", "State Road 5", "State Road 4", "State Road 3", "State Road 2", "State Road 1" are also visible.

On the left side, the "Pop-up Properties" panel is open, showing configuration options for a layer named "Mines - Surface". The "Pop-up Title" is set to "{MINENUMB}". The "Pop-up Contents" are set to "A list of field attributes". The panel lists the following attributes: Mine Number {MINENUM}, Year Mining Started {YEA}, Year Mining Ended {YEA}, Map Number {MAPNUM}, Source Contact {SOURC}, Reaffected {REAFLECTI}, and Mine Report {RPT_LINK}. There are buttons for "Configure Attributes", "Format Fields", "Add" (for media), "Save Pop-up", and "Cancel".

The bottom of the page contains the Esri logo and the text "POWERED BY esri".

ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS My Map". The interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out" options. Below this is a toolbar with icons for "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks", along with a search box labeled "Find address or place".

The main map area shows a satellite-style view of a region with various colored overlays representing coal mines. A popup window titled "Mines - Underground" is open over a specific mine location. The popup contains the following information:

Mines - Underground	
Mine Number	800200
Year Mining Started	1923
Year Mining Ended	1973
Map Number	342855
Source Contact	Primary
Mine Type	U
IMG Avail	Y
Mine Report	More info
Mine Map (PDF)	More info

At the bottom of the popup, there is a "Zoom to" button. The map also features a "Contents" panel on the left with the following layers:

- Coal_Mines_Entries
- Coal_Mines_Subsidence
- Coal_Mines_Surface
 - Mines - Surface
- Coal_Mines_Underground
 - Mines - Underground
- Topos
- Light_Color_Shaded_Relief
- Best_Available_Imagery_Hybrid
- Shaded_Relief

The bottom of the interface includes the Esri logo and the text "POWERED BY esri".

ArcGIS Online

COAL MINE INFORMATION SYSTEM Mine/Pit Data Sheet

MINENUMB
800007
Underground

MINE NAME HISTORY

Mine Name	Start	End
Ayrshire #8 Mine	1919	1928

START DATE

MIN	Start	MAX
1919	1919	1919

END DATE

MIN	End	MAX
1928	1928	1928

MINE OWNERSHIP HISTORY

Company Name	Start	End
Ayrshire Coal Co.	1919	1928

OPERATIONS

Coal Removal Method	Shaft
Removal Equipment	Hand
Transportation Type	UNKNOWN
Preparation Method	UNKNOWN

COUNTIES

County Name	Primary
Pike	Yes

QUADRANGLES

Quadrangle Name	Primary
Augusta	Yes
Oakland City	No

TRS LOCATIONS

Twp	DR	Rng	DR	SecType	Sec	Quarters
2	S	7	W	Sec.	18	NW
2	S	8	W	Sec.	13	

COAL GEOLOGY

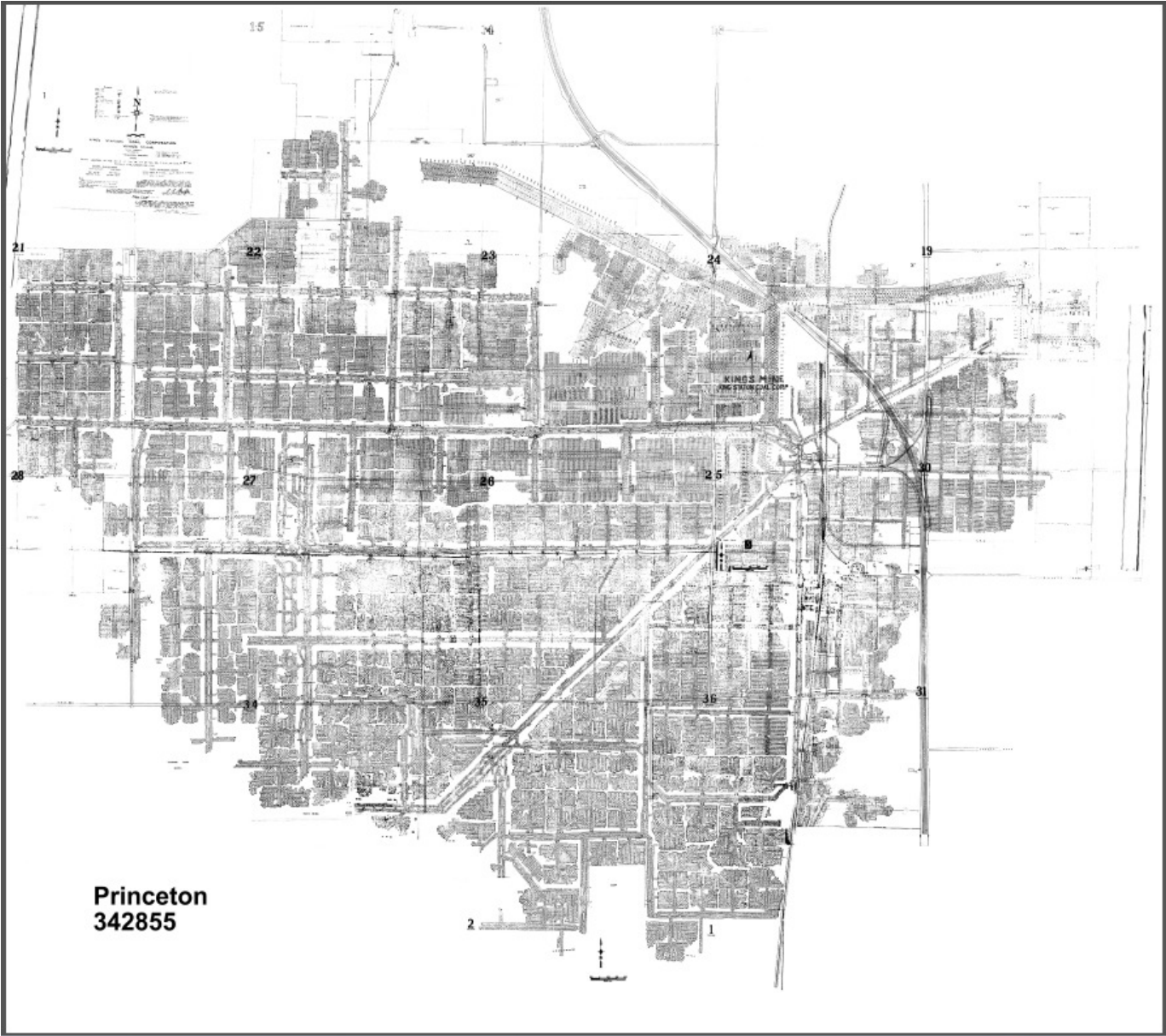
Coal Seam/Member	Depth (ft)	Thickness (ft)	Roof Lithology	Floor Lithology	Original Correlation
Springfield Coal Mbr.	110	5.25	UNKNOWN	UNKNOWN	CO-5 SMI

COMMENTS

CITATIONS

Abbreviated Citation	Internal No.	Digital
USBM Negative	342573	No
USBM Negative	342574	No
USBM Negative	342575	Yes
Powell Negative	402193	No
PCM #3, Pike Co.	999990	No

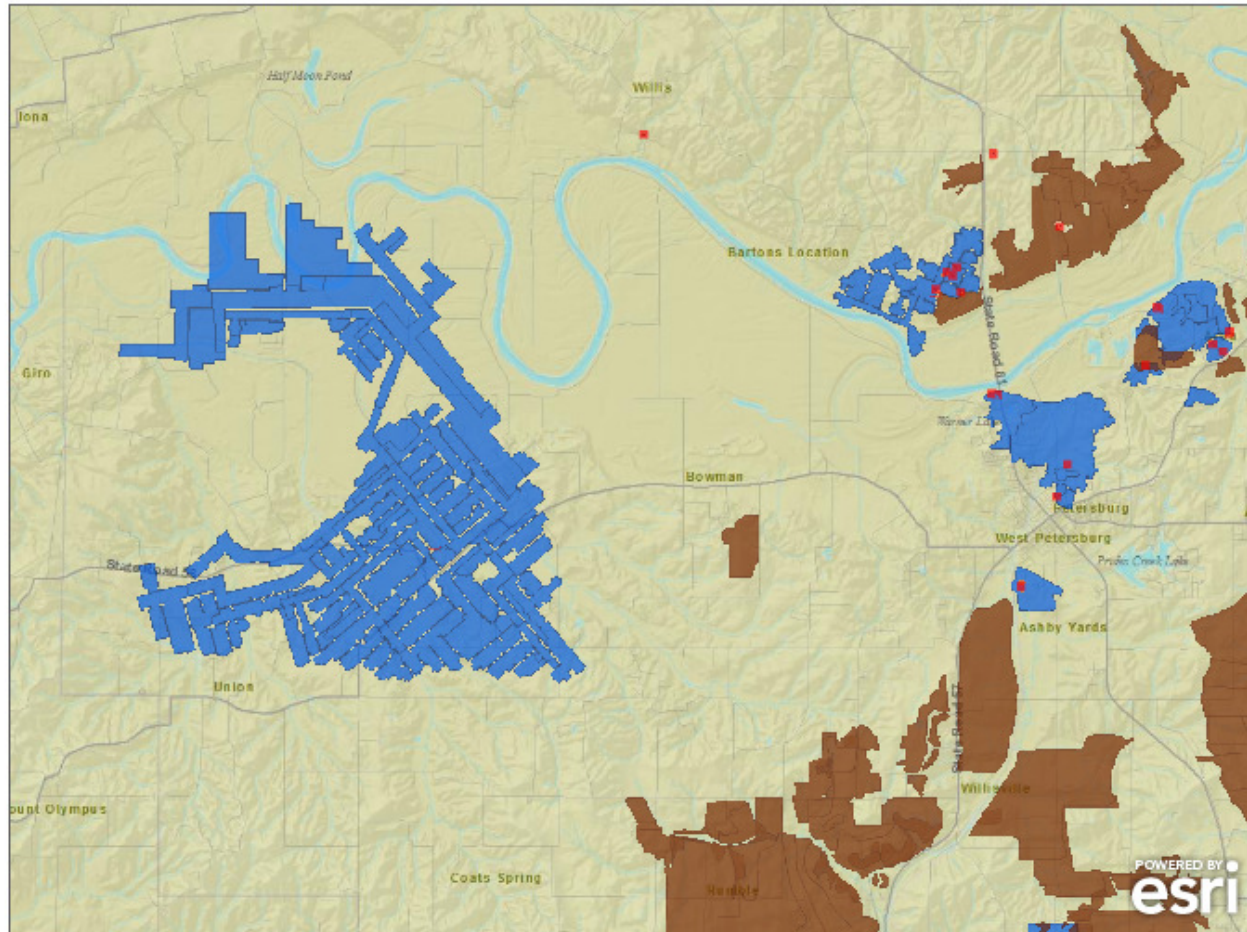
ArcGIS Online



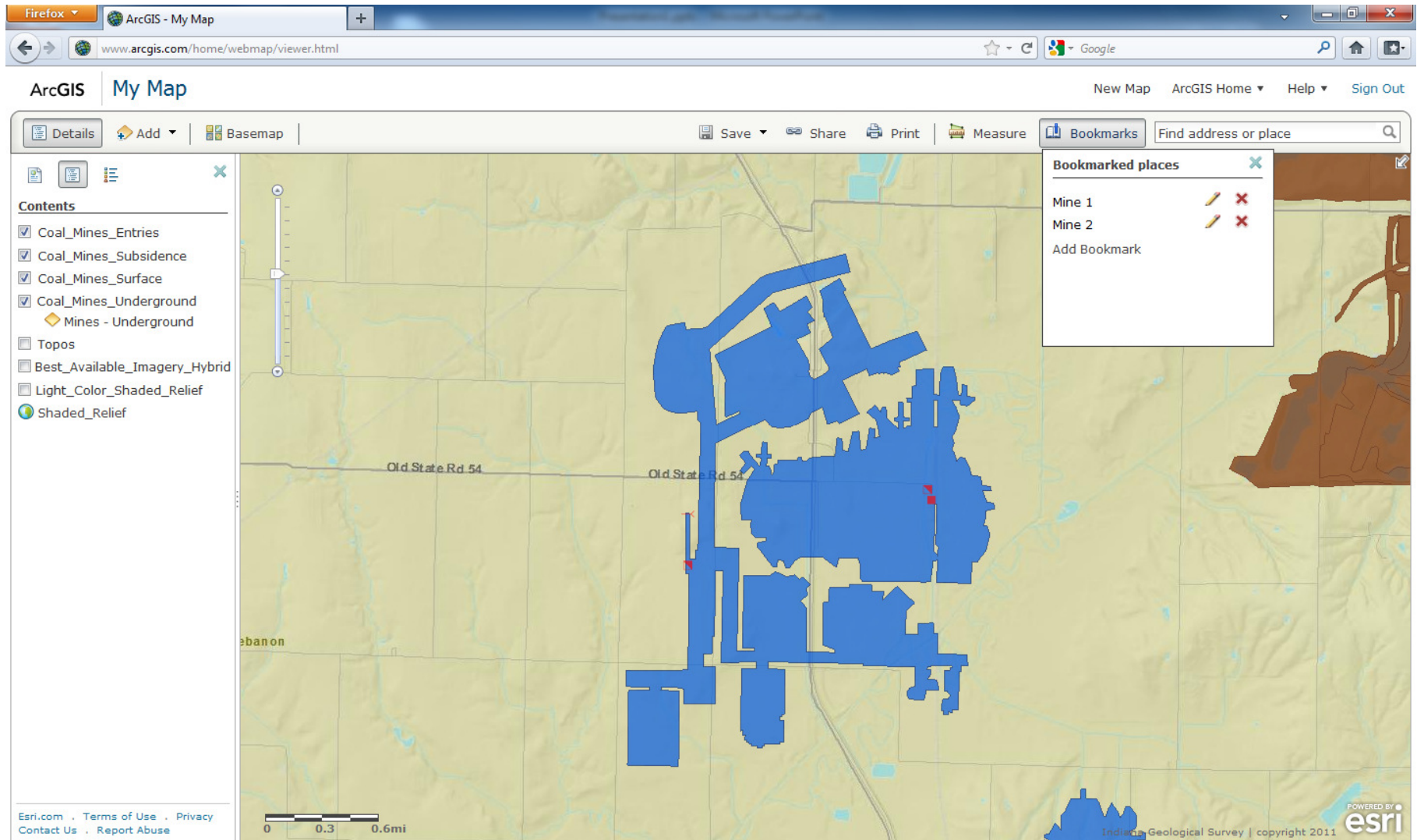
ArcGIS Online



My Map



ArcGIS Online



ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL www.arcgis.com/home/webmap/viewer.html. The page title is "ArcGIS My Map".

The interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out" options. Below this is a toolbar with "Save", "Share", "Print", "Measure", and "Bookmarks" icons, along with a search box labeled "Find address or place".

On the left side, there is a "Contents" panel listing several layers:

- Coal_Mines_Entries
- Coal_Mines_Subsideance
- Coal_Mines_Surface
- Coal_Mines_Underground
 - Mines - Underground
- Topos
- Best_Available_Imagery_Hybrid
- Light_Color_Shaded_Relief
- Shaded_Relief

The main map area shows a map of Indiana with several red lines representing mine locations. A "Save Map" dialog box is open in the center, containing the following information:

- Title: ISMR Mine Map
- Tags: ISMR, Indiana, coal, mine, surface, underground
[Choose from your tags](#)
- Summary: ISMR Mine Map Demo
- Save in folder: reameyer

At the bottom of the map, there is a scale bar showing 0, 20, and 40 miles. The footer of the page includes "Esri.com", "Terms of Use", "Privacy", "Contact Us", "Report Abuse", "Indiana Geological Survey | copyright 2011", and the "POWERED BY esri" logo.

ArcGIS Online

Resource Center Show: Web Content Only Becky Meyer Notifications Help Sign Out

ArcGIS GALLERY MAP GROUPS MY CONTENT Find maps, applications and more... Q

My Content

New Delete

reameyer

Add Item Create Map Share Delete Move To Using 0% of 2GB

<input type="checkbox"/>	Title	Type	Modified	Shared	Size
<input type="checkbox"/>	AML Water Quality Sites	Web Map	Nov 27, 2011	Group	53 KB
<input type="checkbox"/>	Indiana AML Water Quality Sampling Sites	Web Map	Nov 29, 2011	Group	2 KB
<input type="checkbox"/>	Indiana Coal Mine (Basic)	Web Map	Nov 29, 2011	Not Shared	5 KB
<input type="checkbox"/>	Indiana Coal Mines	Web Map	Nov 27, 2011	Group	8 KB
<input type="checkbox"/>	Indiana Coal Mines - ESRI Basemap	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines By Coal Seam and Mine Permits	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines Over Time	Web Map	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	Indiana Coal Mines, 2010	Web Mapping Application	Nov 27, 2011	Not Shared	1 KB
<input type="checkbox"/>	ISMR Mine Map	Web Map	Nov 30, 2011	Not Shared	3 KB
<input type="checkbox"/>	Surface Mines	Layer Package	Sep 7, 2010	Group	3 MB
<input type="checkbox"/>	Test Map	Web Map	Nov 22, 2011	Not Shared	18 KB
<input type="checkbox"/>	Underground Mines	Layer Package	Sep 7, 2010	Group	2 MB

ArcGIS Online

The screenshot shows the ArcGIS Online interface in a Firefox browser window. The browser address bar displays the URL: `www.arcgis.com/home/webmap/viewer.html?webmap=ce4b0cd1609e4d0cb7b64da6ce0e97b4`. The page title is "ArcGIS My Indiana Coal Mine Map".

The main interface includes a top navigation bar with "New Map", "ArcGIS Home", "Help", and "Sign Out". Below this is a toolbar with "Save", "Share", "Print", "Measure", and "Bookmarks". A search bar on the right contains the text "Find address or place".

On the left side, there is a sidebar for the map titled "My Indiana Coal Mine Map". It includes the following information:

- My Indiana Coal Mine Map
- Web Map by reameyer (last modified: December 1, 2011)
- 0 ratings, 15 views, 0 comments
- More Details...
- Open this map in: ArcGIS Explorer Online
- Make your own map
 - Add to this map
 - Make a new map

The central map area shows a map of Indiana with a red line representing a coal mine. A "Share" dialog box is open over the map, containing the following options:

- Choose who can view this map.**
- Your map is currently shared with these people.
- Everyone (public)
- Members of these groups:
 - CMIS Group
 - GIS Test Group
- Link to this map**
 - http://bit.ly/vSCqM1
 - Facebook
 - Twitter
- Embed this map**
 - Embed in Website
 - Make a Web Application
- Note: To embed your map, you must share it with Everyone.
- Close

At the bottom of the page, there is a scale bar (0, 20, 40mi) and the text "Esri.com Terms of Use Privacy Contact Us Report Abuse". The footer also includes "Indiana Geological Survey | copyright 2011" and the "POWERED BY esri" logo.

ArcGIS Online

The screenshot shows the ArcGIS Online web interface in a Firefox browser window. The browser's address bar displays the URL: `www.arcgis.com/home/webmap/viewer.html?webmap=ce4b0cd1609e4d0cb7b64da6ce0e97b4`. The page title is "My Indiana Coal Mine Map".

The main interface includes a top navigation bar with "ArcGIS" and "My Indiana Coal Mine Map" on the left, and "New Map", "ArcGIS Home", "Help", and "Sign Out" on the right. Below this is a toolbar with "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks". A search box labeled "Find address or place" is also present.

On the left side, there is a sidebar for "My Indiana Coal Mine Map" with the following information:

- My Indiana Coal Mine Map
- Web Map by reameyer (last modified: December 1, 2011)
- 0 ratings, 15 views, 0 comments
- More Details...
- Open this map in: ArcGIS Explorer Online
- Make your own map: Add to this map, Make a new map

The central map area shows a map of Indiana with red shaded regions. A "Share" dialog box is open, titled "Share", with a sub-section "Embed in Website". It contains the following HTML code for embedding:

```
<iframe width="500" height="400" frameborder="0" scrolling="no" marginheight="0" marginwidth="0" src="http://www.arcgis.com/home/webmap/embedViewer.html?webmap=ce4b0cd1609e4d0cb7b64da6ce0e97b4"></iframe><br /><small><a href="http://www.arcgis.com/home/webmap/viewer.html?webmap=ce4b0cd1609e4d0cb7b64da6ce0e97b4" style="color:#0000FF;text-align:left" target="_blank">View Larger Map</a></small>
```

Below the code, there are options for map size: Small (300 x 260), Medium (500 x 400, selected), Large (940 x 600), and Custom (Width: 500, Height: 400). There are also checkboxes for "Show zoom control" and "Show scale bar". A "< Back" link is at the bottom left of the dialog, and a "Close" button is at the bottom right.









At the bottom of the page, there is a scale bar showing 0, 20, and 40 miles. The footer includes "Esri.com", "Terms of Use", "Privacy", "Contact Us", "Report Abuse", "Indiana Geological Survey | copyright 2011", and the "esri" logo.

ArcGIS Online Templates – Easily create a web application for a web map with predefined templates

Share ✕

Make a Web Application

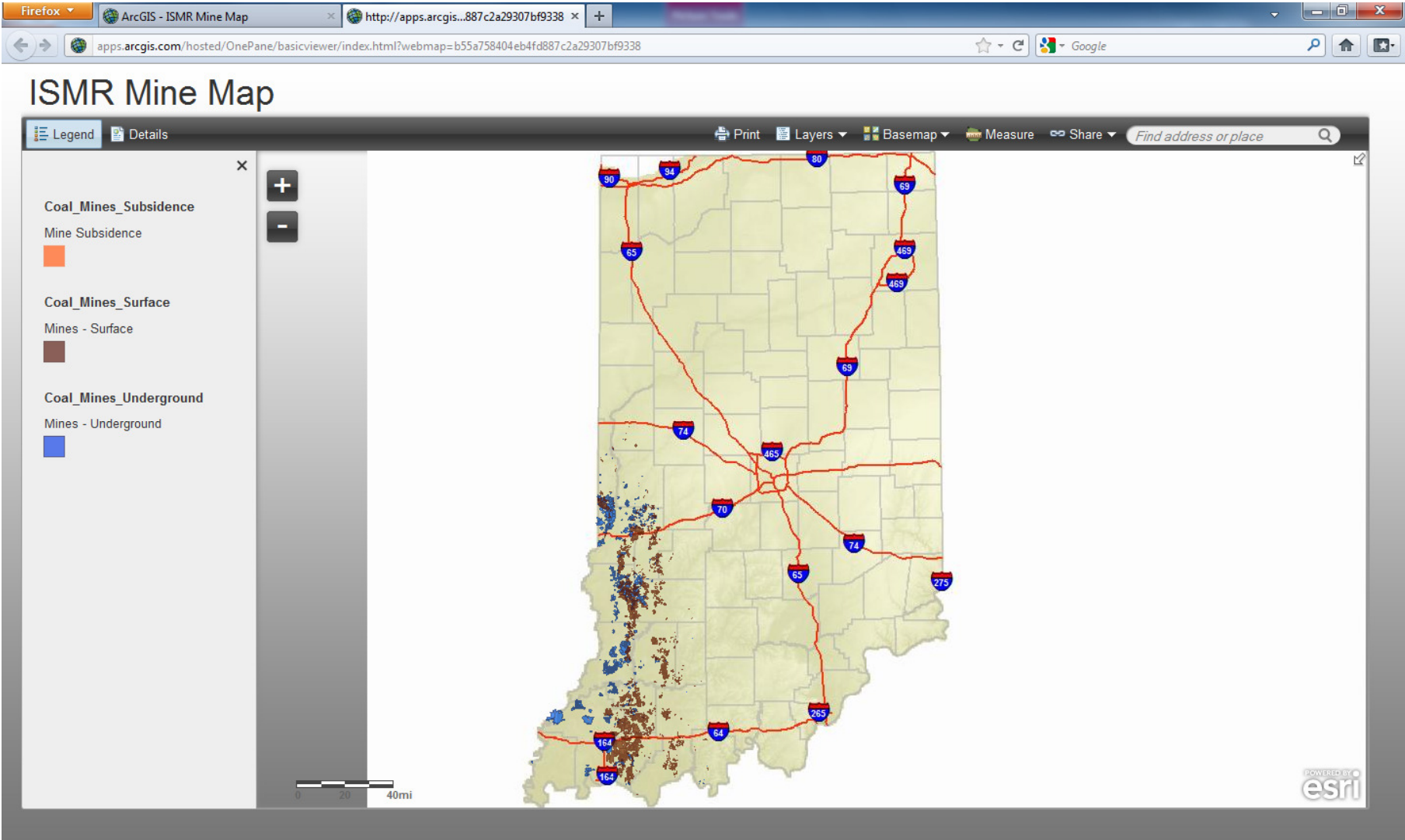
Select a template to preview or download.

<p>Chrome</p>  <p>Download</p>	<p>Chrome - Header & Footer</p>  <p>Download</p>	<p>Chrome - Identify</p>  <p>Download</p>	<p>Chrome - Legend</p>  <p>Download</p>
<p>Chrome - Twitter</p>  <p>Download</p>	<p>Chrome - Two Panel</p>  <p>Download</p>	<p>Compare maps</p>  <p>Download</p>	<p>Contemporary - Blue</p>  <p>Download</p>

1 2 3 4

[< Back](#)

ArcGIS Online



ArcGIS Online

Firefox ArcGIS - ISMR Mine Map http://apps.arcgis.com/...887c2a29307bf9338

apps.arcgis.com/hosted/Identify/Seaside/index.html?webmap=b55a758404eb4fd887c2a29307bf9338

ISMR Mine Map

ISMR Mine Map Demo

Description

Indiana Coal Mine Map created as a demo for the 2011 ISMR Online Tools Workshop.

A map of Indiana showing coal mines and major highways. The map is overlaid with a network of red lines representing major highways, including I-90, I-80, I-69, I-65, I-74, I-70, I-465, I-64, I-275, I-164, and I-64. The coal mines are shown as brown and blue patches. A scale bar at the bottom left indicates 0, 20, and 40 miles. The map is powered by Esri.

Identify

Coal_Mines_Underground

Mines - Underground

Mine Number: 800200
Year Mining Started: 1923
Year Mining Ended: 1973
Map Number: 342855
Source Contact: Primary
Mine Type: U
IMG Avail: Y
Mine Report: [link](#)
Mine Map (PDF): [link](#)
Mine Map (JPG): [link](#)

Coal_Mines_Surface

No information at this location...

Coal_Mines_Subsidence

Mine Subsidence

OBJECTID: 537
Area: 127277.391
Source: Harper, Special Report 27

OBJECTID: 538
Area: 1712.617
Source: Harper, Special Report 27

OBJECTID: 539
Area: 77110.797
Source: Harper, Special Report 27

A map from: reameyer

ArcGIS Online

The screenshot displays the ArcGIS Online 'My Map' interface. At the top, the browser window shows the URL 'www.arcgis.com/home/webmap/viewer.html'. The page header includes 'ArcGIS My Map' and navigation links for 'New Map', 'ArcGIS Home', 'Help', and 'Sign Out'. Below the header, there are utility buttons for 'Details', 'Add', 'Basemap', 'Save', 'Share', 'Print', 'Measure', and 'Bookmarks', along with a search bar for 'Find address or place'.

The main content area is divided into two sections. On the left is a 'Search for layers to add' panel. It features a search input field with the placeholder '(e.g., parcels, fire...)', a 'Go' button, and a dropdown menu for the search location, currently set to 'A GIS server'. The URL field contains 'http://maps.indiana.edu/ar'. Below the search fields, it asks 'What kind of layers can I add?' and reports '275 results found'. A list of search results is shown, each with a name and a folder path, and an 'Add' button:

- Best_Available_Imagery (Folder: Basemaps)
- Best_Available_Imagery_Hybrid (Folder: Basemaps)
- Dark_Color_Shaded_Relief (Folder: Basemaps)
- Imagery_2005 (Folder: Basemaps)
- Imagery_Hybrid_2005 (Folder: Basemaps)
- Light_Color_Shaded_Relief (Folder: Basemaps)
- NAIP_2010 (Folder: Basemaps)
- PLSS (Folder: Basemaps)
- Shaded_Relief (Folder: Basemaps)
- Topos (Folder: Basemaps)
- Coal_Mines_Entries (Folder: CMIS)
- Coal_Mines_Subsidence (Folder: CMIS)
- Coal_Mines_Surface (Folder: CMIS)
- Coal_Mines_Surface_Coal_Seam (Folder: CMIS)

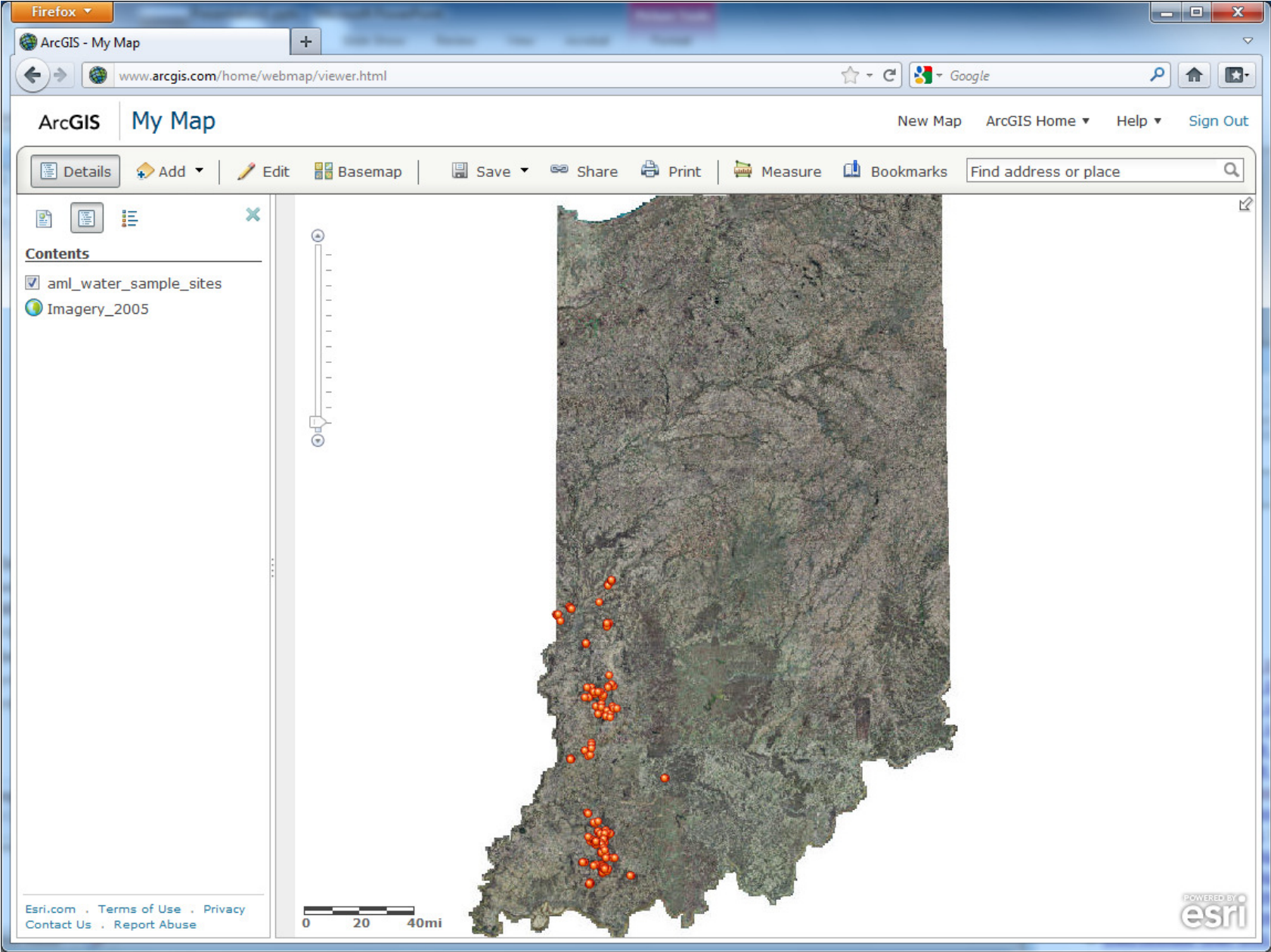
At the bottom of the search panel is a 'Done Adding Layers' button. Below the search panel is a scale bar showing 0, 20, and 40 miles.

The main map area displays a satellite-style imagery of the state of Indiana. To the left of the map is a vertical zoom slider. In the bottom right corner of the map area, there is a 'POWERED BY esri' logo.

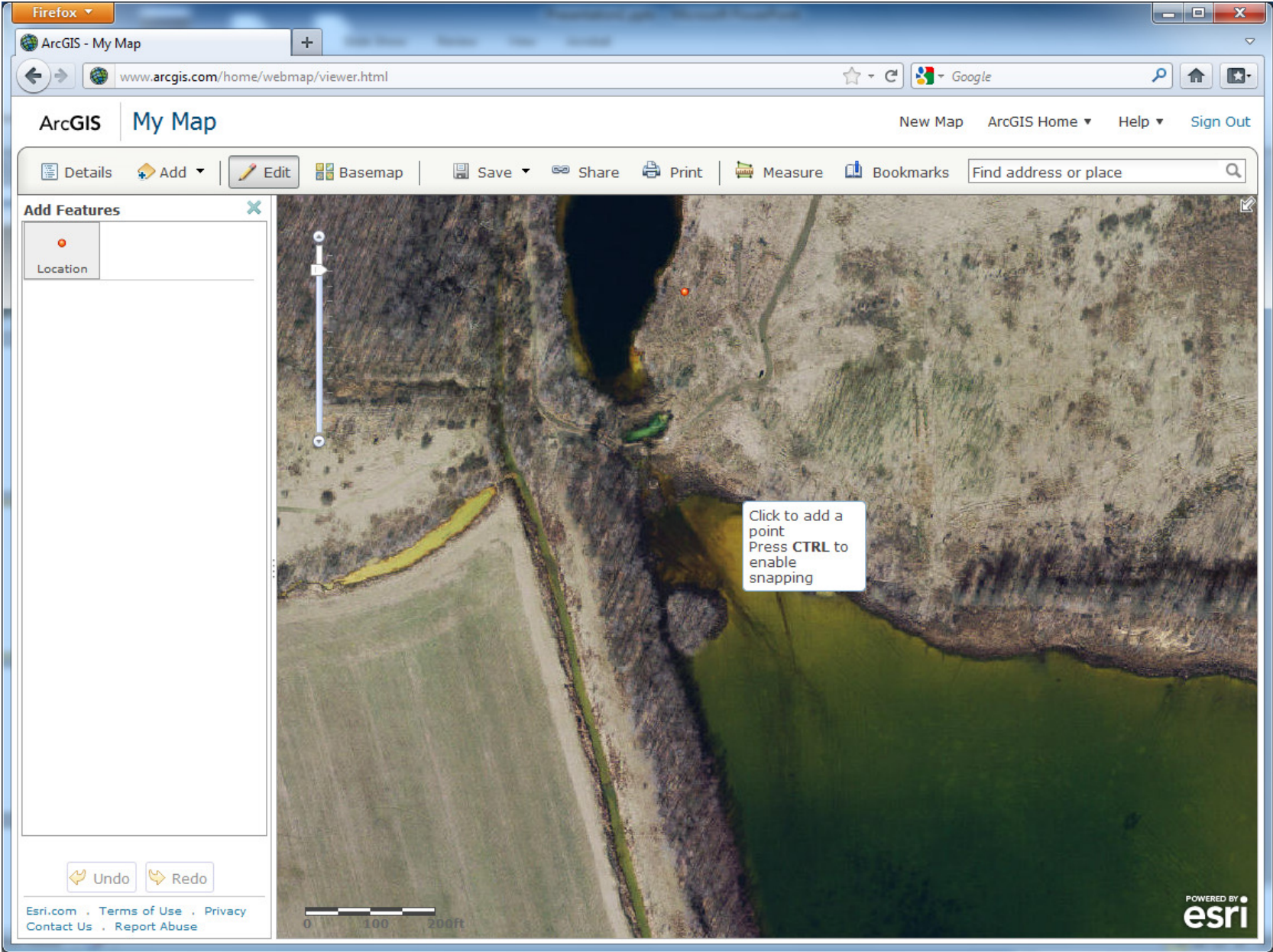
ArcGIS Online

```
aml_water_sample_sites.csv - Notepad
File Edit Format View Help
PointID,Type,AMLID,PointDescr,Long,Lat
273G,Seep,273,"Main seep near entrance road, north side of project.",-87.17767085910,39.46677708120
196A,Lake,196,Acid impoundment behind house.,-87.20448796380,38.12344122370
196B,Lake,196,Small impoundment along Hunsaker Rd.,-87.20364158310,38.12658190540
196C,Stream,196,"Pipe outlet into roadside ditch, south side of driveway.",-87.20391707520,38.12677006310
982A,Stream,982,where impoundment flows into roadside ditch.,-87.20766664590,38.15553869370
2084B,Stream,2084,where Fire Pit outlet ditch crosses access lane.,-87.21870851510,38.33714957180
2084C,Stream,2084,where culverts drain into Fire Pit.,-87.21633998610,38.33678319620
2084D,Lake,2084,"At outlet of upper acid impoundment, just south of Ashby Lake.",-87.21865817150,38.34335584800
2084E,Stream,2084,where drainage from Ashby Lake crosses Scottsburg Rd.,-87.22022350520,38.34357921910
2084F,Stream,2084,Above confluence of Ashby Lake and Fire Pit ditches.,-87.22642686360,38.34309551860
2084G,Stream,2084,where ditch crosses access lane.,-87.23022157520,38.34612502290
2048A,Seep,2048,Main seep,-87.20548977900,39.07236079790
2048B,Seep,2048,Secondary seep,-87.20532530880,39.07265097900
2048C,Stream,2048,"Main ditch draining seep area, prior to entering Black Creek",-87.20472865430,39.07176054670
2048D,Stream,2048,Black Creek just upstream of confluence with acid ditch,-87.20432617800,39.07201735180
2048E,Stream,2048,"Black Creek at SR 54 bridge, upstream of tributary entering from the west",-
87.20802206670,39.06717061180
232A,Lake,232,, -87.23594805190,39.01122165250
232B,Lake,232,, -87.21885097920,38.99118843170
863D,Pipe,863,"Pipe exiting bioreactor, south side of SR 150",-86.77520601030,38.63381589570
2084H,Lake,2084,Frog Pit,-87.22890152220,38.34601414150
2084J,Lake,2084, Surprise Pit,-87.23209278760,38.34050384360
2084K,Lake,2084, Trestle Pit,-87.23015842250,38.34580502810
900D,Stream,900,where culvert crosses reclaimed haul road,-87.20667022350,38.23086884230
291C,Stream,291,Seep at inlet to passive treatment system,-87.32745327880,38.78328426420
196D,Stream,196,"In ditch leaving site, upstream of roadside ditch",-87.20221935700,38.12528770590
297B,,297,, -87.42002306050,38.73630088710
2084L,Seep,2084,Acid seep entering Fire Pit,-87.21616123740,38.33750857070
898L,Pipe,898,west Agridrain from limestone cell,-87.25023727110,38.29103372810
898M,Pipe,898,East Agridrain from dolomite cell,-87.25016859660,38.29104856490
898N,Seep,898,west stop log structure entering limestone cell,-87.25055096280,38.29014290060
898P,Seep,898,East stop log structure entering dolomite cell,-87.25013385460,38.29038838810
898Q,Lake,898,Near outlet of Oxydation Pond,-87.24843487930,38.29295197930
2160A,Seep,2160,, -87.24749609130,39.02344527160
130D,Stream,130,New weir in stream draining MOAS,-87.20167689570,38.30716766260
1087A,,1087,, -87.16982996380,38.32337084740
1087B,,1087,, -87.17125706010,38.32294870470
1087C,,1087,, -87.17137543440,38.32288661660
1087D,,1087,, -87.17165699760,38.32338017420
1087E,,1087,, -87.17004427010,38.32382440100
1087F,,1087,, -87.16474496790,38.32785933100
1087G,,1087,, -87.16306436410,38.32809762390
1087H,,1087,, -87.16095867050,38.32960947640
1087J,,1087,, -87.16145778070,38.33803347130
1087K,,1087,, -87.16027318500,38.33779861150
1087L,,1087,, -87.15231815170,38.33563768180
1087M,,1087,, -87.14963924790,38.33488787600
1101A,Stream,1101,"where creek crosses county road, east side",-87.21941364820,38.31006864590
1101B,Stream,1101,"where creek crosses county road, south side",-87.19089601400,38.28978693740
1101C,Stream,1101,"where creek crosses county road, north side",-87.22383809450,38.29303663610
2084A,Stream,2084,"where culvert crosses Scottsburg Road, west side",-87.21991049420,38.33709568320
```

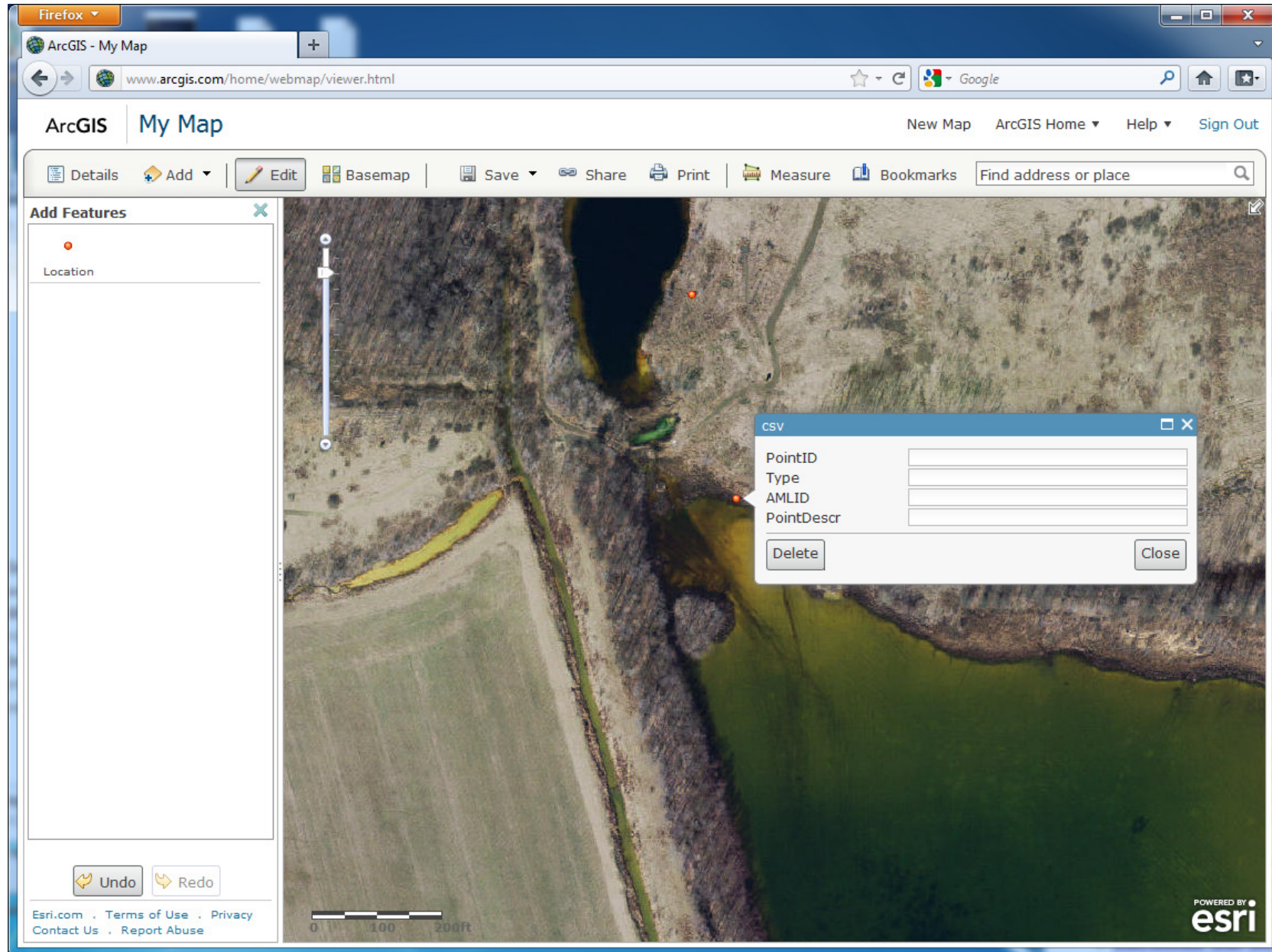
ArcGIS Online



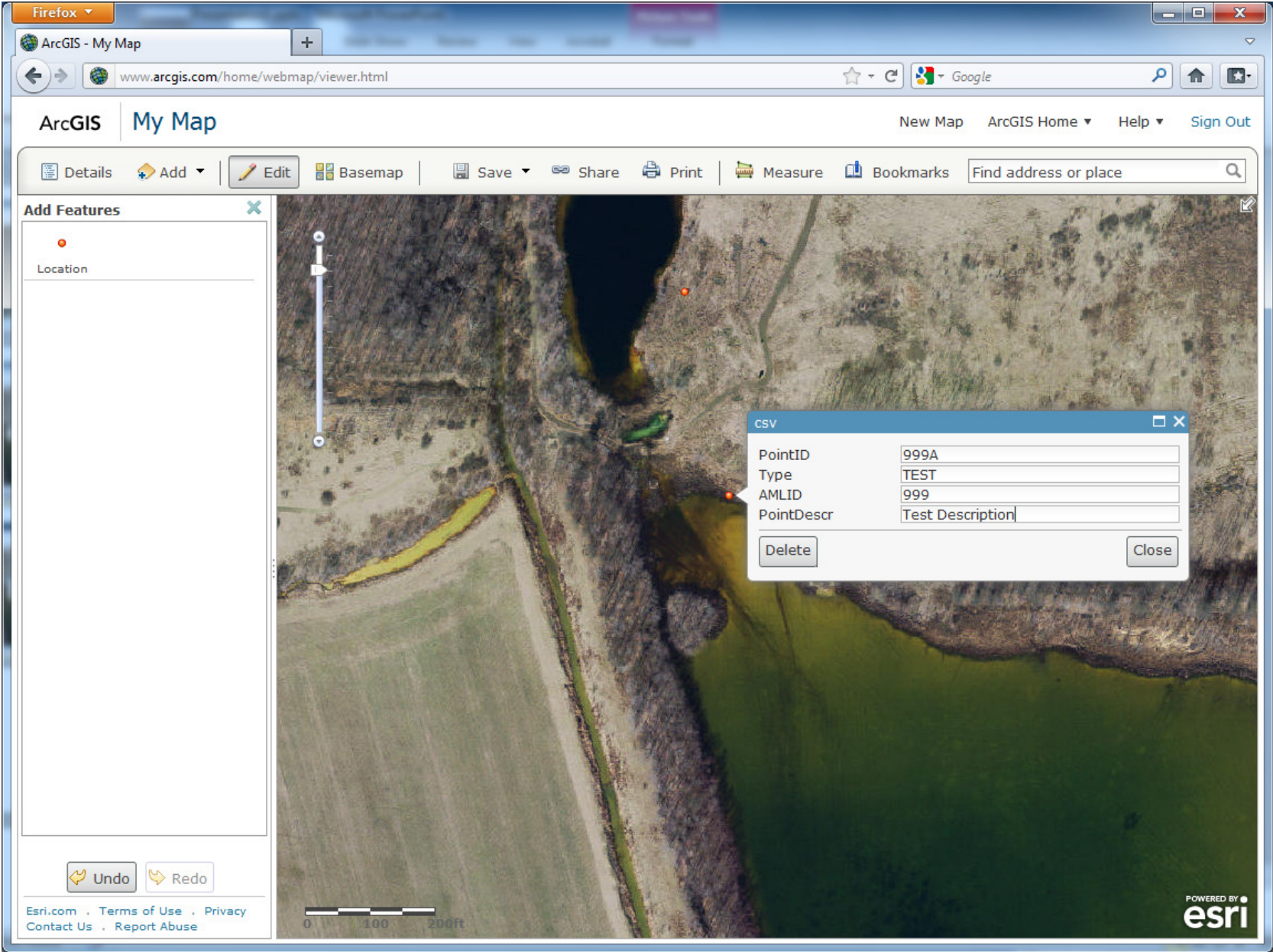
ArcGIS Online



ArcGIS Online



ArcGIS Online



ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL: www.arcgis.com/home/webmap/viewer.html?webmap=4950ea00ade74a26813d910356a37f30. The page title is "ArcGIS | Indiana Coal Mines Over Time".

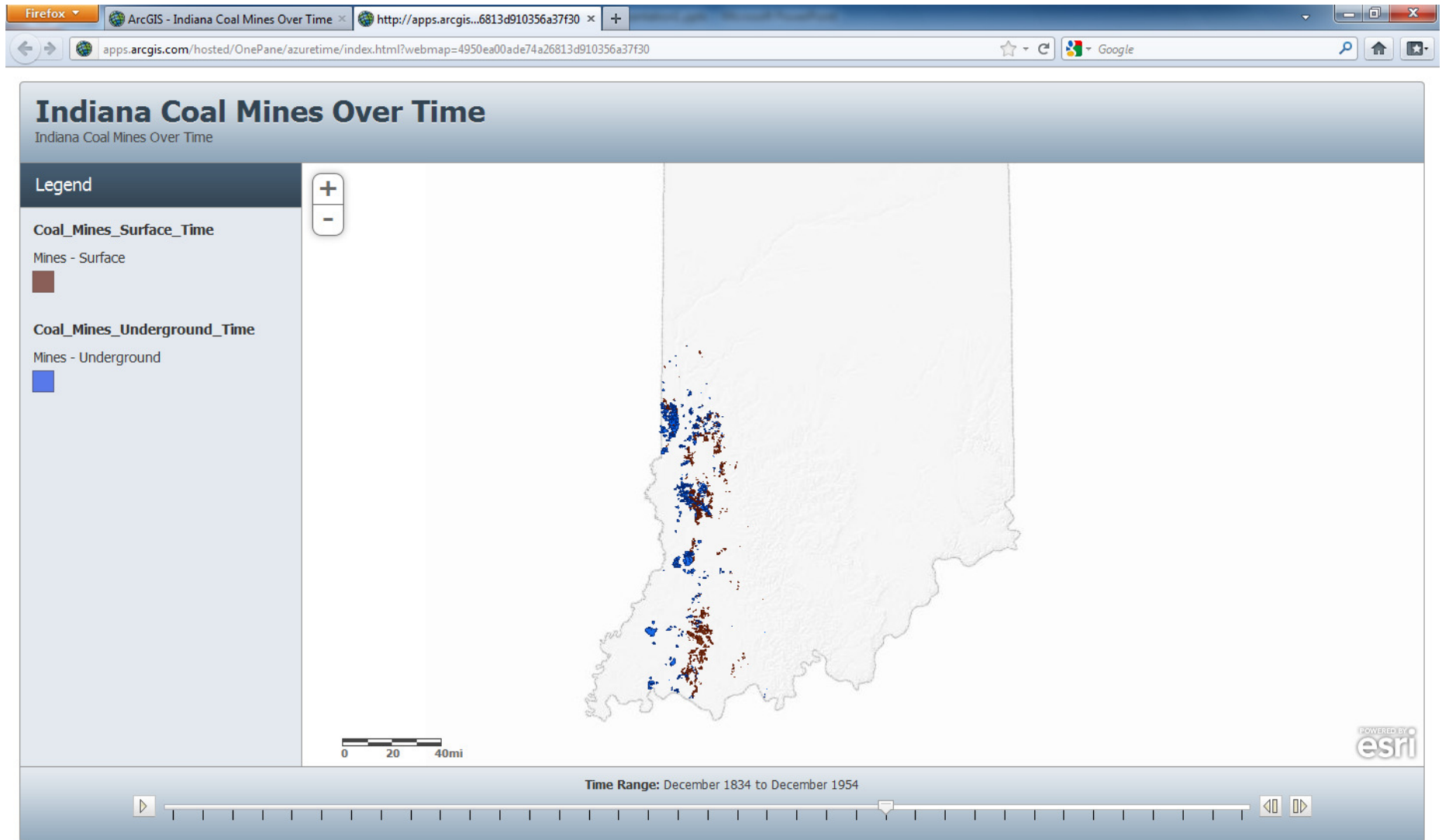
The interface includes a top navigation bar with links for "New Map", "ArcGIS Home", "Help", and "Sign Out". Below this is a toolbar with options for "Details", "Add", "Basemap", "Save", "Share", "Print", "Measure", and "Bookmarks". A search bar is also present with the placeholder text "Find address or place".

The main map area shows a map of Indiana with a shaded relief background. Overlaid on the map are numerous small, colored dots representing coal mines. The dots are primarily concentrated in the western and central parts of the state, with colors ranging from blue to brown. A vertical timeline slider is positioned on the left side of the map, and a scale bar at the bottom left indicates distances of 0, 20, and 40 miles.

At the bottom of the interface, there is a playback control bar for the "1834 to 1969" time period. It includes a play/pause button, a progress slider, and navigation buttons for previous, next, and full-screen views. The text "Indiana Geological Survey" and the "esri" logo are visible in the bottom right corner.

In the bottom left corner, there are links for "Esri.com", "Terms of Use", "Privacy", "Contact Us", and "Report Abuse".

ArcGIS Online



ArcGIS Online

The screenshot displays the ArcGIS Online web interface in a Firefox browser window. The browser's address bar shows the URL: `arcgisonline.com/home/webmap/viewer.html?webmap=c44d1144ac17427495f3b698f6cc373d`. The page title is "Indiana Coal Mine Maps".

The interface includes a navigation bar with "New Map", "My Content", "Help", and "Sign Out" options. Below this is a toolbar with "Save", "Share", "Print", "Measure", and "Bookmarks" icons, along with a search box labeled "Find address or place".

The main map area shows a satellite view of a region with a semi-transparent map overlay. The overlay features a grid of blue-shaded areas representing coal mine maps. Red numbers (8, 9, 10, 15, 16, 17) are placed on the map to identify specific areas. Text labels on the map include "1325 South", "800 East", and "Indiana 61". A scale bar at the bottom left of the map indicates distances of 0.15 and 0.3 miles.

On the left side, a "Contents" panel is visible, listing the following layers:

- Coal Mines Entries
- Coal Mines Underground
- Coal Mine Maps
- Imagery 2005

At the bottom left, there are links for "Esri.com", "Terms of Use", "Privacy", "Contact Us", and "Report Abuse". At the bottom right, the "POWERED BY esri" logo is displayed.

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The interface includes a navigation bar with options: "New Map", "My Content", "Help", and "Sign Out". Below this is a toolbar with "Save", "Share", "Print", "Measure", and "Bookmarks" icons, along with a search box labeled "Find address or place".

On the left side, there is a "Contents" panel with the following items:

- Coal Mines Entries
- Coal Mines Underground
- Coal Mine Maps
- Imagery 2005

The main map area shows a 2005 aerial imagery base map. A semi-transparent white overlay map is centered on the map, displaying coal mine entries and underground structures in blue. The overlay map includes labels for "Greene/Coal City 810248", "HOME SVILLE", and "520". A scale bar at the bottom left of the map indicates 0.15 and 0.3 miles. The bottom right corner of the map area features the text "Indiana Geological Survey" and the "POWERED BY esri" logo.

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The screenshot displays the ArcGIS Online interface in a Firefox browser window. The browser's address bar shows the URL: `arcgisonline.com/home/webmap/viewer.html?webmap=e411a557c6184c46aca0b6daf496f7a7`. The page title is "ArcGIS AML_Problem_Areas".

The interface includes a top navigation bar with "New Map", "My Content", "Help", and "Sign Out" options. Below this is a toolbar with "Save", "Share", "Print", "Measure", and "Bookmarks" buttons. A search bar is located to the right of the toolbar.

On the left side, there is a "Contents" panel with a list of layers:

- Coal Mines Entries
- Coal Mines Surface
- Coal Mines Underground
- Coal Mines AML Sites
- Coal Mines AML Quads
- Quadrangle Boundaries 24k
- Topos
- Best Available Imagery
- Light Color Shaded Relief

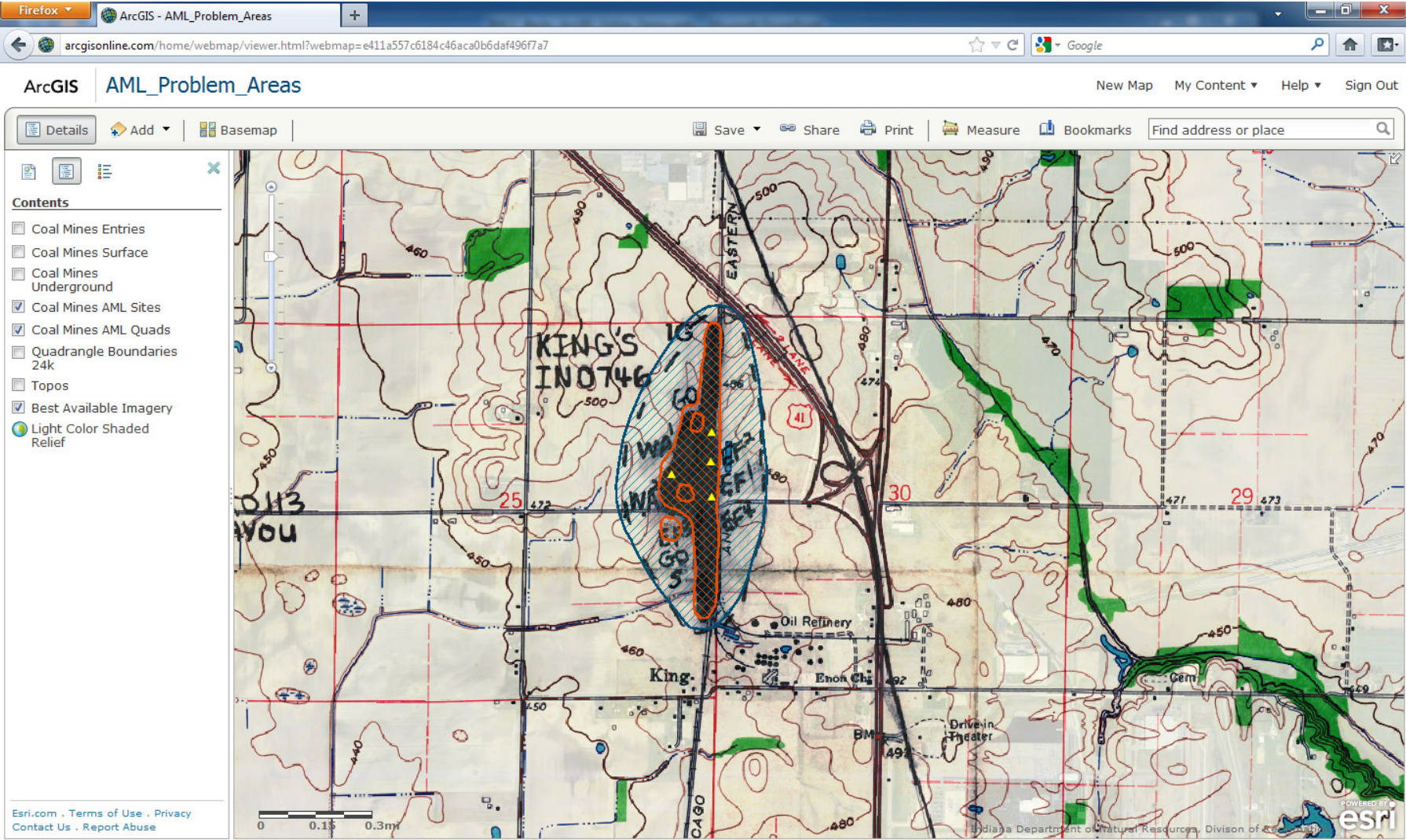
The main map area shows a shaded relief topographic map of Indiana. Numerous yellow triangles are overlaid on the map, representing AML sites. A scale bar at the bottom left indicates 0, 20, and 40 miles.

On the right side, a "Bookmarked places" panel is open, showing a single bookmark:

- IN0746
- Add Bookmark

At the bottom of the page, there is a footer with "Esri.com - Terms of Use - Privacy Contact Us - Report Abuse" on the left and "Indiana Department of Natural Resources, Division of Reclamation" and the "esri" logo on the right.

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ArcGIS Rest Services in ArcMap

End Demo