

Geospatial One-Stop
Exercises: Discover and Access
Geospatial Data Using geodata.gov





Learning Objectives

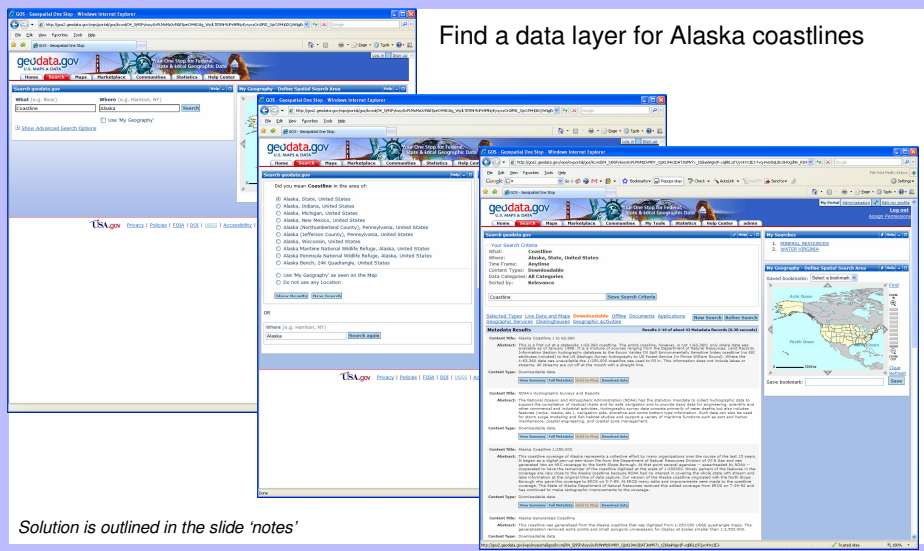
After completing this lesson the student can use the geodata.gov portal to:

- ▶ Perform basic and advanced searches for data
- ▶ Browse 'Communities' to find theme-related geospatial data and resources
- ▶ Create a map in the 'Map Viewer'
- ▶ Browse and search the Partnership Marketplace
- ▶ Register with and Login to the Website
- ▶ Modify the website portal to suit their interests



Basic Search

Find a data layer for Alaska coastlines



Solution is outlined in the slide 'notes'

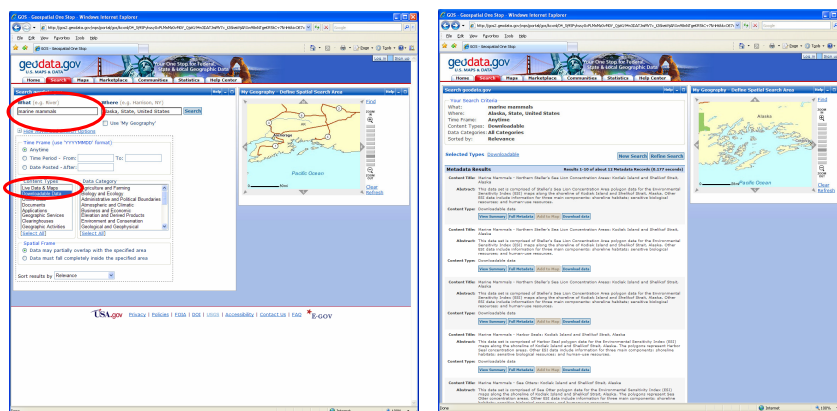
Solution:

- ▶ Go to the GOS portal by entering “geodata.gov” in your browser’s address bar
- Using either the search area on the home page, or in the “Search” tab:
 - Enter the term “Coastline” in the *What* field
 - Enter the term “Alaska” in the *Where* field
 - Click Search
 - The Search dialog will prompt you to narrow your “Where” selection. Choose “Alaska, State, United States” and click *Show Results*.
 - In the results page, you can narrow down the number of results by clicking on “Downloadable”
 - Find the result “Alaska Coastline 1 to 63,360 “
 - Click on “Download data”
 - Save the zip file to your local disk and unzip it
 - Add the data layer to ArcGIS



Advanced Search

Continuing the study of Alaska, find *downloadable* data on the distribution of marine mammals in and around Prince William Sound, Alaska



Solution is outlined in the slide 'notes'

Solution

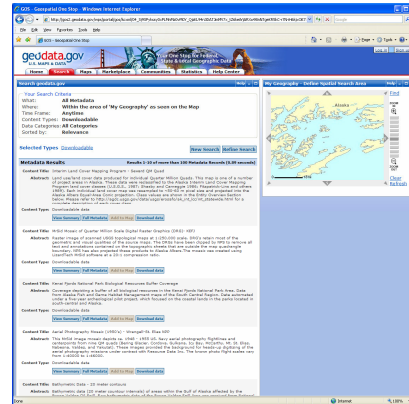
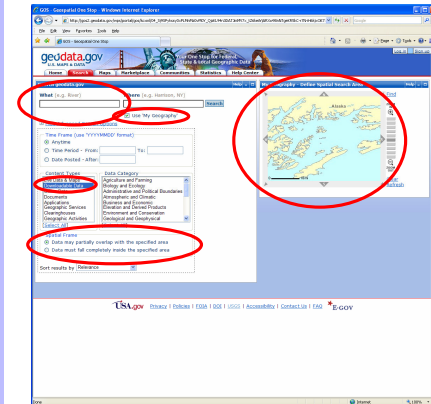
In the Search Tab:

1. What = "Marine Mammals"
2. Where = "Alaska"
3. Select Content Type = Downloadable Data
4. Click "Search"
5. The Search dialog will prompt you to narrow your "Where" selection. Choose "Alaska, State, United States" and click *Show Results*.
6. View Results page
7. Go to the second and third pages of the search results
8. Downloadable data exists for the following datasets:
 - a. Marine Mammals - Northern Steller's Sea Lion Concentration Areas: Kodiak Island and Shelikof Strait, Alaska
 - b. Marine Mammals - Harbor Seals: Kodiak Island and Shelikof Strait, Alaska
 - c. Marine Mammals - Sea Otters: Kodiak Island and Shelikof Strait, Alaska
 - d. Spring CIK (Cook Inlet/Kenai Peninsula) Marine Mammals
 - e. Marine Mammals - Gray Whale Migration Corridors: Kodiak Island and Shelikof Strait, Alaska
 - f. Fall CIK (Cook Inlet/Kenai Peninsula) Marine Mammals
 - g. Winter CIK (Cook Inlet/Kenai Peninsula) Marine Mammals
9. For each data layer you want to get:



Advanced Search Using 'My Geography'

1. Find out what other relevant data might be available for the study area around Prince William Sound, Alaska.
2. Find data specifically related to the Exxon Valdez oil spill



Solutions are outlined in the slide 'notes'

Solution 1:

1. Start a new search
2. Leave the What field blank
3. In the My Geography map interface, zoom in to an area around Prince William Sound, Alaska
4. Check the box where it says 'Use My Geography'
5. Select content type of Downloadable Data
6. Allow the spatial frame to partially overlap the specified area
7. Click "Search"
8. View Results page
9. For each data layer you want to get:
 1. Click on "Download data"
 2. Save the zip file to your local disk and unzip it
 3. Add the data layer to ArcGIS

Solution 2:

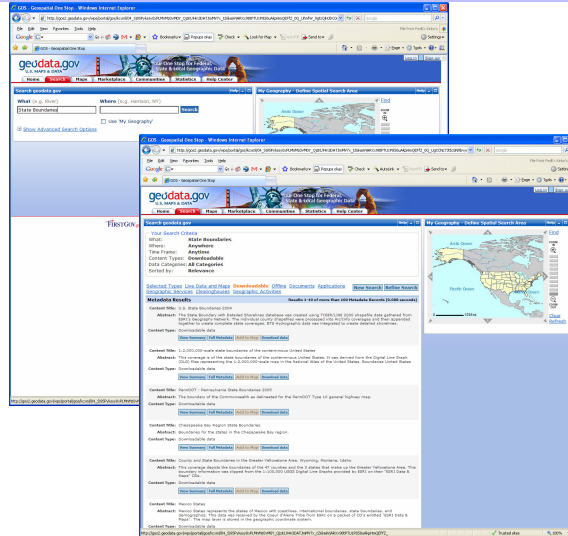
1. Click on "Refine Search"
2. In the What field, enter "Exxon"
3. Leave all other selections in the search page the same
4. Click "Search"
5. View Results page
6. For each data layer you want to get:
 1. Click on "Download data"
 2. Save the zip file to your local disk and unzip it
 3. Add the data layer to ArcGIS



Browse Communities

Browse geodata.gov to find downloadable data on US State boundaries.

- ▶ Go to the GOS portal by entering "geodata.gov" in your browser address bar
- ▶ Go to the *Administrative and Political Boundaries* Community
- ▶ Review the *Key Resources* metadata records
- ▶ Find the "National Atlas of the United States Clearinghouse" record
- ▶ Review the metadata record and then click on "Go to website"
- ▶ In the National Atlas Website, locate the downloadable data for US State Boundaries
- ▶ Download the shapefile (zipped)
- ▶ Open ArcGIS and add the data to a map





Finding and Downloading Data

National Atlas of the United States Clearinghouse

Metadata contact:
 Individual's name: Jay Donnelly
 Contact Information:
 Address:
 or email address: jdonnelly@usgs.gov
 Phone: 703.548.5395
 Contact's role: point of contact
 Last update: 20030627

Distribution Information:
 Distribution:
 Contact Information:
 Contact's role: distributor
 Transfer options:
 Online location (URL): <http://nationalatlas.gov>
 Description: Clearinghouse
 Ordering procedure:
 Terms and fees: Public Domain

Identification Information:
 Resource's bounding rectangle:
 West longitude: -172
 East longitude: -66
 North latitude: 72
 South latitude: 26
 Citation:
 Title: National Atlas of the United States Clearinghouse
 Party responsible for the resource:
 Organization's name: National Atlas of the United States
 Contact's role: publisher
 Contact Information:
 Address:
 Delivery point: Reston, Virginia
 Party responsible for the resource:
 Organization's name: National Atlas of the United States
 Contact's role: originator
 Presentation format: digital profile
 Reference date:
 Date: 20030703
 Type of date: publication

Download link in US National Atlas Website →

← Metadata Record

Raw Data Download

Resource Name	Start Date	End Date	File Name	File Size
County Boundaries, 2003	June 2003	June 2003	0203060203.tar.gz	4.5 / 1.8
County Boundaries, 2003	June 2003	June 2003	0203060203.tar.gz	3.0 / 1.4
County Boundaries, 2003	June 2003	June 2003	0203060203.tar.gz	4.5 / 1.8
Federal Lands	December 2005	December 2005	0205120105.tar.gz	8.5 / 3.7
Federal Lands	December 2005	December 2005	0205120105.tar.gz	8.5 / 3.7
Indian Lands	December 2005	December 2005	0205120105.tar.gz	1.1 / 1.1
Indian Lands	December 2005	December 2005	0205120105.tar.gz	1.1 / 1.1
North American Atlas - Political Boundaries	July 2004	July 2004	0204070104.tar.gz	2.4 / 1.2
North American Atlas - Political Boundaries	July 2004	July 2004	0204070104.tar.gz	2.4 / 1.2
Official Proclamation, Program, and Survey Line Boundaries	May 2001	March 2003	0201050103.tar.gz	1.1 / 1.2
Official Proclamation, Program, and Survey Line Boundaries	May 2001	March 2003	0201050103.tar.gz	1.1 / 1.2
Public Land Survey Boundaries	January 2003	January 2003	0203010103.tar.gz	13.7 / 6.6
Public Land Survey Boundaries	January 2003	January 2003	0203010103.tar.gz	13.7 / 6.6
State Boundaries	June 2003	June 2003	0203060203.tar.gz	2.2 / 1.2
State Boundaries	June 2003	June 2003	0203060203.tar.gz	2.2 / 1.2
Time Zones	June 2003	April 2006	0203060203.tar.gz	2.2 / 1.2
Time Zones	June 2003	April 2006	0203060203.tar.gz	2.2 / 1.2
Watershed Preservation District Files	December 2005	December 2005	0205120105.tar.gz	1.1 / 1.1
Watershed Preservation District Files	December 2005	December 2005	0205120105.tar.gz	1.1 / 1.1

File Download dialog box:
 Name: 0203060203.tar.gz
 Type: TAR archive
 From: usgs.gov
 Buttons: Open, Save, Cancel

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Browse Communities 2

Find the National Geodetic Survey Data Sheet for the CHACOCNHP_NM2005 CORS ARP control point in Chaco Canyon, NM

Solution is outlined in the slide 'notes'

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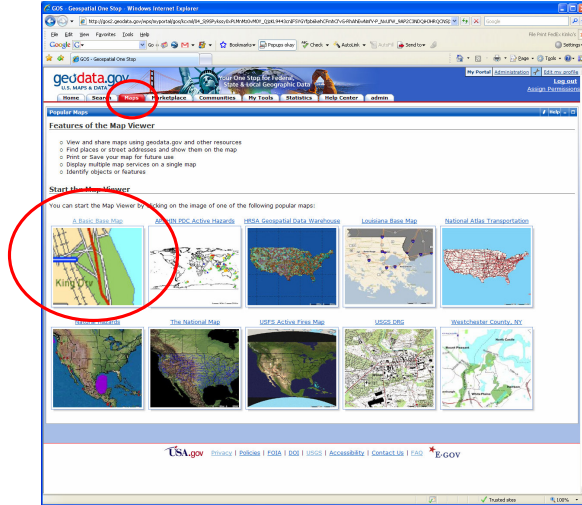
Solution:

1. Browse the “Locations and Geodetic Networks” community
2. Find the metadata entry for “Horizontal and Vertical Geodetic Control Data for the United States ”
3. Click on “Go to website”
4. In the “NGS Datasheet Datasheet Page”, click on the “Datasheets” button
5. Select the Retrieval method – by “Station Name”
6. Enter Station Name = “Chaco”
7. Pick a State = New Mexico
8. Click “Submit”
9. Select the station in the Station List Results
10. Click the “Get Datasheets” button



Making A Map

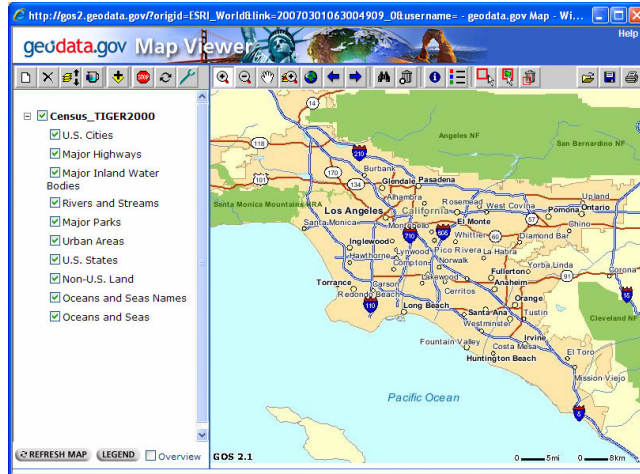
- Go to the 'Maps' tab
- Click on the map titled "A Basic Base Map"





A Simple Map

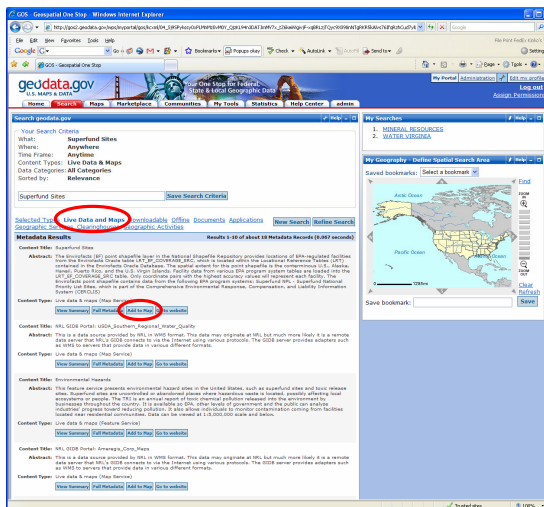
- Zoom to the Los Angeles Area
- You should have a map like this





Add Other Map Services to A Map

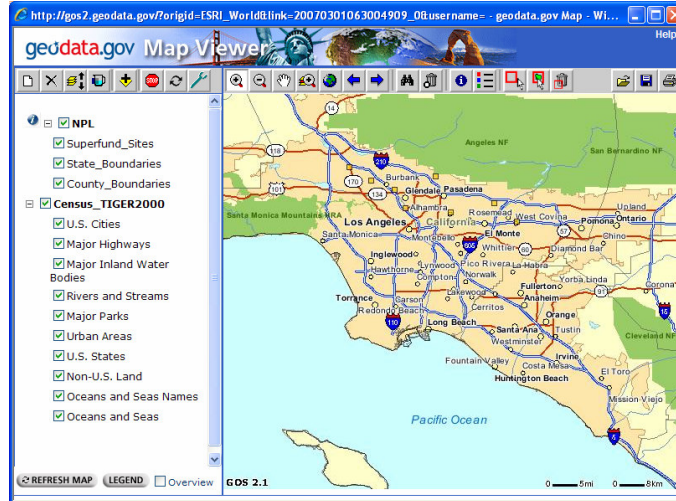
- Go to the Search tab
- Enter What = "Superfund Sites" and click Search
- In the results screen, filter the data by clicking "Live Data and Maps"
- In the first results metadata record, click "Add to map"





A Map With Two Map Services

- Your updated map will now look like that shown at right.
- Note the orange squares marking Superfund Sites have been added





Add Another Map Service to the Map

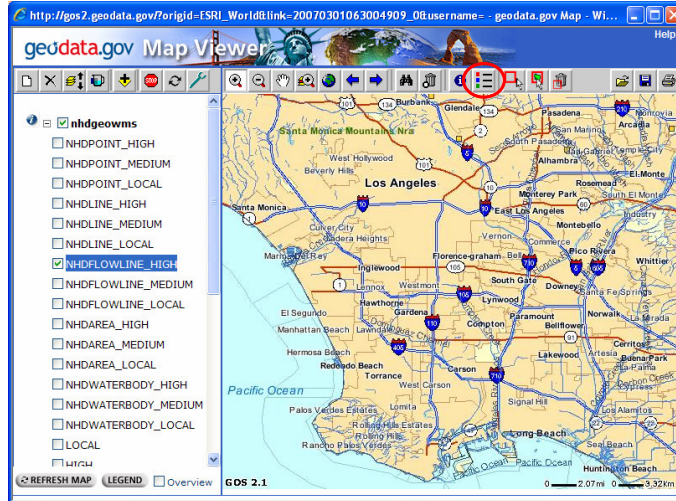
- Go to the Inland Water Resources community
- Find the dataset titled “National Hydrography Dataset - NHD - ArcIMS “ and click on the “Add to map” button
- The NHD data should appear on the map (If it looks like a red overlay, turn off the “High” layer and refresh the map)
- Zoom in some and more NHD layers should show up in the Table of Contents
- Turn on the “NHDFLOWLINE_HIGH” layer and turn off all other NHD layers
- Your map should look like that shown on the next slide



A Map With Three Map Services

Note that this map includes three map services:

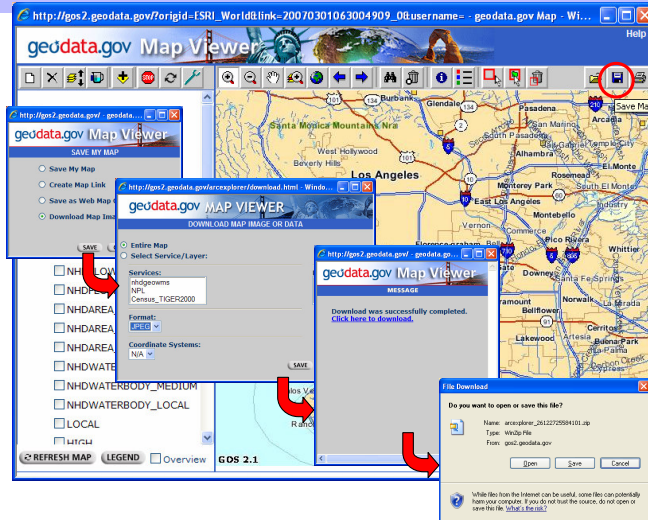
1. The Basic Base Map
2. The Superfund Sites
3. The NHD





Save a Map

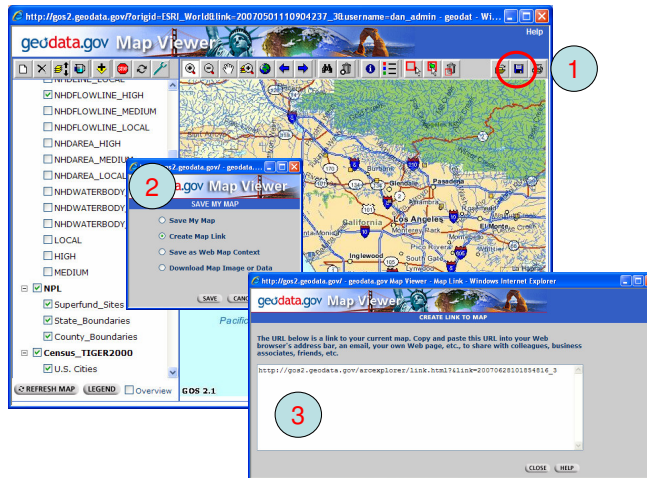
- Click on the Save Map tool in the Map Viewer
- Select "Download Map Image or Data" and click "Save"
- In the next dialog, select "Entire Map" and the image format you want to use (jpeg in this example), then click "Save"
- Next Dialog, click on the download link
- Download the file
- The zip file contains the map image and a world file





Save a Map Link

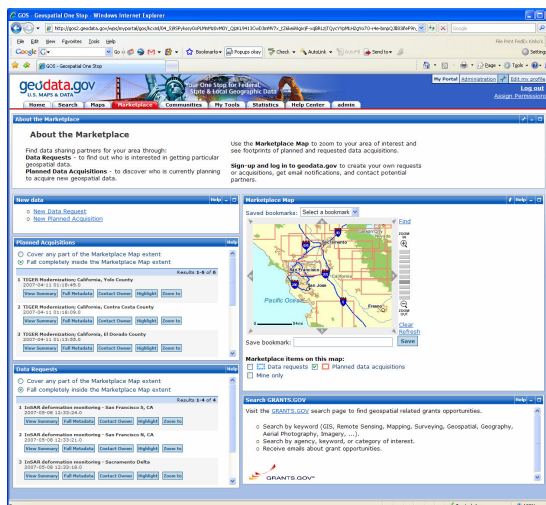
1. Click on the *Save Map* button
2. In the next window, select the *Create Map Link* radio button, then click *Save*
3. The URL for the map link will show in a new window. You can copy and paste this URL into a browser to bring back the map any time. You can save this URL, mail it to someone, etc.





Searching in the Marketplace

- The Marketplace lists planned and requested data acquisitions
- Go to the Marketplace tab
- Here you can do a spatial search using the Marketplace Map at right
- In the map, zoom to an area of interest
- Select the radio buttons that say “Fall completely inside the Marketplace Map extent” to narrow down the list
- See the notes for more things you can do with the Marketplace map and data



There are many ways to manipulate the map and data

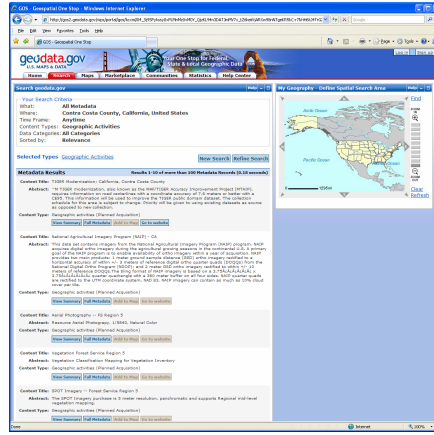
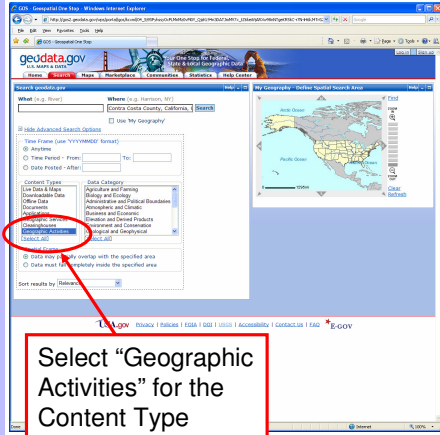
1. Turn on only Data requests or Planned data acquisitions with check boxes below the map
2. In the list of activities, click on “Highlight” to show the extent of a particular activity
3. Click on “Clear” on the right side of the map to clear a highlighted selection
4. Click on “Zoom to” to zoom to a particular activity
5. Click on “Contact Owner” to find out who is the owner of the project. There is an e-mail link in this window to contact the owner directly.
6. View the metadata summary and full metadata



Searching for Data Acquisition Plans

Search for Data Acquisition Plans in Contra Costa County, California, as shown below

Results will show several projects, as shown below



Geographic activities include planned data acquisitions and requested data acquisitions.

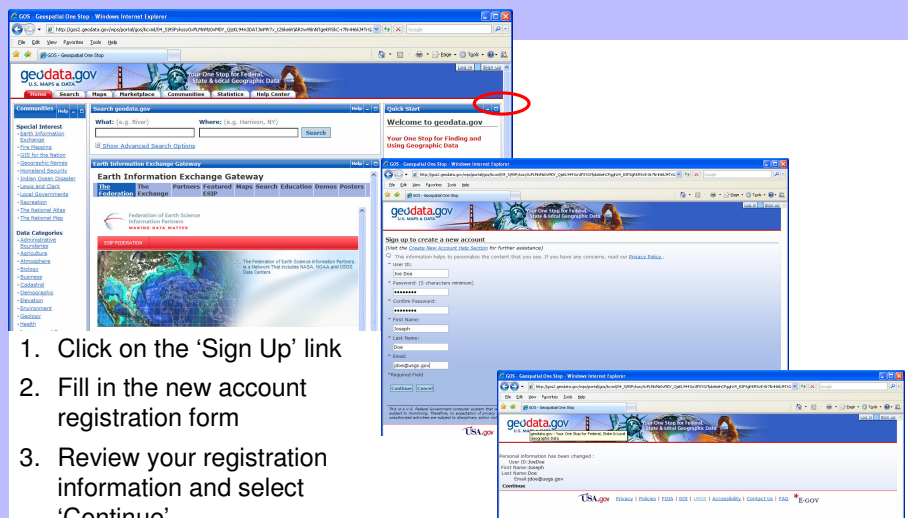
These are Marketplace activities.

Solution:

1. Set Where = "Contra Costa County, CA"
2. Select Content Type = "Geographic Activities"
3. Click *Search*
4. In the next window where it says "Did you mean all metadata in the area of:", select "Contra Costa County, California, United States"
5. Click *Show Results*



Register and Log in to geodata.gov

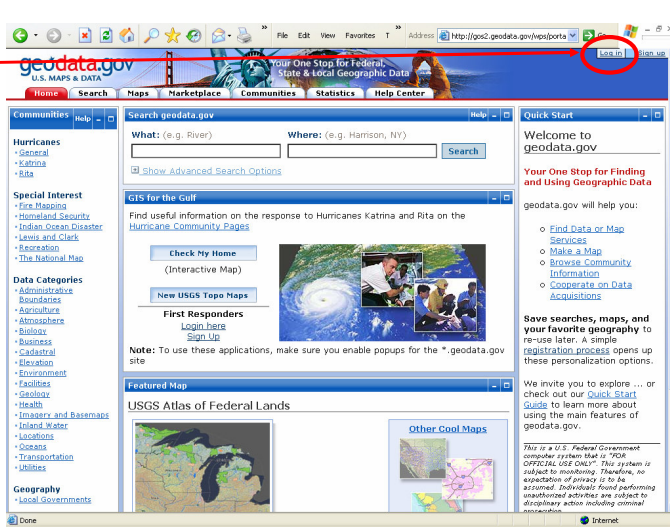


1. Click on the 'Sign Up' link
2. Fill in the new account registration form
3. Review your registration information and select 'Continue'
4. Your registration is complete



Login to geodata.gov

You must login to geodata.gov to publish data





Enter User ID and Password

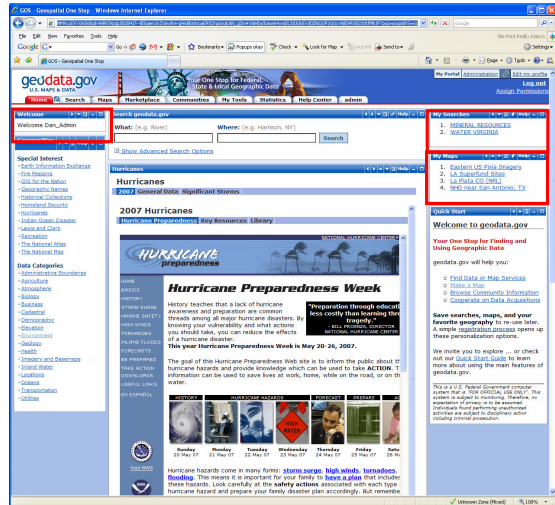




Modify the Portal Home Page

When you are logged into geodata.gov as a registered user, you see several new portlets, including:

- Welcome - showing your user name
- My Searches - where links to searches you have saved are displayed
- My Maps – where links to maps you have saved are displayed
- You can also customize the Home tab to show different portlets than the default portlets



fgdc
www.fgdc.gov/Geospatial/

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Modify the Portal Home Page

Show Tools button

Edit Page Tool

Screen for rearranging portlets

Portlet Name	Search	Thumbnail	Remove
Home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Earth Information Exchange Gateway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Featured Map	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hot Spot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Click the Log In Link

Enter your user ID and password and click “Log In”

Click on the “Show Tools’ button

Click on the “Edit Page” tool located within the tabs area of the page

The WebSphere portal tool page will appear.

On this page you can add or remove portlets, and rearrange the order of the portlets within a column



Geospatial One-Stop
Publishing Geospatial Metadata to
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Next, NSDI Learning Module