## How GIS is Used to Meet OMB Circular A-16 Requirements

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SWUG Conference Oct 21, 2004

### The Purpose of A-16

 Many governmental agencies are funded by the OMB for mapping efforts...























#### OMB Circular A-16

http://www.whitehouse.gov/omb/circulars/a016/print/a016\_rev.html

 The purpose of the Circular was "to ensure that surveying and mapping activities may be directed toward meeting the needs of federal and state agencies and the general public, and will be performed expeditiously, without duplication of effort."

### A-16 History

- Originally issued by the President's Office of Management & Budget (OMB) in 1953 to coordinate topographic mapping activities, National Atlas, Geodetic Control Surveys and International Boundaries.
- A 1967 revision placed responsibility for coordination of mapmaking and surveying to the Dept. of Interior, Dept. of Commerce, and Dept. of State.
- A 1990 revision included "geographically referenced digital data".
- August 19, 2002 revision incorporated Executive Order 12906 to recognize the implementation of the National Spatial Data Infrastructure (NSDI) and the authority of the Federal Geographic Data Committee (FGDC) for NSDI coordination.

# A-16 Outlines the Provisions of the National Spatial Data Infrastructure

- Data Themes
- Metadata
- National Spatial Data Clearinghouse
- Standards
- Partnerships



## Questions People Have Regarding Federally Produced Spatial Data

- Who is the data steward for a particular spatial data theme.
- What data layers are available from the government to the public?
- Where does one go to find Spatial Data?
- When (and how) was the data collected?
- How can I view and use the data?

#### A-16 Describes Specific Framework Data Layers and Assigns Agency Responsibility

Geodetic Control



Cadastral



Governmental Units



Transportation



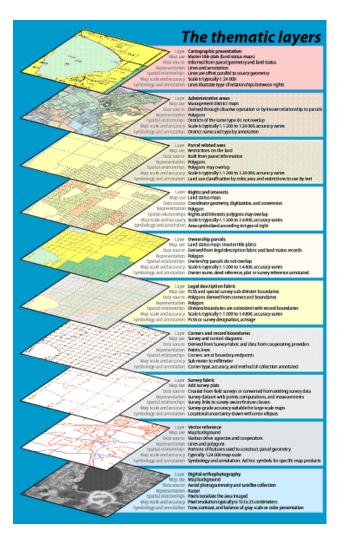
 Elevation and Bathymetry



Hydrography



- Orthoimagery
  - Plus 27 others...



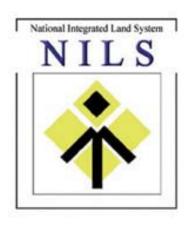
### Meeting A-16 Requirements

- Take responsibility for your assigned data layer.
- Work with your partners to move toward standardization & interoperability.
- Document with METADATA!
- Make your data accessible through a spatial data clearinghouse.

#### Demonstration

 The National Integrated Land System (NILS) is serving the Bureau of Land Management's assigned spatial data layers in compliance with OMB A-16 Requirements.







http://www.geocommunicator.gov

### NILS Spatial Data Layers

- Land Survey Information
- Federal Land Stewardship
- Land & Mineral Use Records

Serving National Spatial Data Layers for the BLM as directed by OMB Circular A-16

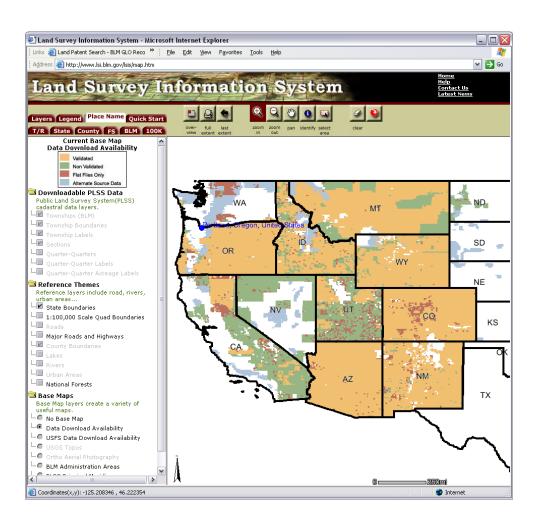
http://www.whitehouse.gov/omb/circulars/a016/a016\_rev.html

# GeoCommunicator: The Portal to NILS Spatial Data

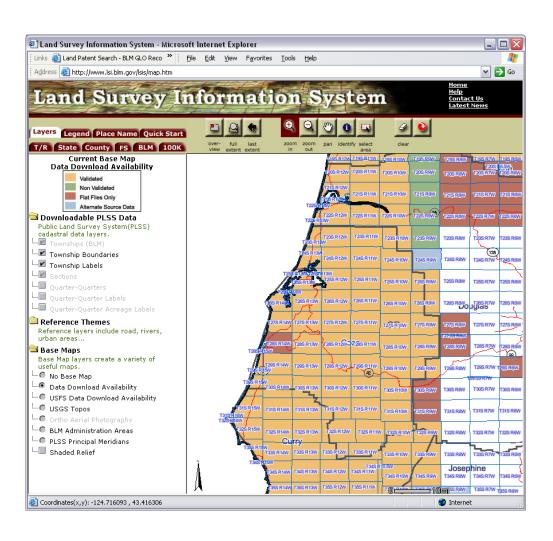


### Land Survey Information

A Seamless Multi-Purpose Cadastre



### Data is delivered 3 ways...



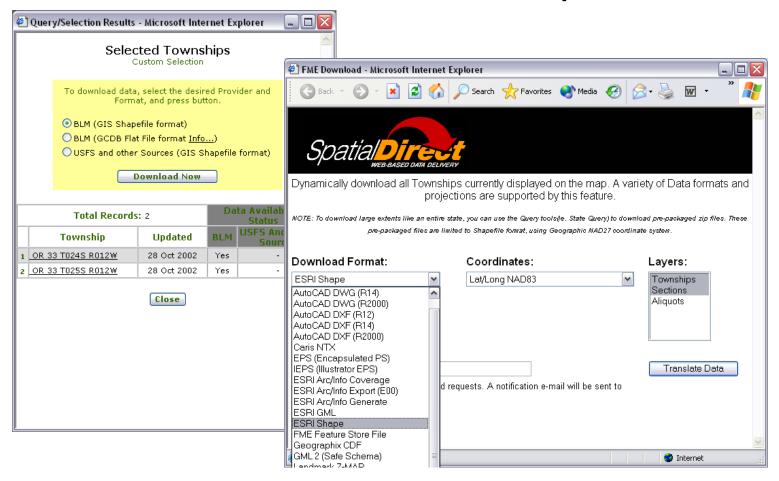
#### 1

Viewable from the web interface



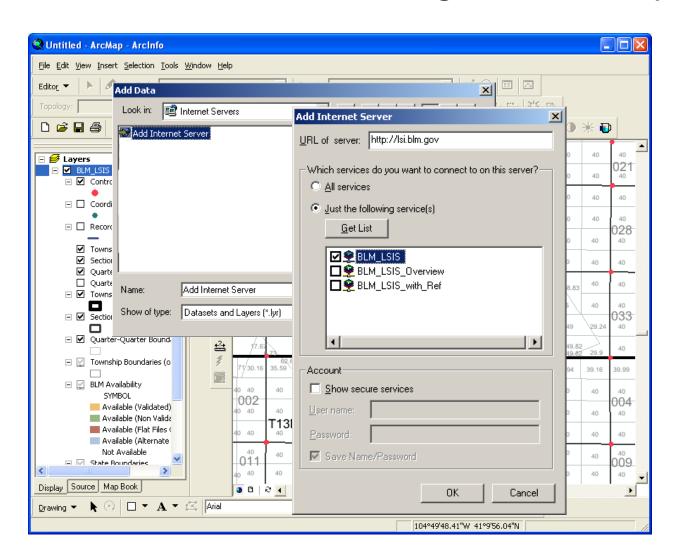
#### 2

#### Downloadable as Shapefiles



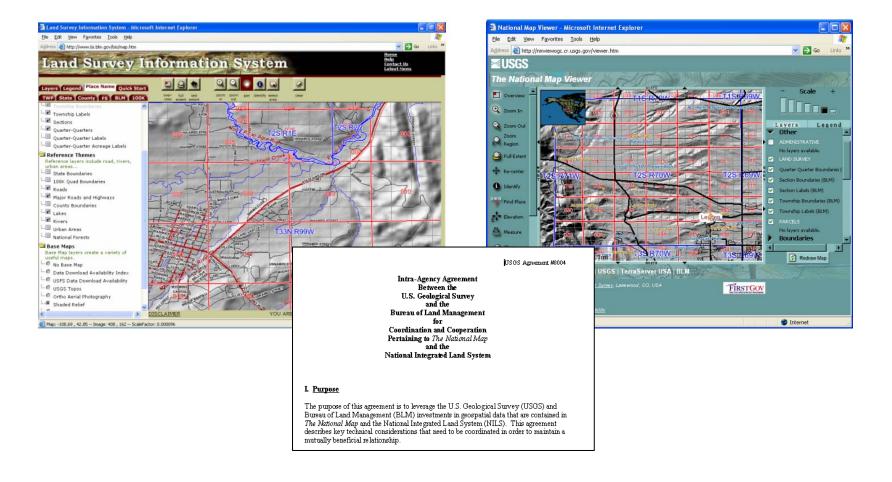
#### 3

Accessible as a streaming ArcIMS layer



### Part of the National Map

BLM & USGS sharing data resources

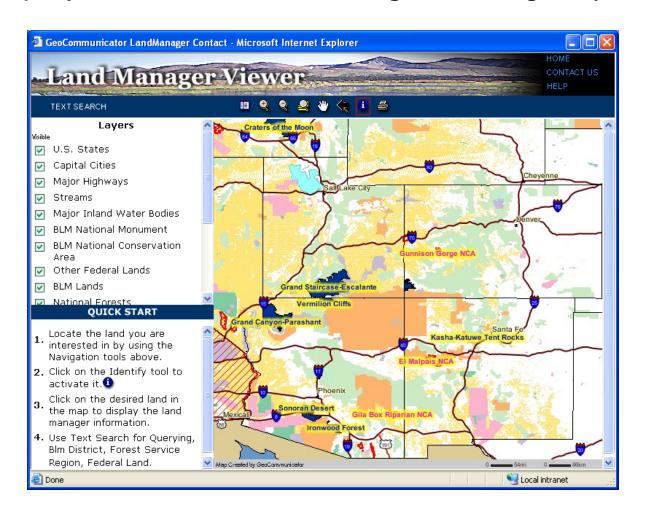


# GeoCommunicator: Federal Land Stewardship

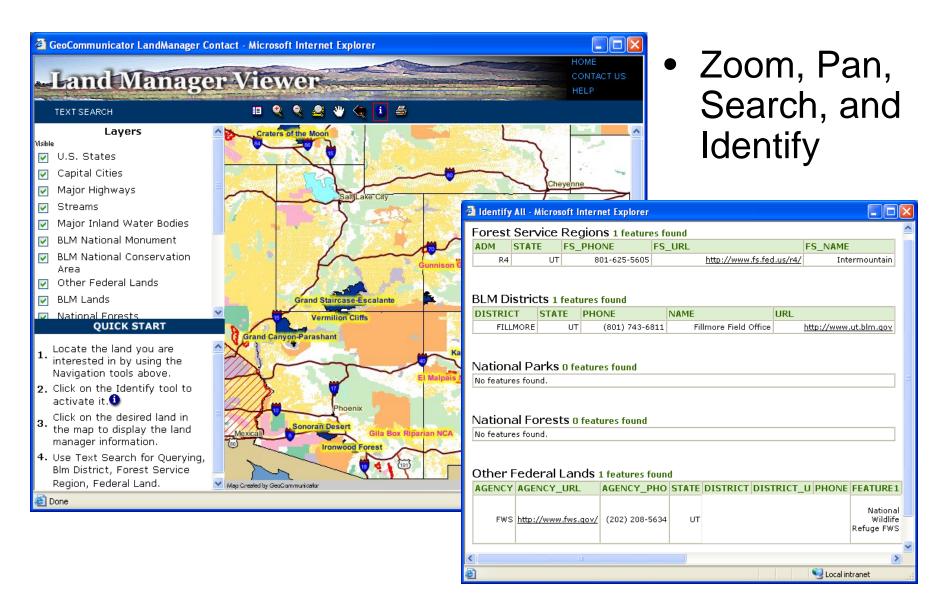


## Land Manager Viewer

Displays Surface Land Management Agency



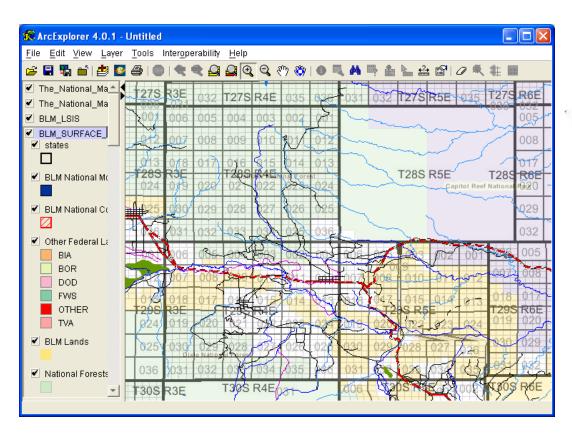
#### Land Browser Interface



## Integrate with other data layers through Desktop or Mobile GIS

Add data from the internet with the URL:

## http://lsi.blm.gov



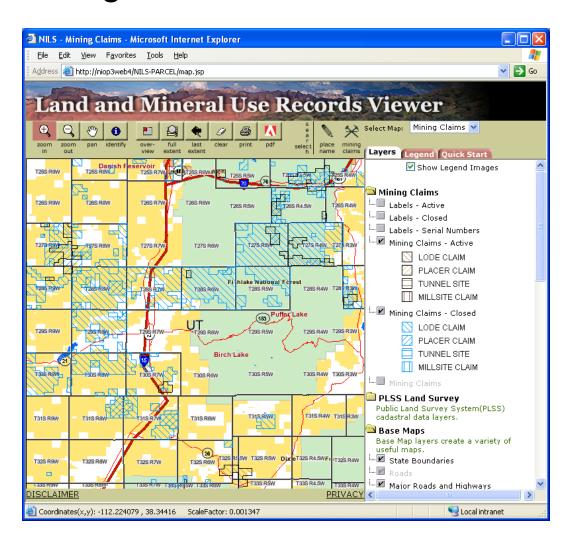


### GeoCommunicator: Land & Mineral Use Records



#### Land & Mineral Use Records Viewer

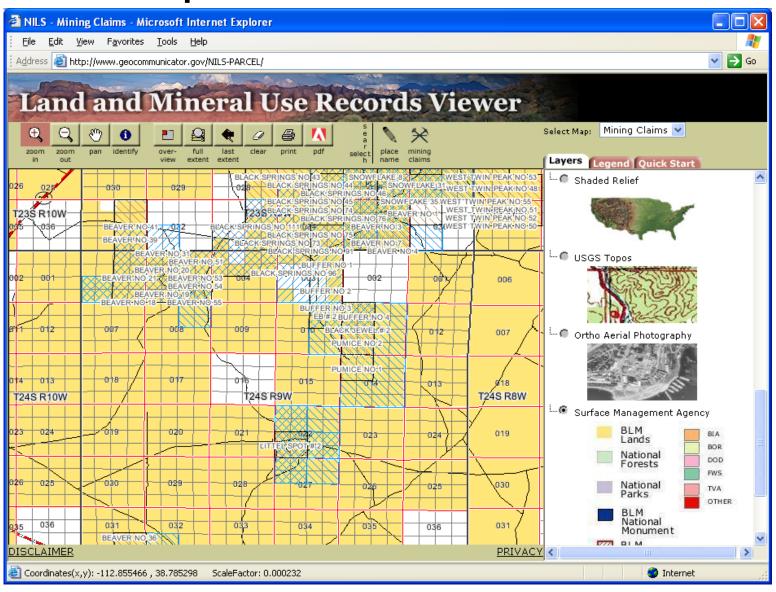
Mining claims - Oil & Gas leases



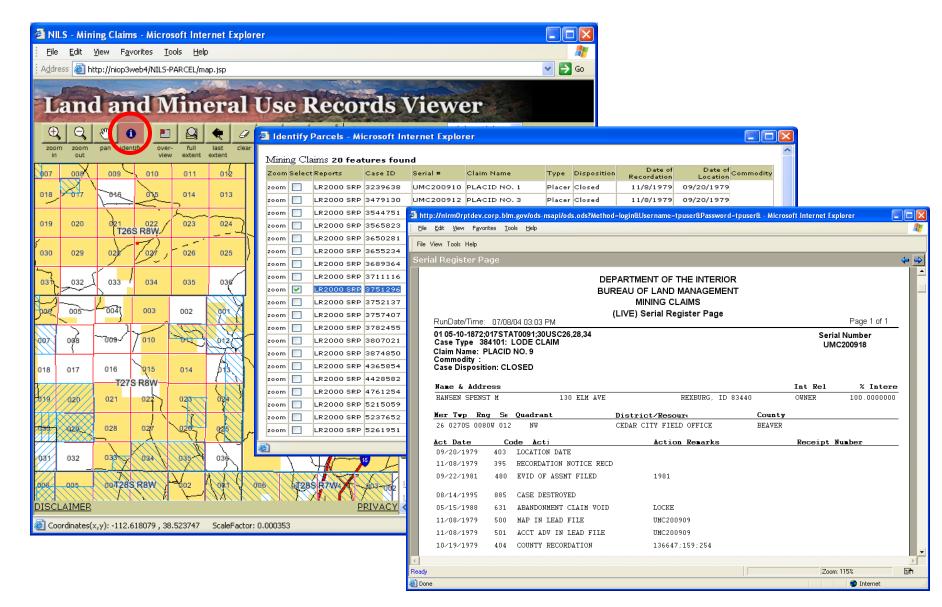
### **NILS Mining Claims**

- Display claims by type
- Display active or closed claims
- Label with claim name or serial number
- Display with reference themes:
  - survey, roads, topographic map, orthophoto
- Links directly to LR2000 reports

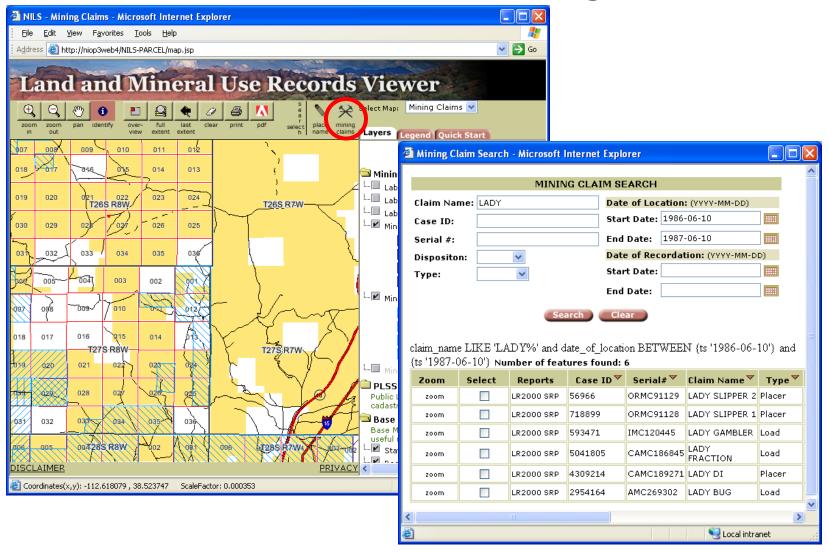
## View Land Records in Context with Other Spatial Reference Themes



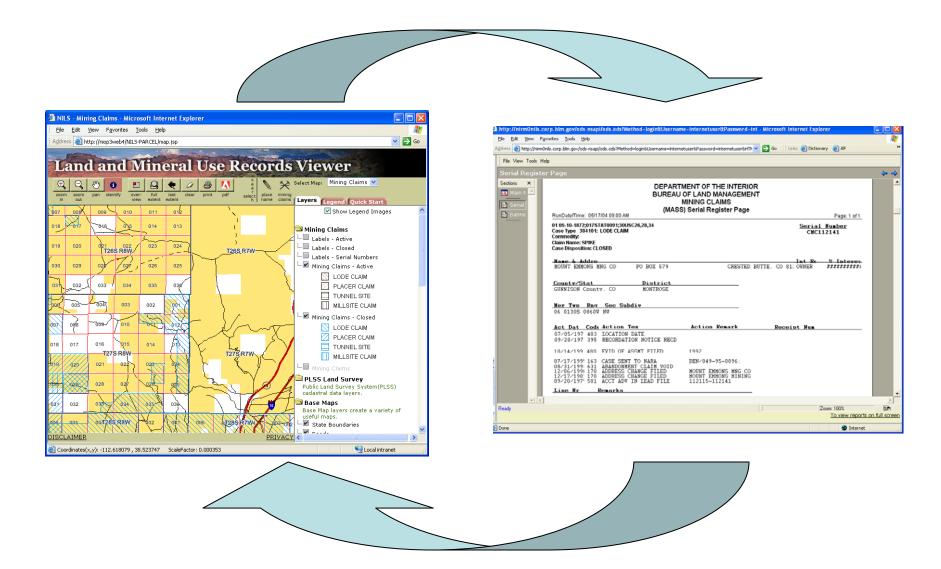
#### Links with LR2000



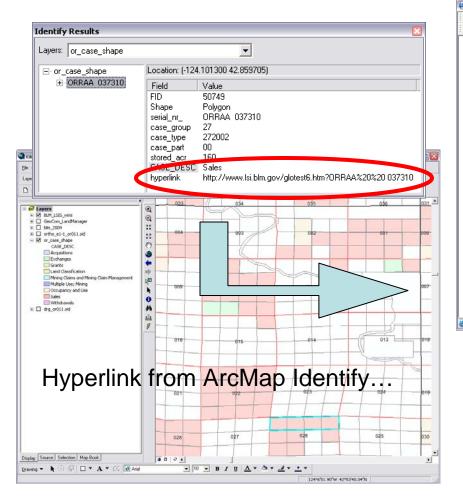
## Allows Searching...

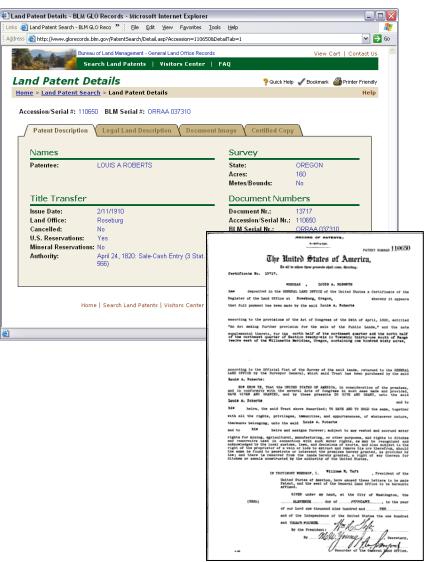


#### Direct Link with LR2000



## Integration with other Land Record Systems





## Serving Spatial Data through Web Services

- Access to a wide range of spatial data
- Minimize client storage requirements
- Minimize data maintenance/processing
- Minimize client software requirements
- Provide central point of distribution
  - Always accessing the most current data
  - Information is accessible from anywhere
  - Source is always known

## To Find More Streaming Services...



Search:

http://www.geodata.gov

## Geodata.gov

Part of the <u>Geospatial One-Stop E-Govinitiative</u> providing access to Federal,
 State, and Local geospatial data and

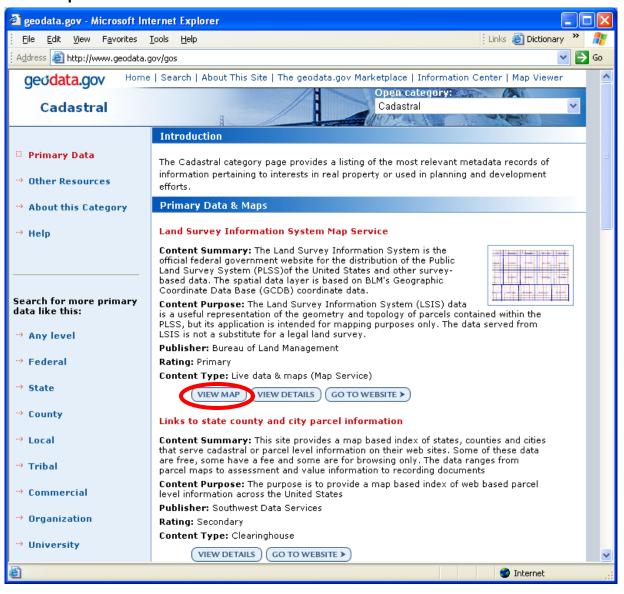
information.



Point browser to <a href="http://www.geodata.gov">http://www.geodata.gov</a> and choose the "Cadastral" data category.

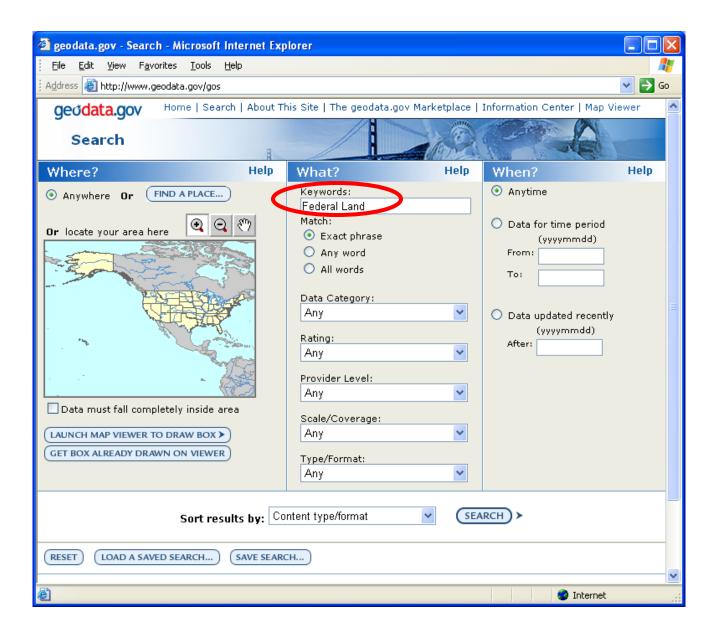


From the Cadastral data listing, locate the "Land Survey Information System Map Service" and click on the "VIEW MAP" button.

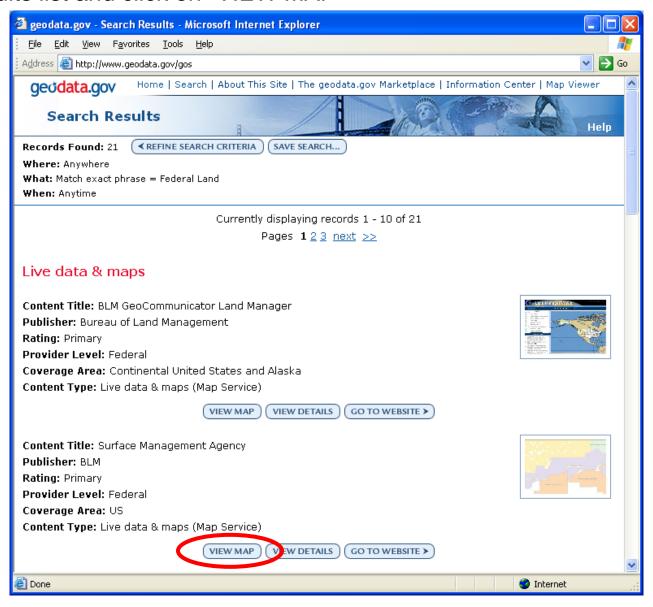


Search for additional layers to add... 🗿 geodata.gov Map Viewer - Microsoft Internet Explorer geodata.gov MAP VIEWER Home | Search | Delp | How To Add Data **□ ☑ BLM\_LSIS** ✓ State Boundaries **REFRESH MAP** LEGEND

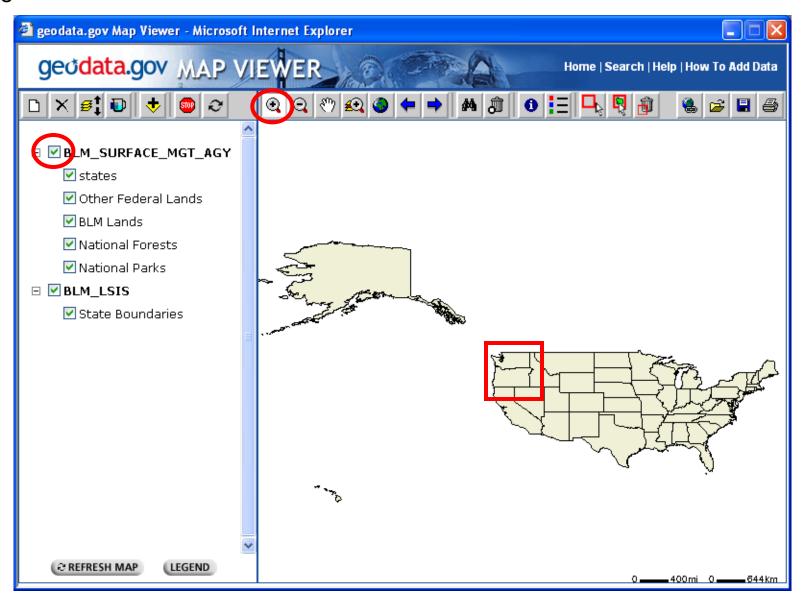
#### Search for "Federal Land"...



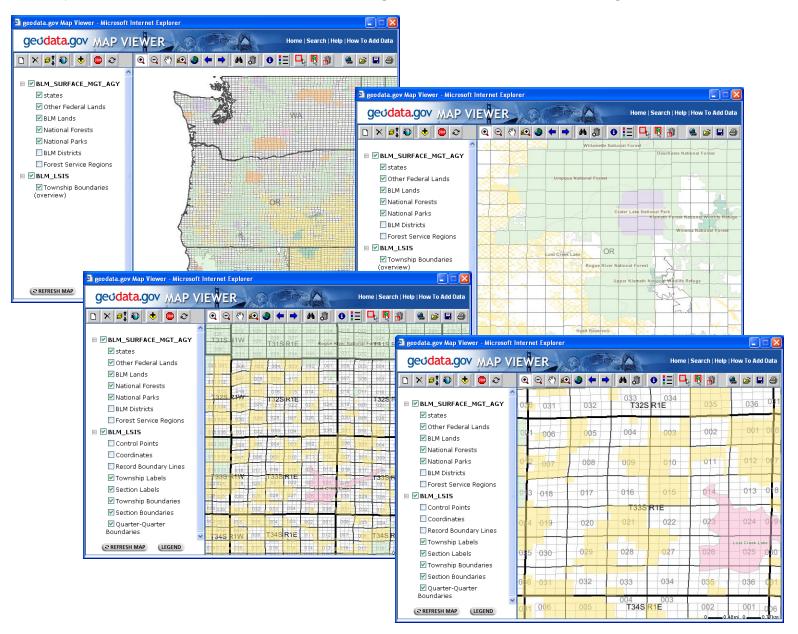
#### Locate "Surface Management Agency" from the Search Results list and click on "VIEW MAP"



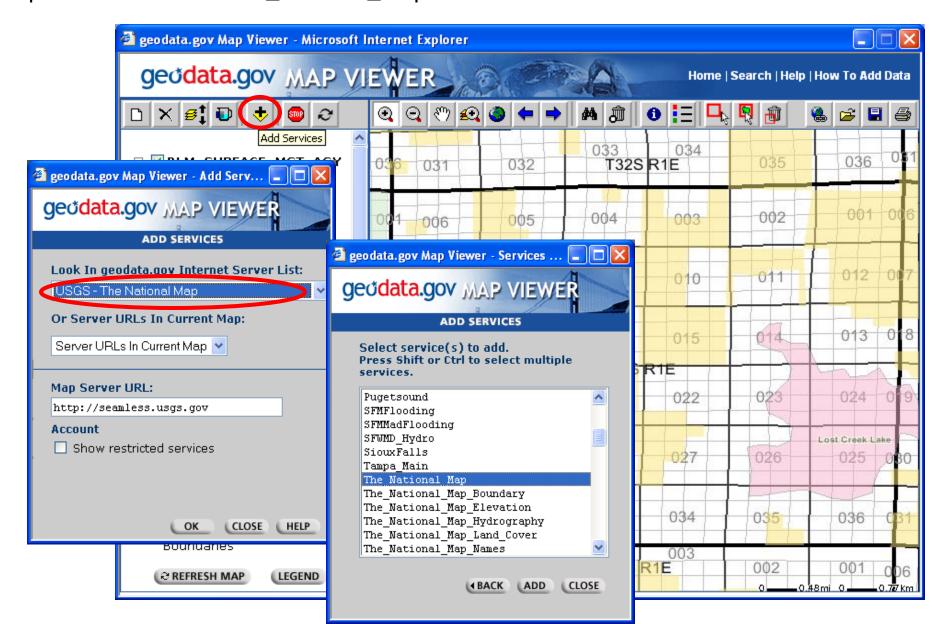
Make the new layer visible by clicking the empty box next to the BLM\_SURFACE\_MGT\_AGY title in the map legend then zoom in for a closer look using the Zoom In tool.



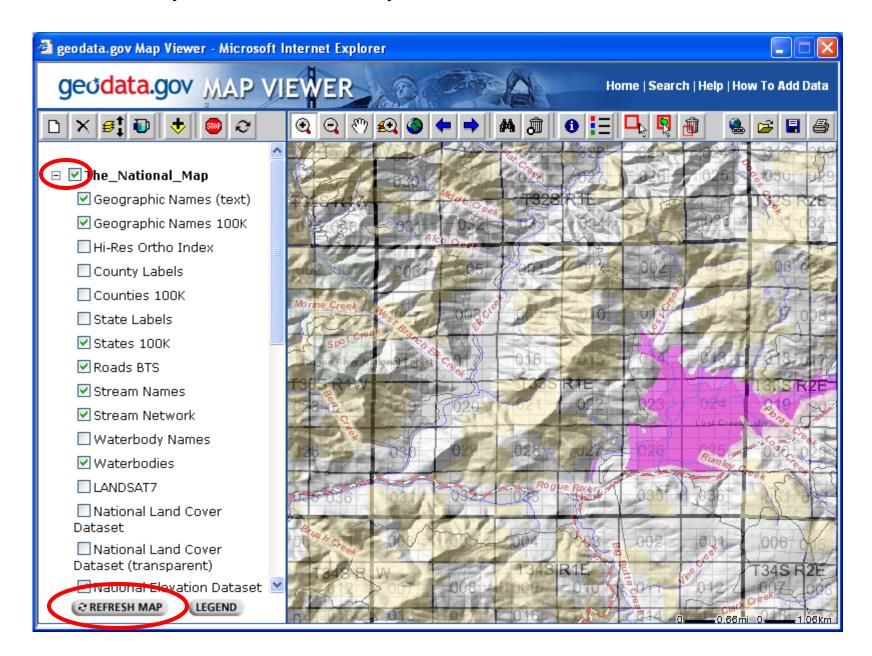
As you zoom further in, increasing levels of detail emerge.



Additional layers can be added through the "Add Services" button. Choose "USGS - The National Map" from the Internet Server List pulldown. Select "The\_National\_Map" from the list of services.



Check the visibility boxes of added layers and click the "REFRESH MAP" button.



#### www.geocommunicator.gov



#### Questions?

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