Accessing Land Records with NILS and the GeoCommunicator

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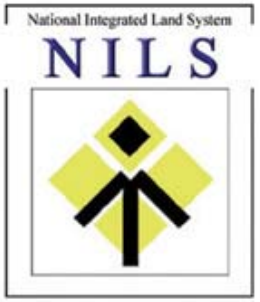
Underground Mine Mapping Workshop

Sheraton Station Square

Pittsburgh, PA

June 1, 2005

What is NILS?



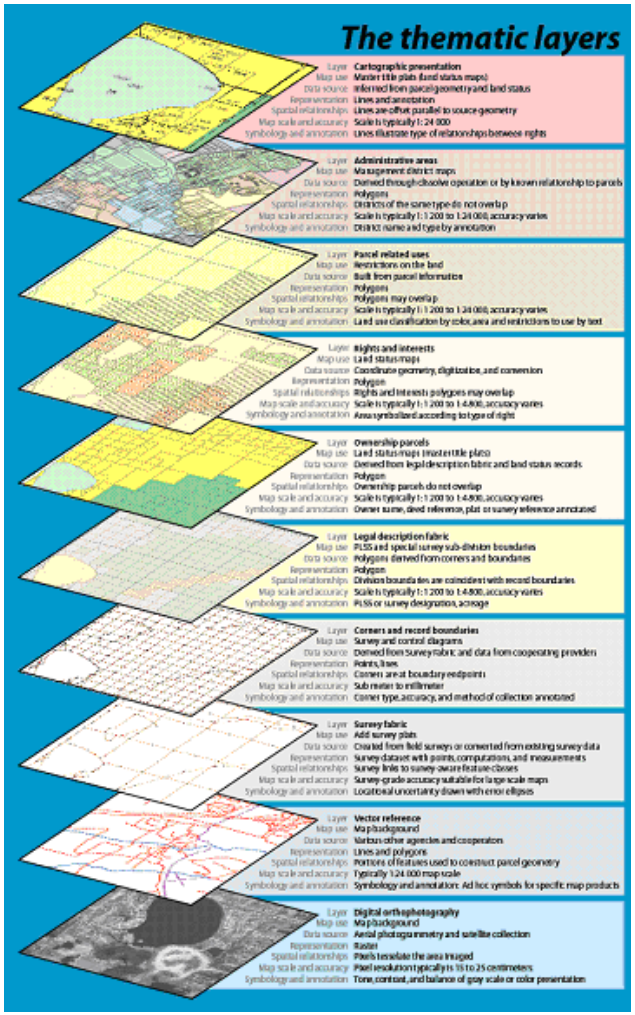
- The National Integrated Land System (NILS) is a joint project between the BLM and the USDA Forest Service in partnership with the states, counties, and private industry to provide business solutions for the management and integration of ***cadastral records*** and ***land parcel information*** in a Geographic Information System (***GIS***) environment.

What is the GeoCommunicator?

- The GeoCommunicator is an interactive ***web based system*** designed to facilitate the ***integration of geographic data*** among federal, state, local, and private individuals and organizations interested in ***land-related information***.

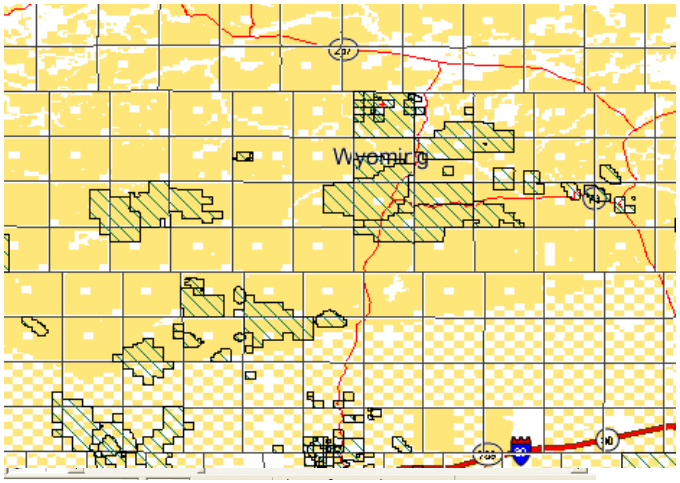
OMB Circular A-16 Describes Specific GIS Framework Data Layers and Assigns Agency Responsibility

- Geodetic Control
- Cadastral & Land Records
- Governmental Units
- Transportation
- Elevation and Bathymetry
- Hydrography
- Orthoimagery
  - Plus 27 others…



NILS Spatial Data Layers

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



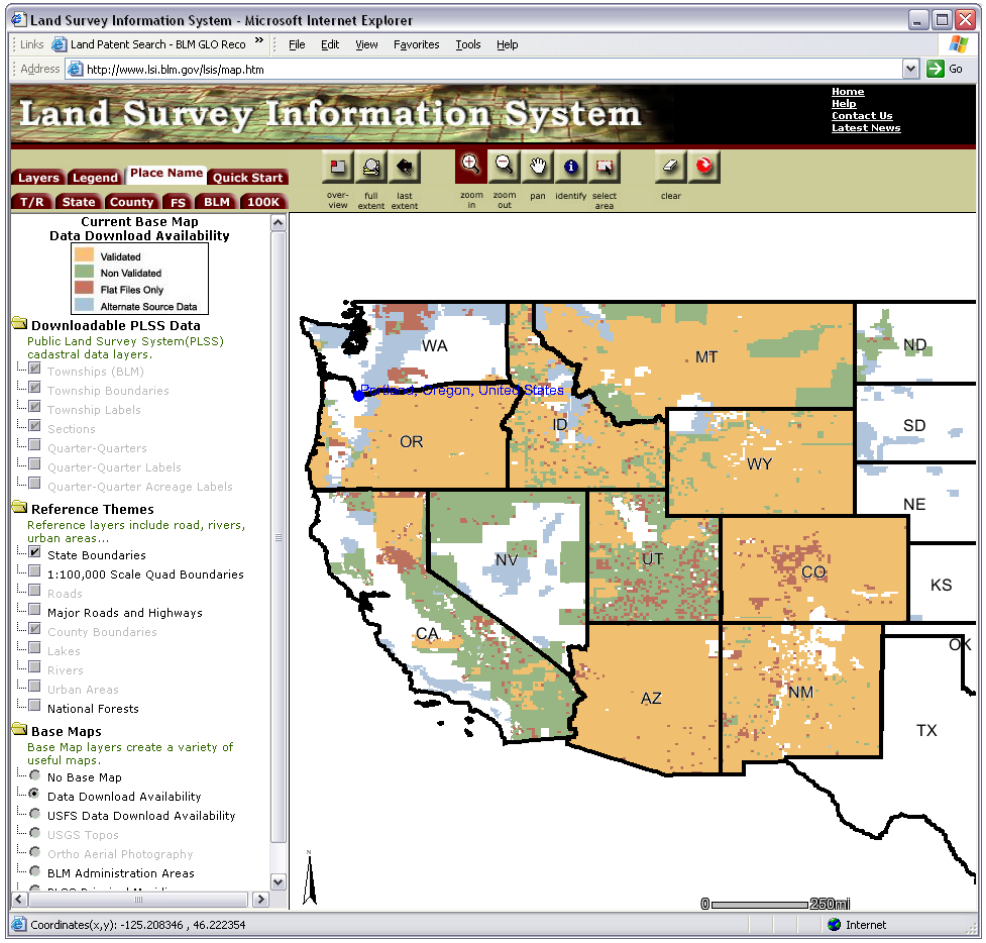
Serving National Spatial Data Layers for the BLM as directed by OMB Circular A-16

http://www.whitehouse.gov/omb/circulars/a016/a016_rev.html

Land Survey Information

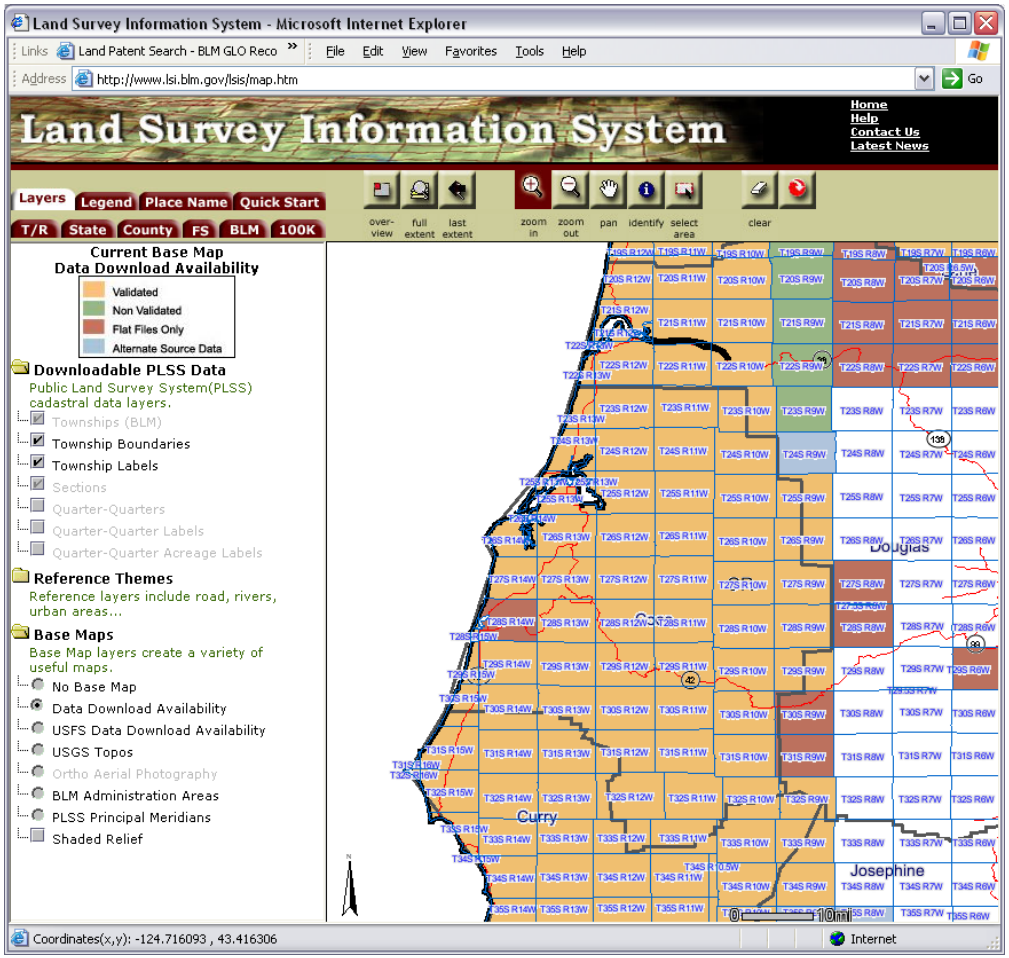
Land Survey Information

A Seamless Multi-Purpose Cadastre



Land Survey Information

Survey data delivered in several ways:

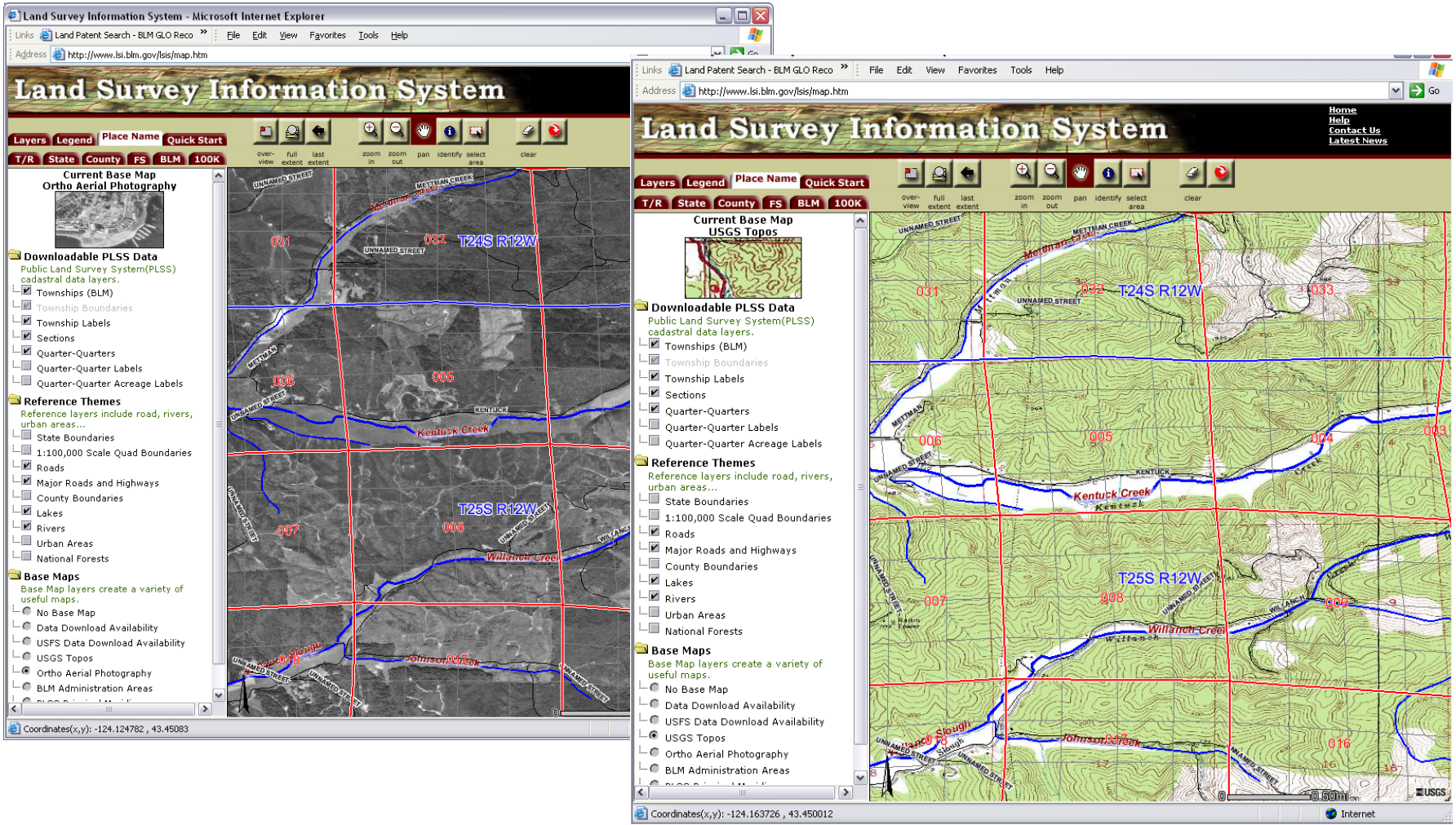


Public Land Survey System:

- Township
- Range
- Section
- Aliquot

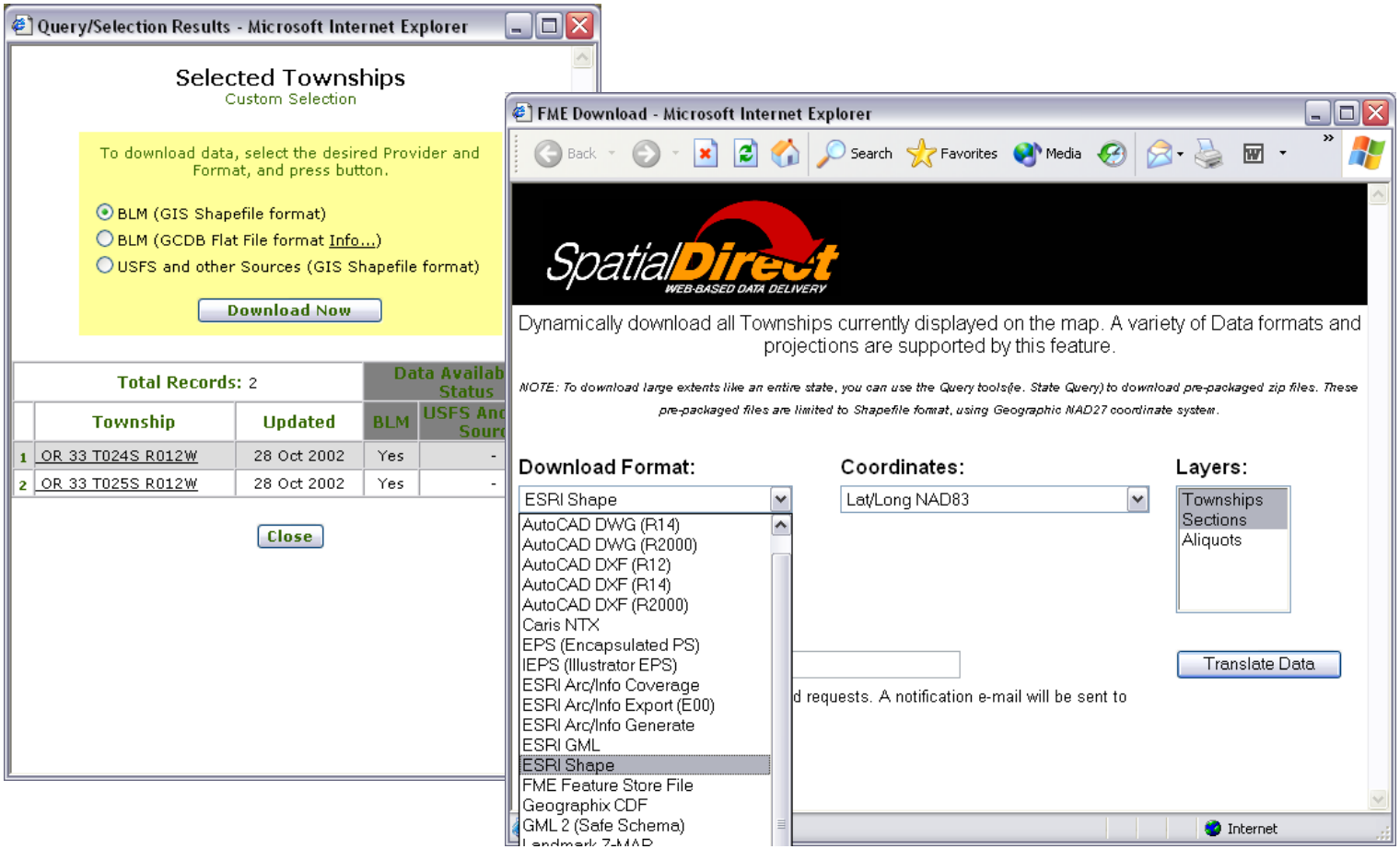
Land Survey Information

Data viewable from the web interface



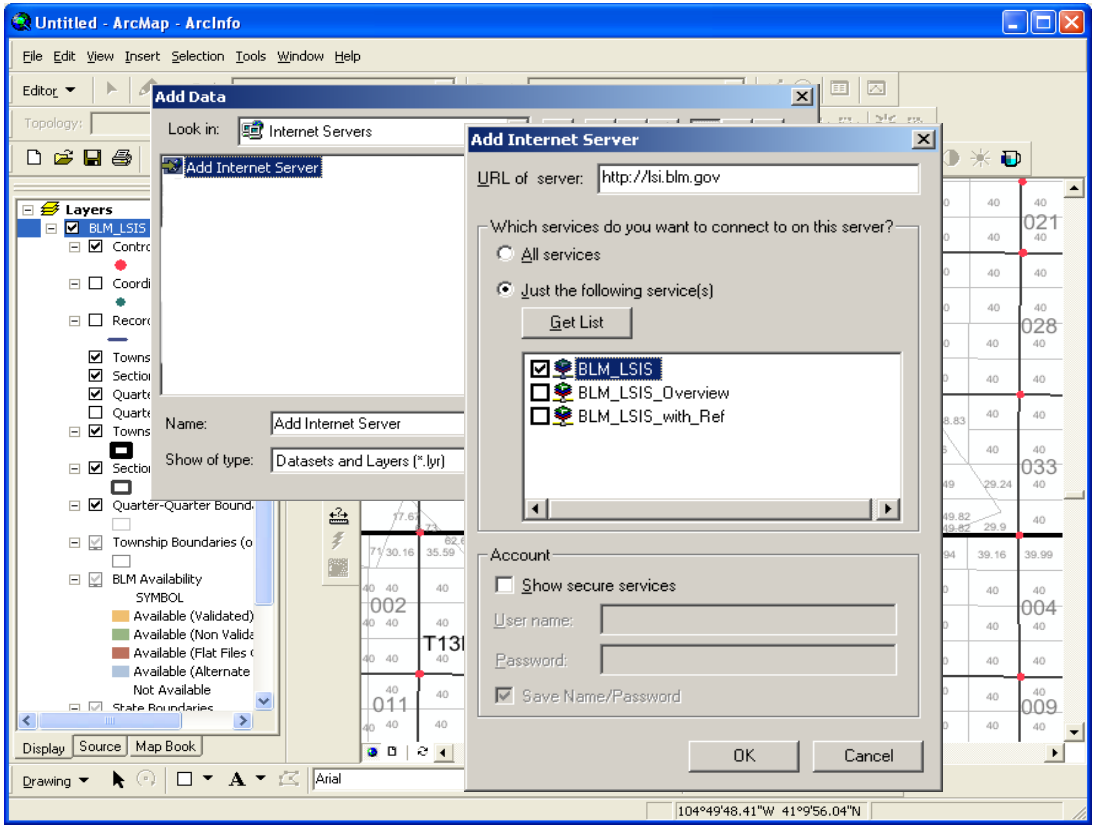
Land Survey Information

Data delivered as downloadable shape files



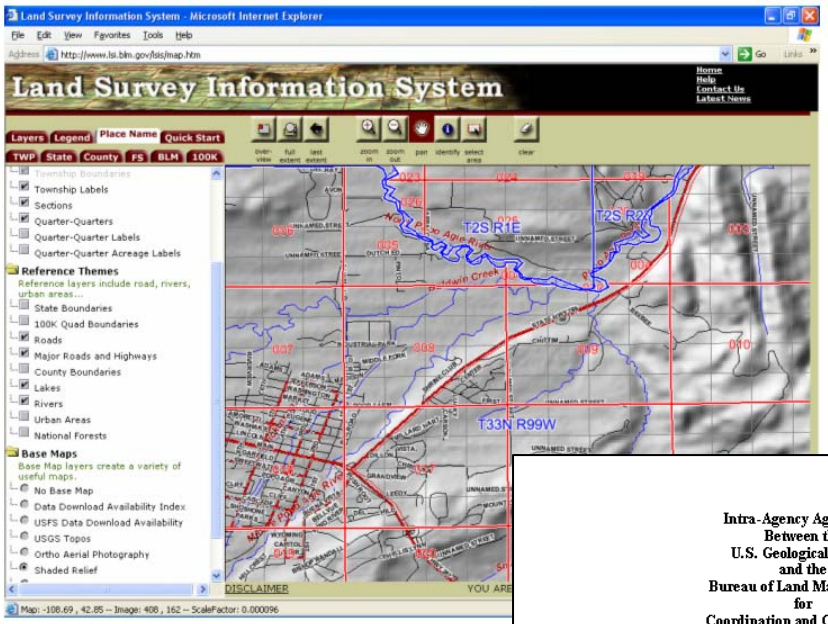
Land Survey Information

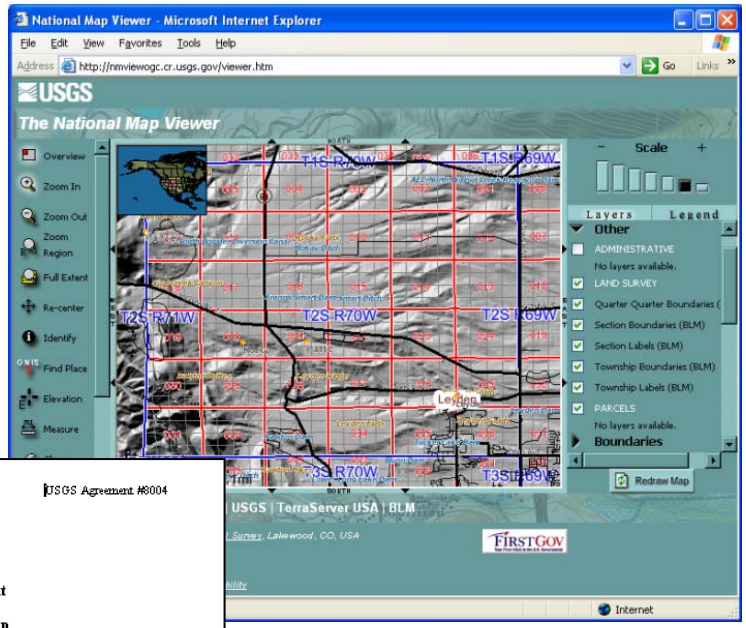
Data integrated as map streaming ArcIMS layer



Part of the National Map

BLM & USGS sharing data resources





USGS Agreement #8004

Intra-Agency Agreement
Between the
U.S. Geological Survey
and the
Bureau of Land Management
for
Coordination and Cooperation
Pertaining to *The National Map*
and the
National Integrated Land System

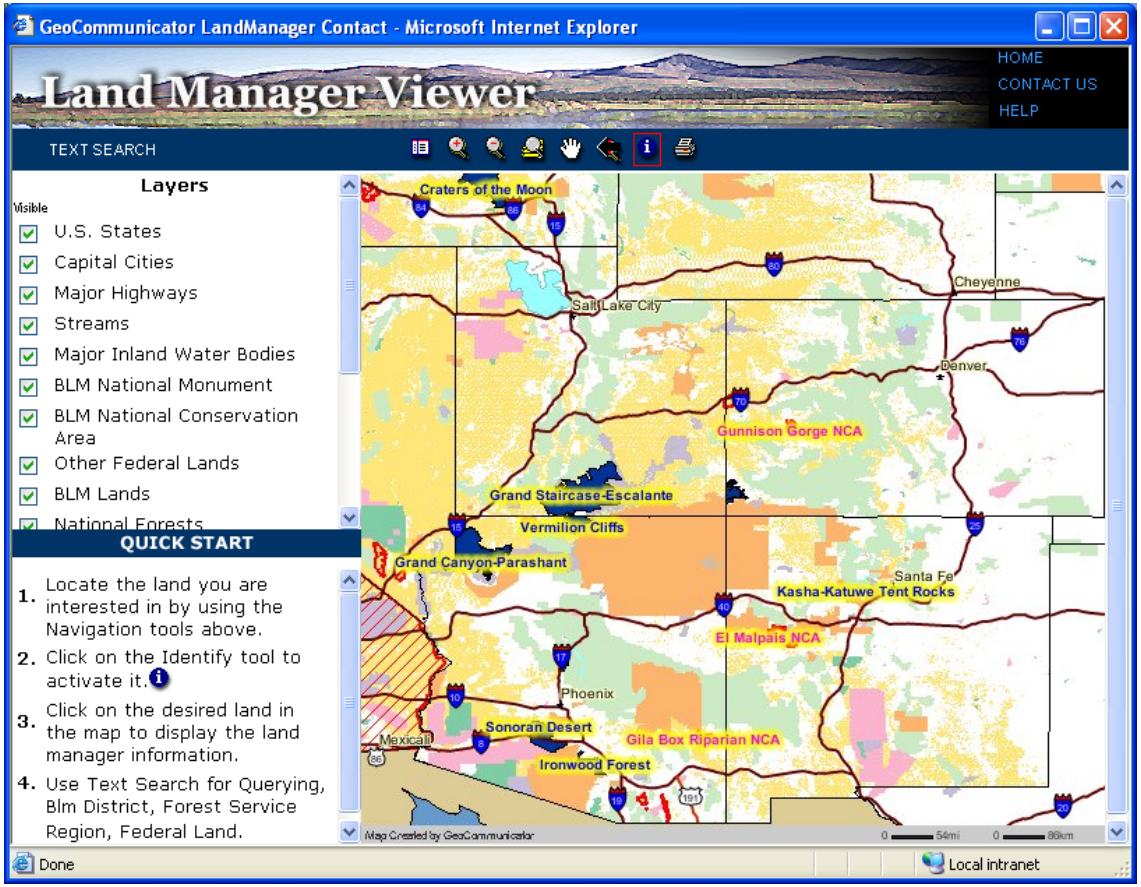
I. Purpose

The purpose of this agreement is to leverage the U.S. Geological Survey (USGS) and Bureau of Land Management (BLM) investments in geospatial data that are contained in *The National Map* and the National Integrated Land System (NILS). This agreement describes key technical considerations that need to be coordinated in order to maintain a mutually beneficial relationship.

Federal Land Stewardship

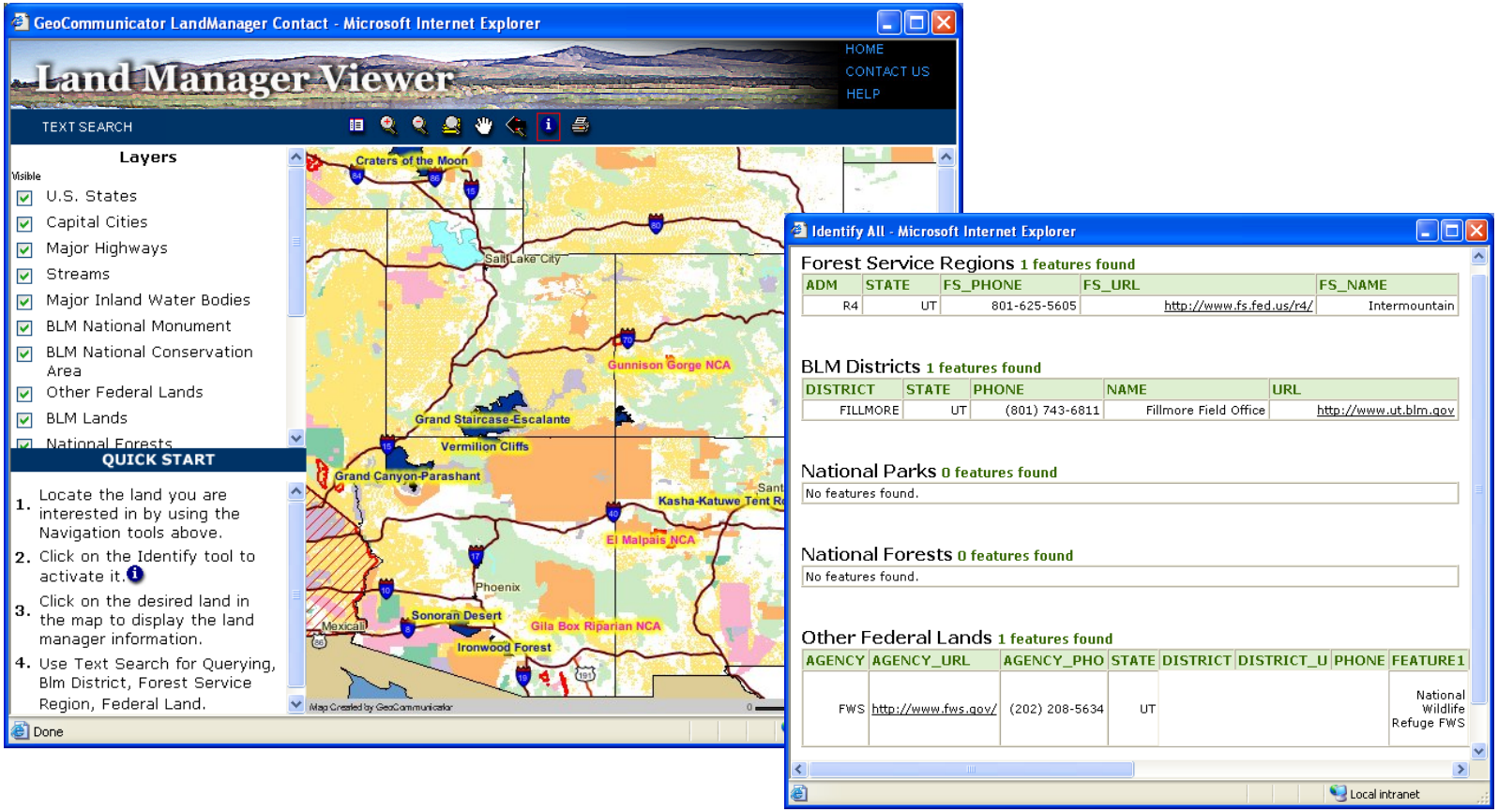
Land Manager Viewer

Displays Federal Surface Management Agency



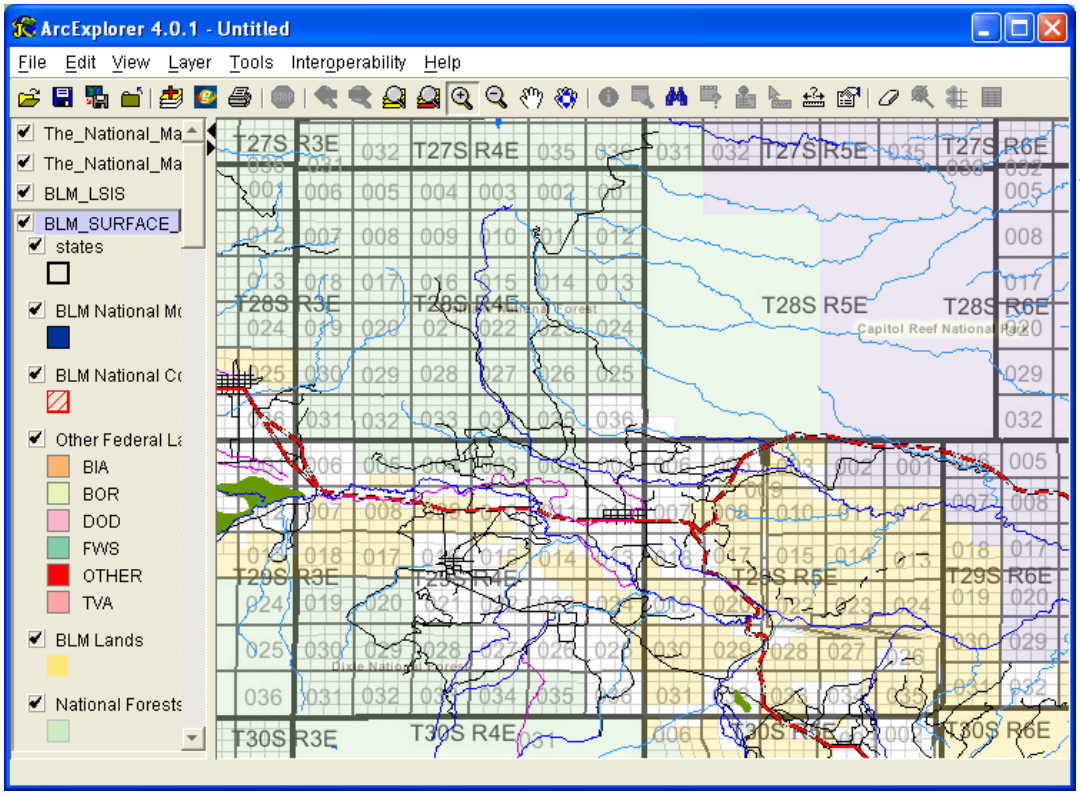
Land Browser Interface

Zoom, Pan, Search, and Identify



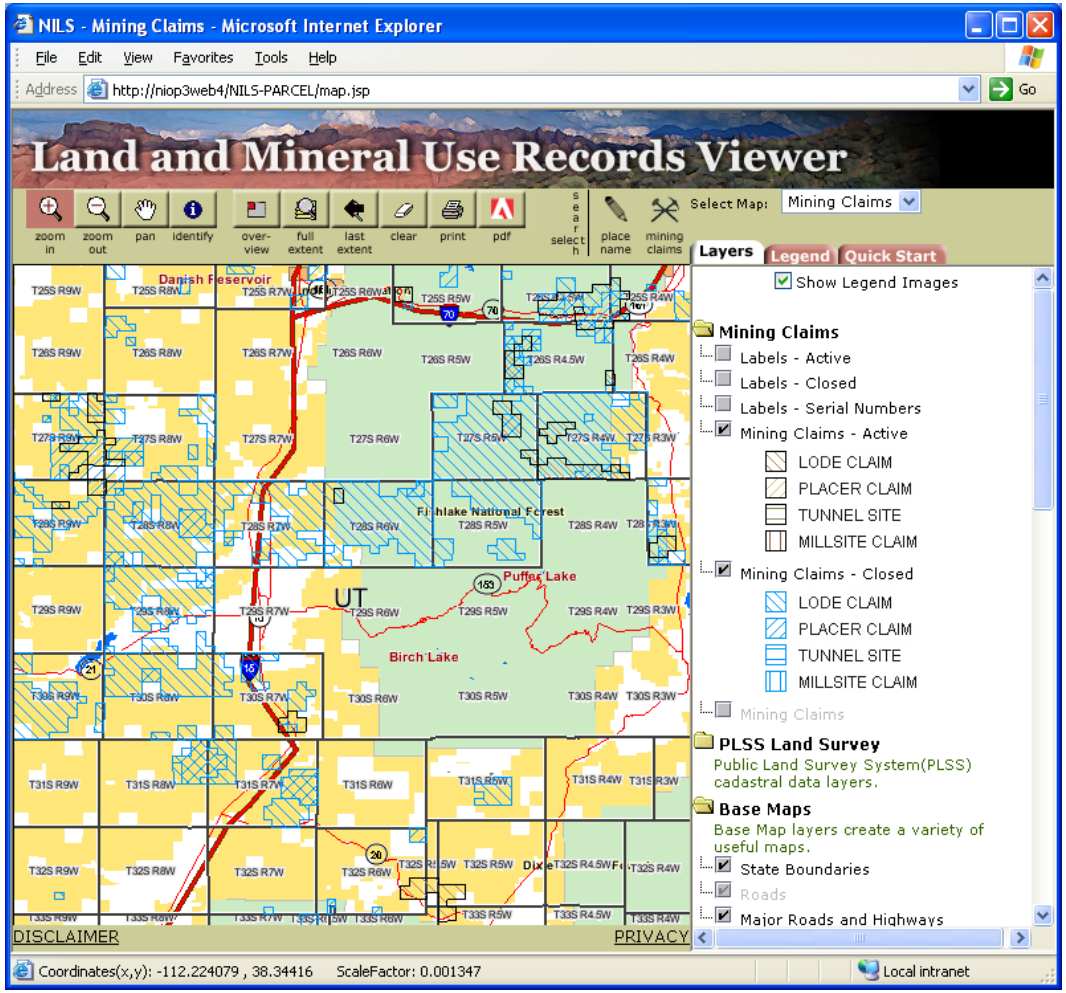
Integrate with other data layers through Desktop or Mobile GIS

Add data from the internet with the URL: http://lsi.blm.gov



Land & Mineral Use Records

Land & Mineral Use Records Viewer

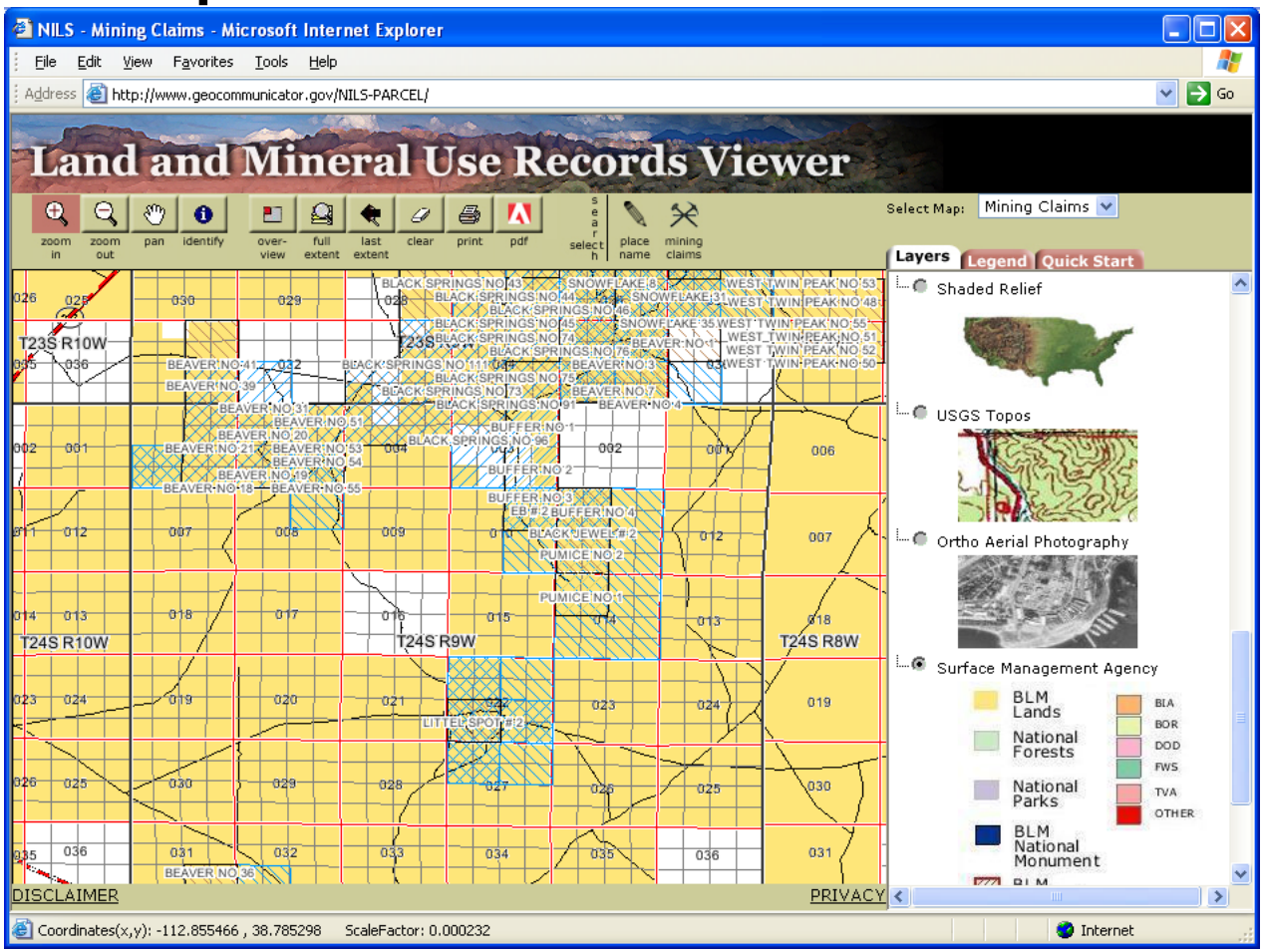


Display of

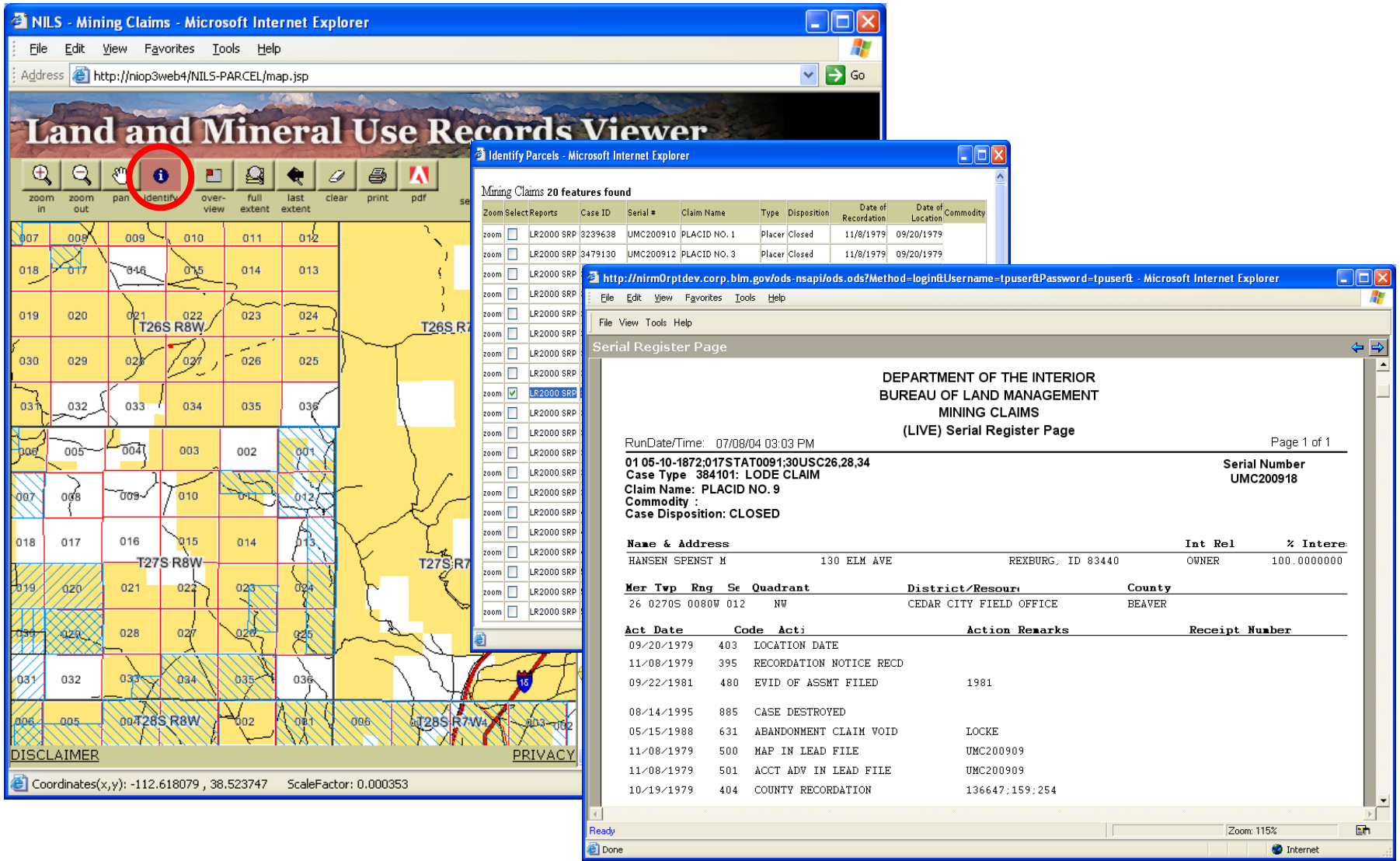
Mining Claims

Oil & Gas Leases

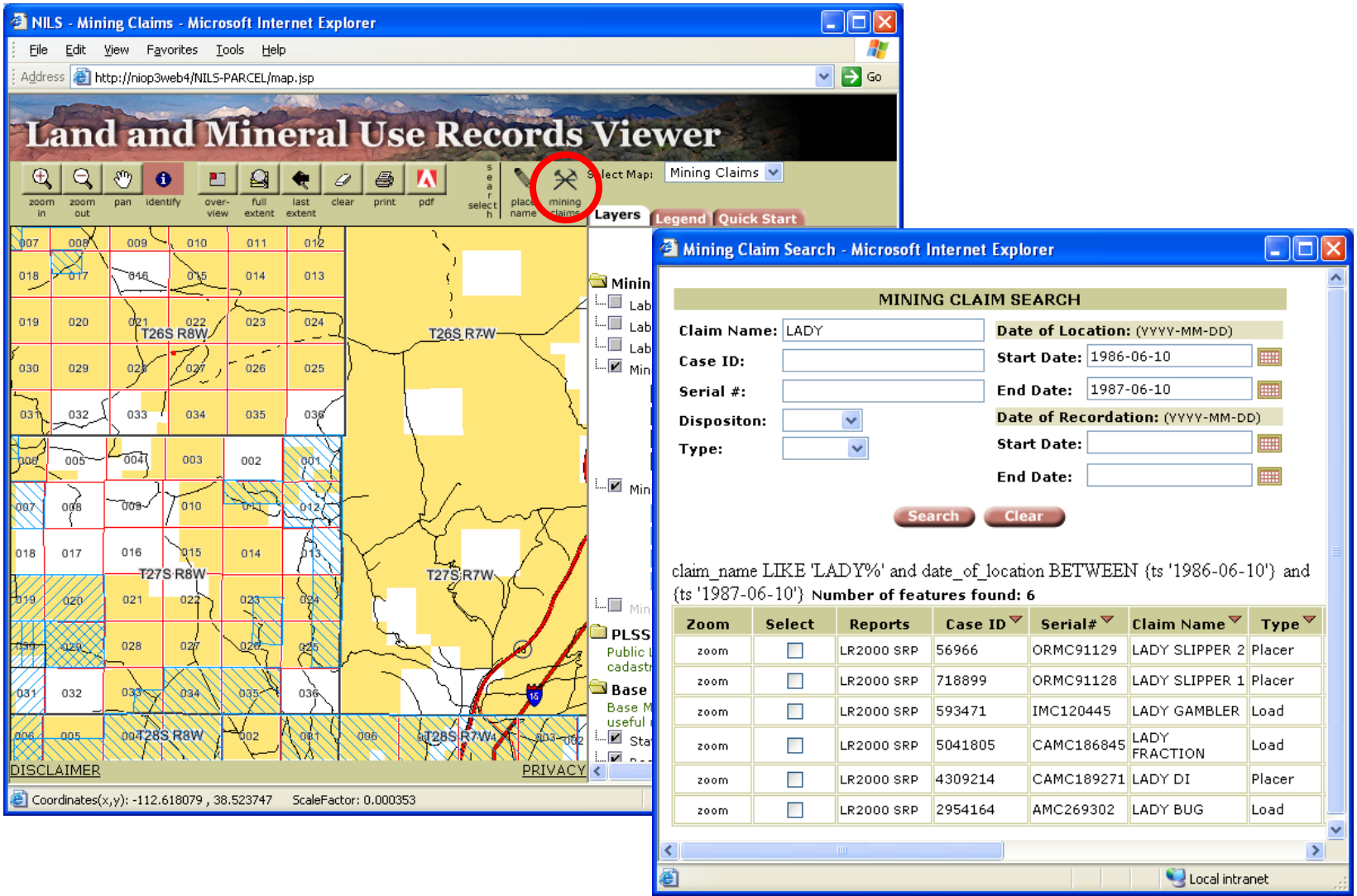
View Land Records in Context with Other Spatial Reference Themes



Links with Land & Mineral Use Records

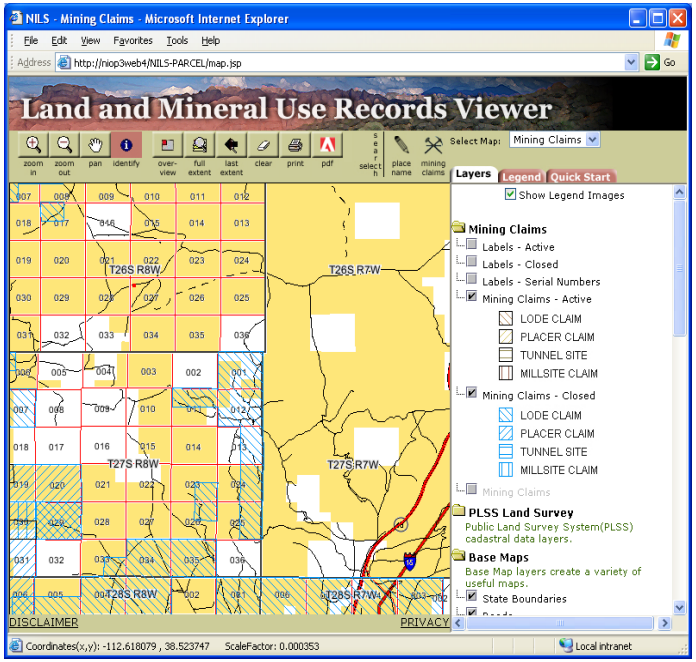


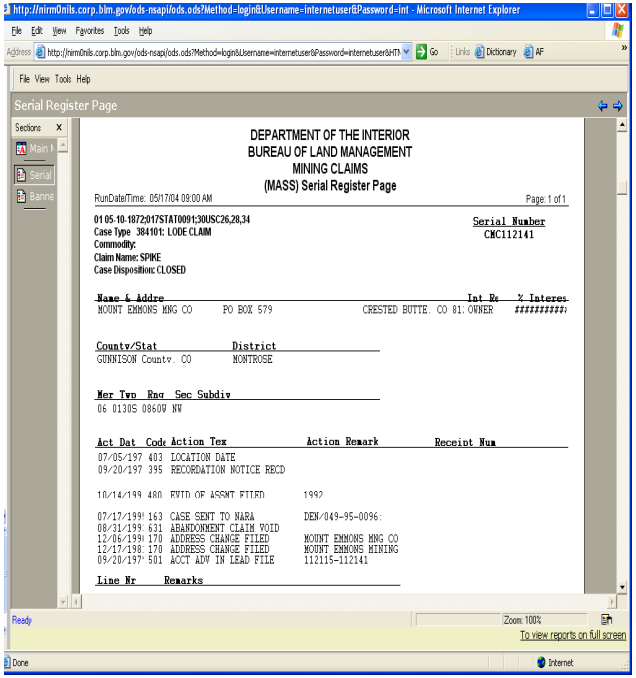
Allows Searching by Record Info



Bi-directional Link with Land & Mineral Use Record System

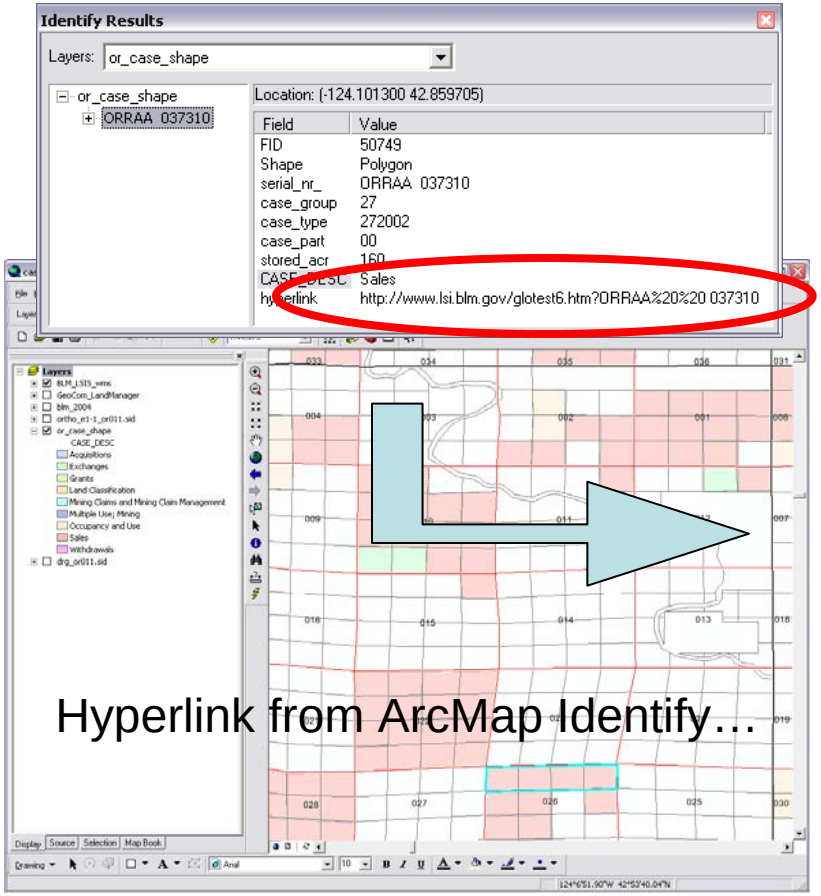
Spatial System

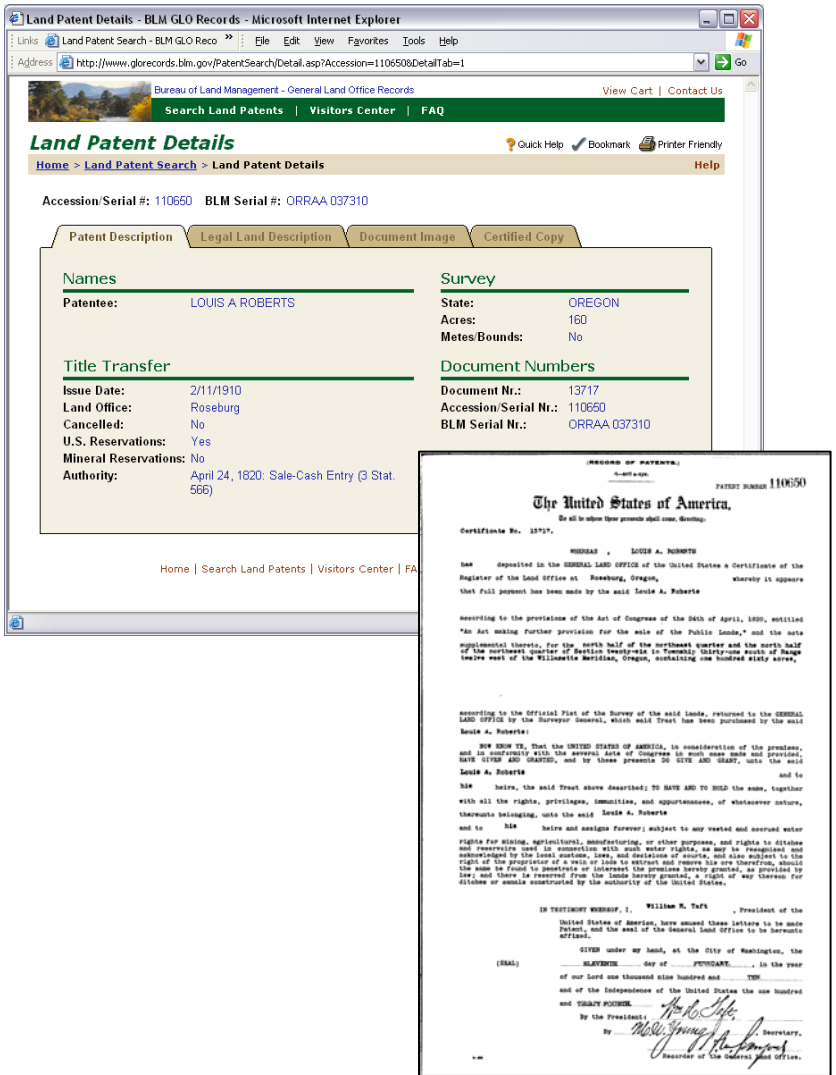




Text-based System

Integration with other Land Record Systems





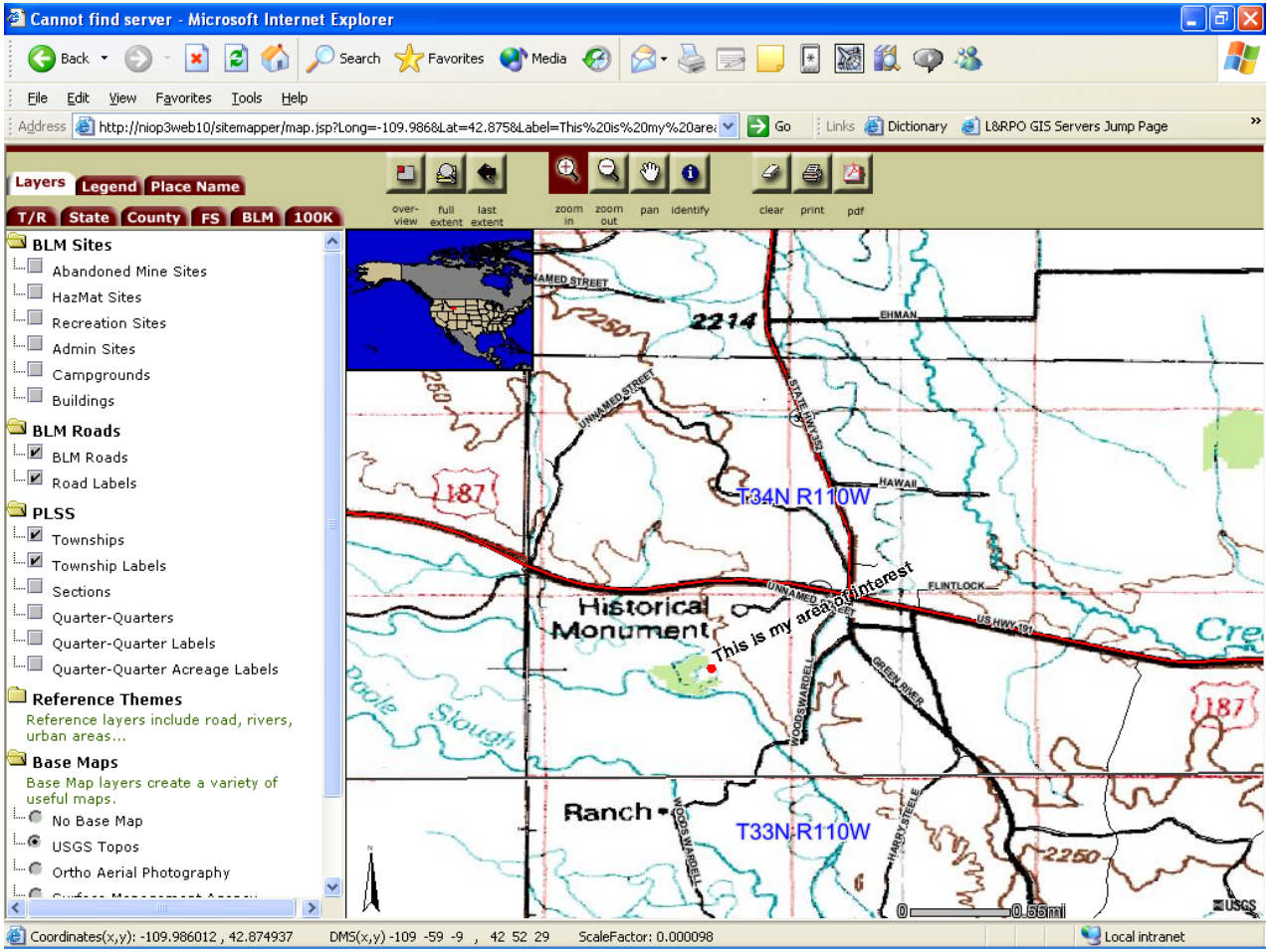
Sitemapper

- Allows you to pass a geographic coordinate and display the location with BLM standard spatial data themes.

http://www.geocommunicator.gov/NILS-PARCEL/map.jsp?Long=-109.986&Lat=42.875&Label=This%20is%20my%20area%20of%20interest

www.geocommunicator.gov/NILS-PARCEL/map.jsp?Long=-105.11565&Lat=39.71767&Lab

Direct Spatial Query for 42.875N 109.986W



To Find More Map Streaming Services…

Search:

http://www.geodata.gov

geodata.gov
U.S. Maps & Data

your one stop for federal,
state & local geographic data

E-government Portal for Geospatial Data

geodata.gov
U.S. Maps & Data

your one stop for federal, state & local geographic data

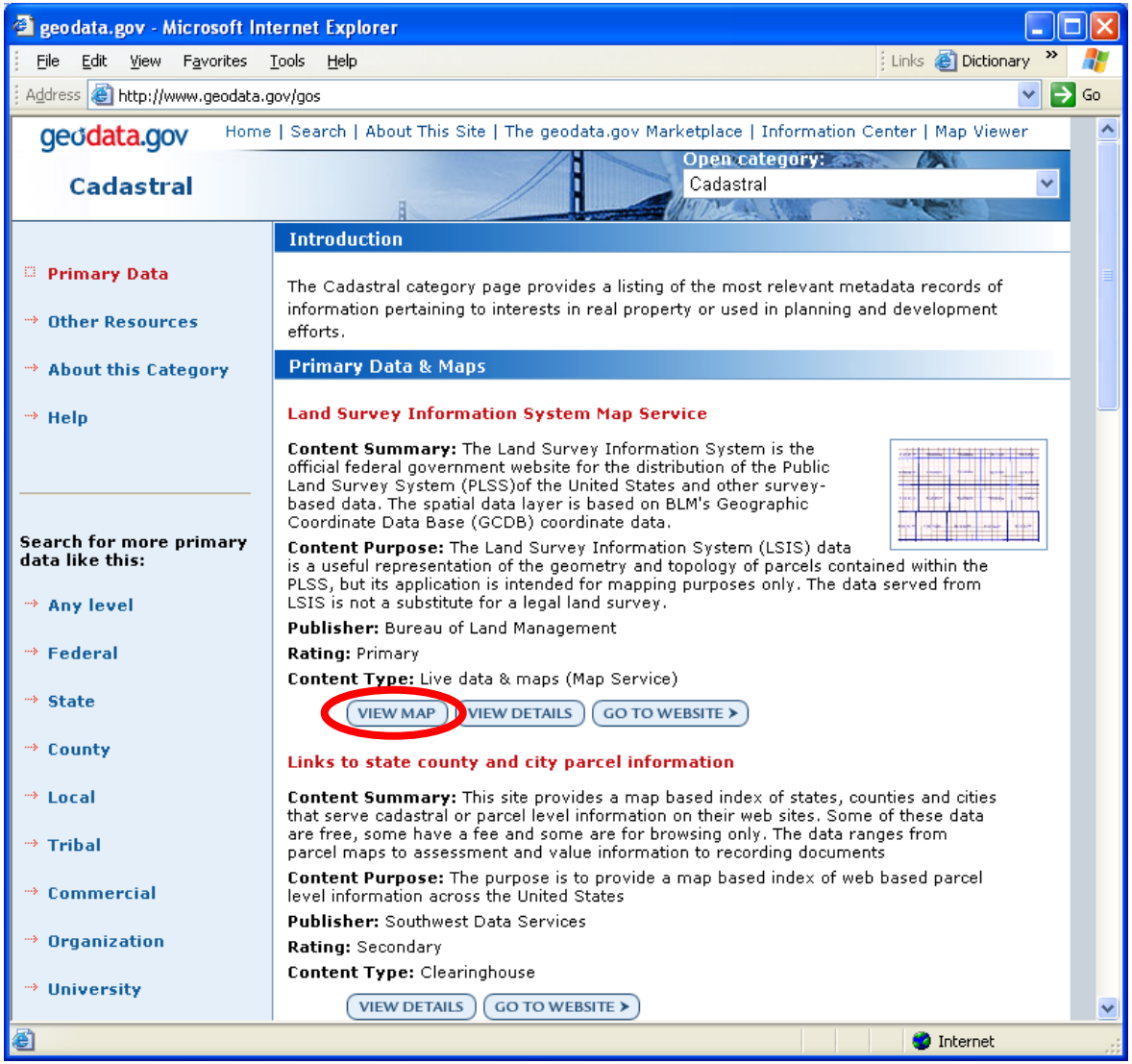
Point browser to http://www.geodata.gov and select the “Cadastral” data category.

Find BLM’s Map Streaming Services

geodata.gov
U.S. Maps & Data

your one stop for federal, state & local geographic data

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



geodata.gov
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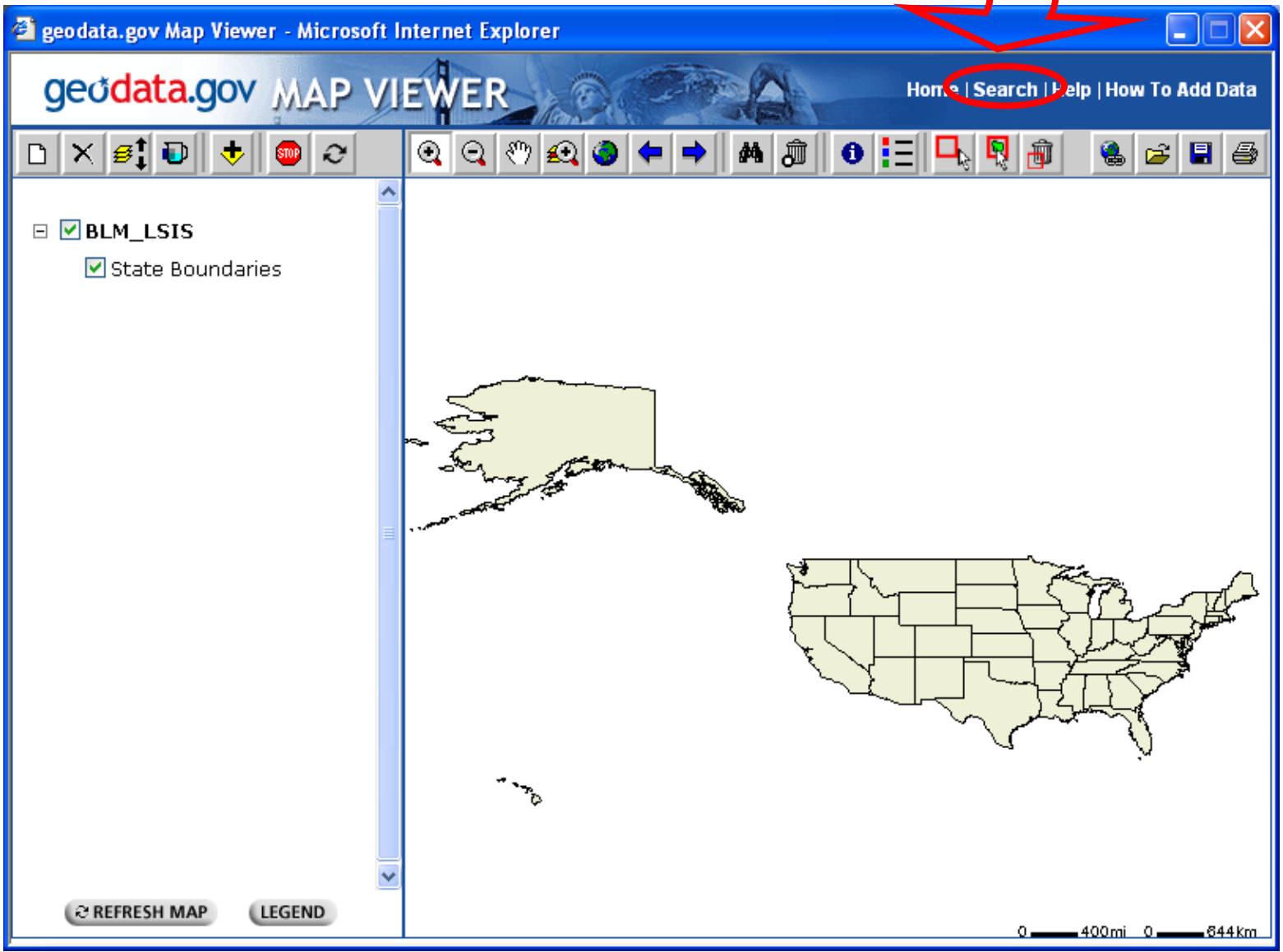
Search for additional layers to add…



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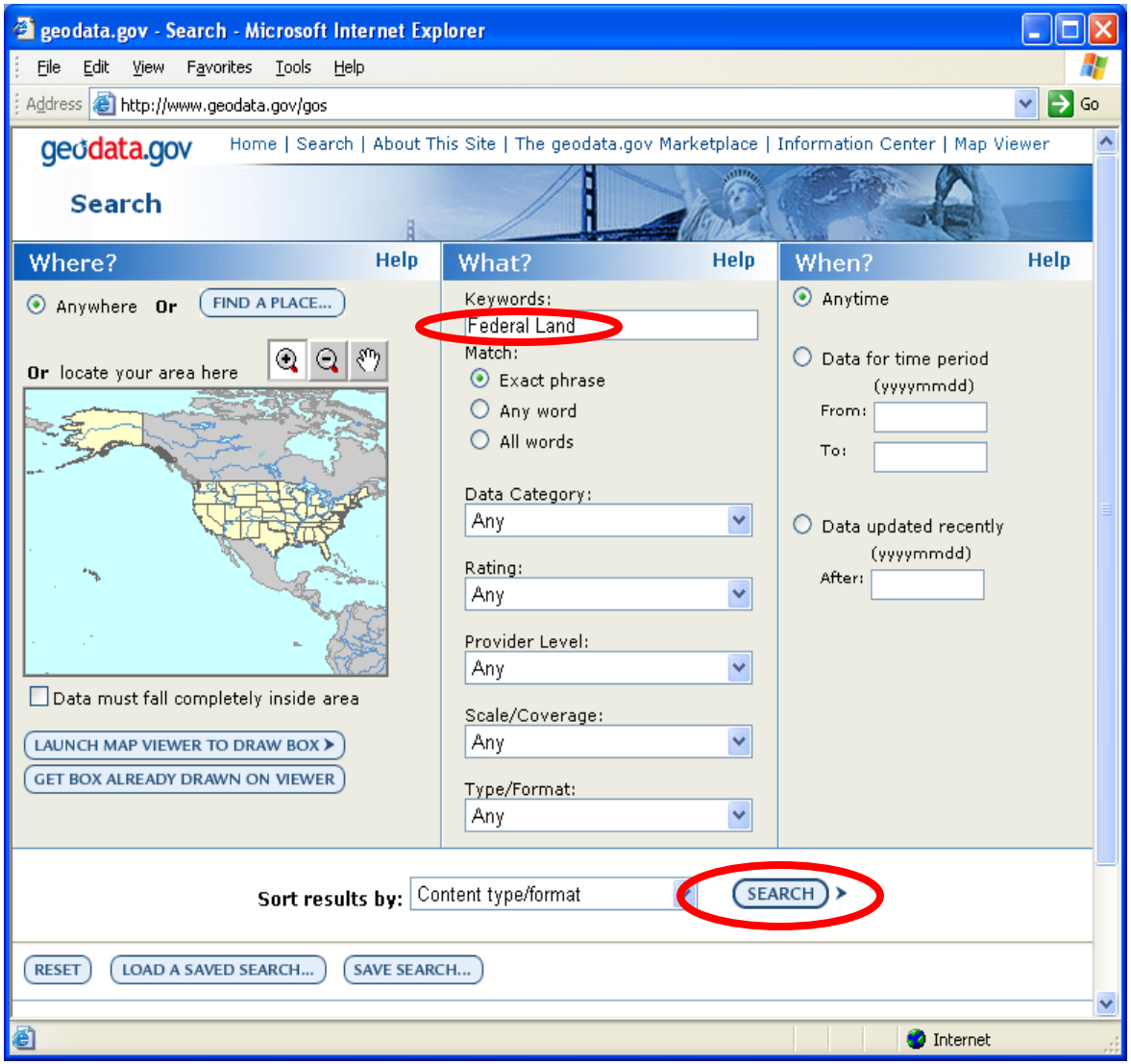
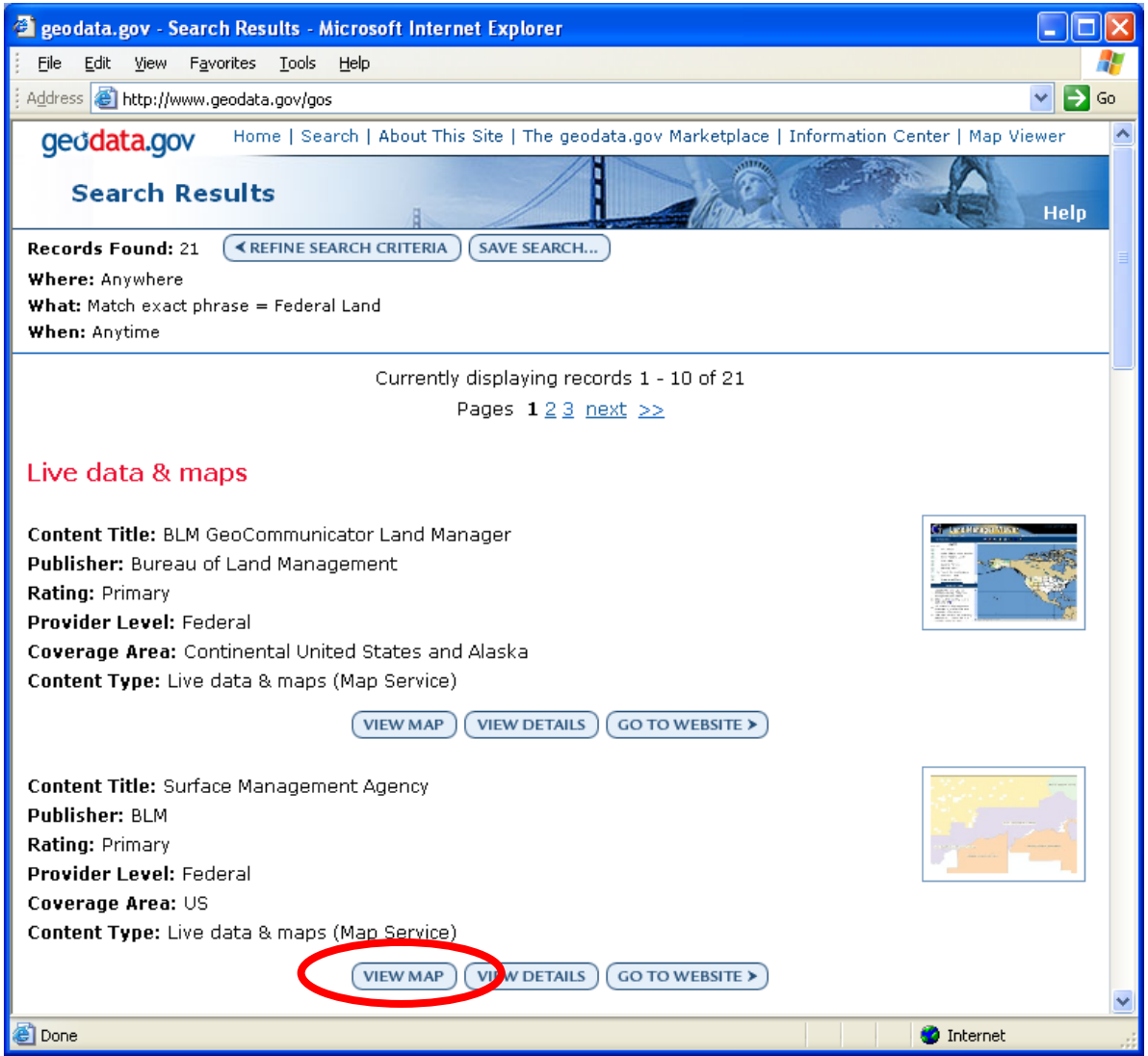
Search for “Federal Land”…



Locate “Surface management Agency” and click on “VIEW MAP”



geodata.gov
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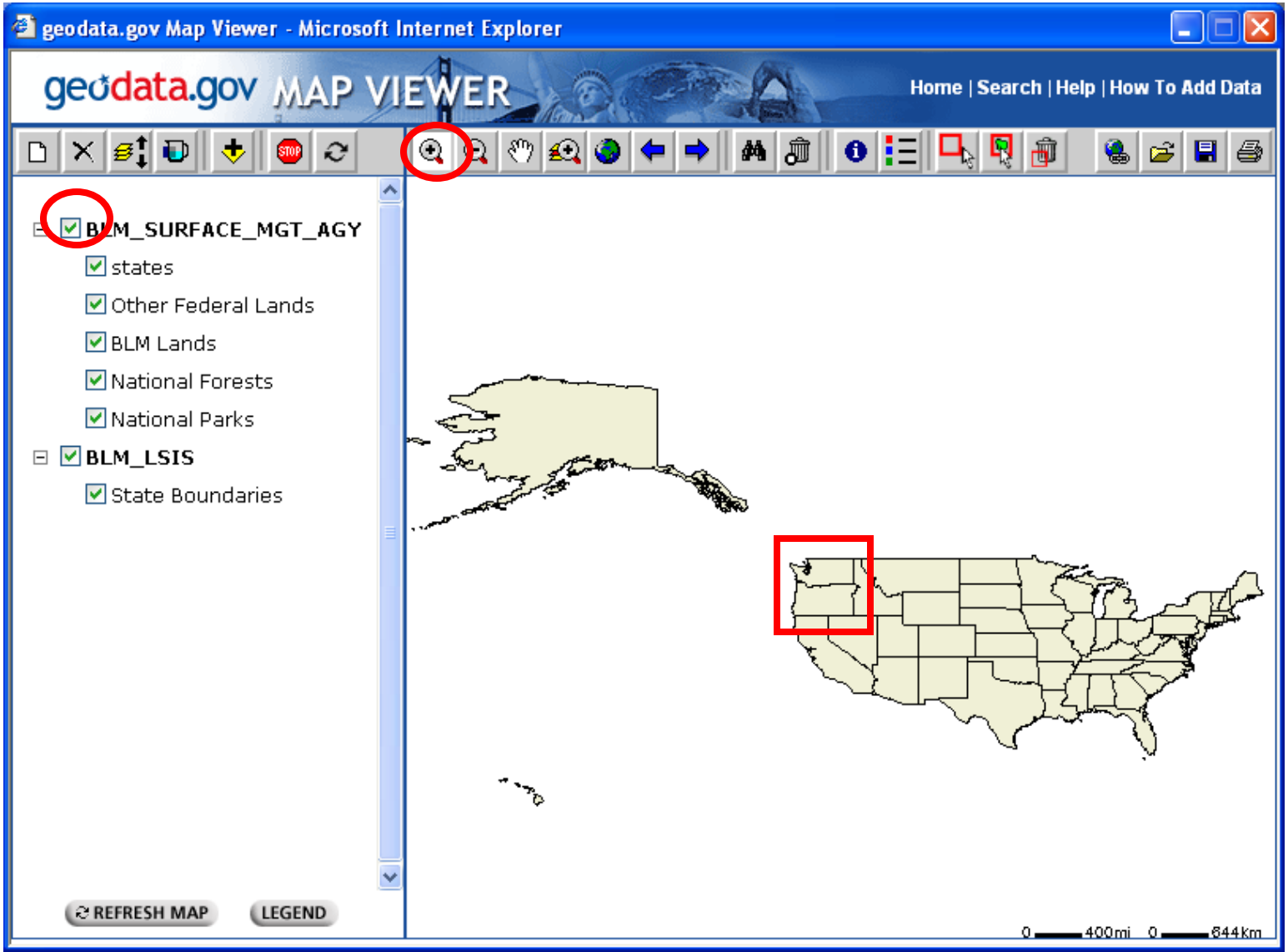
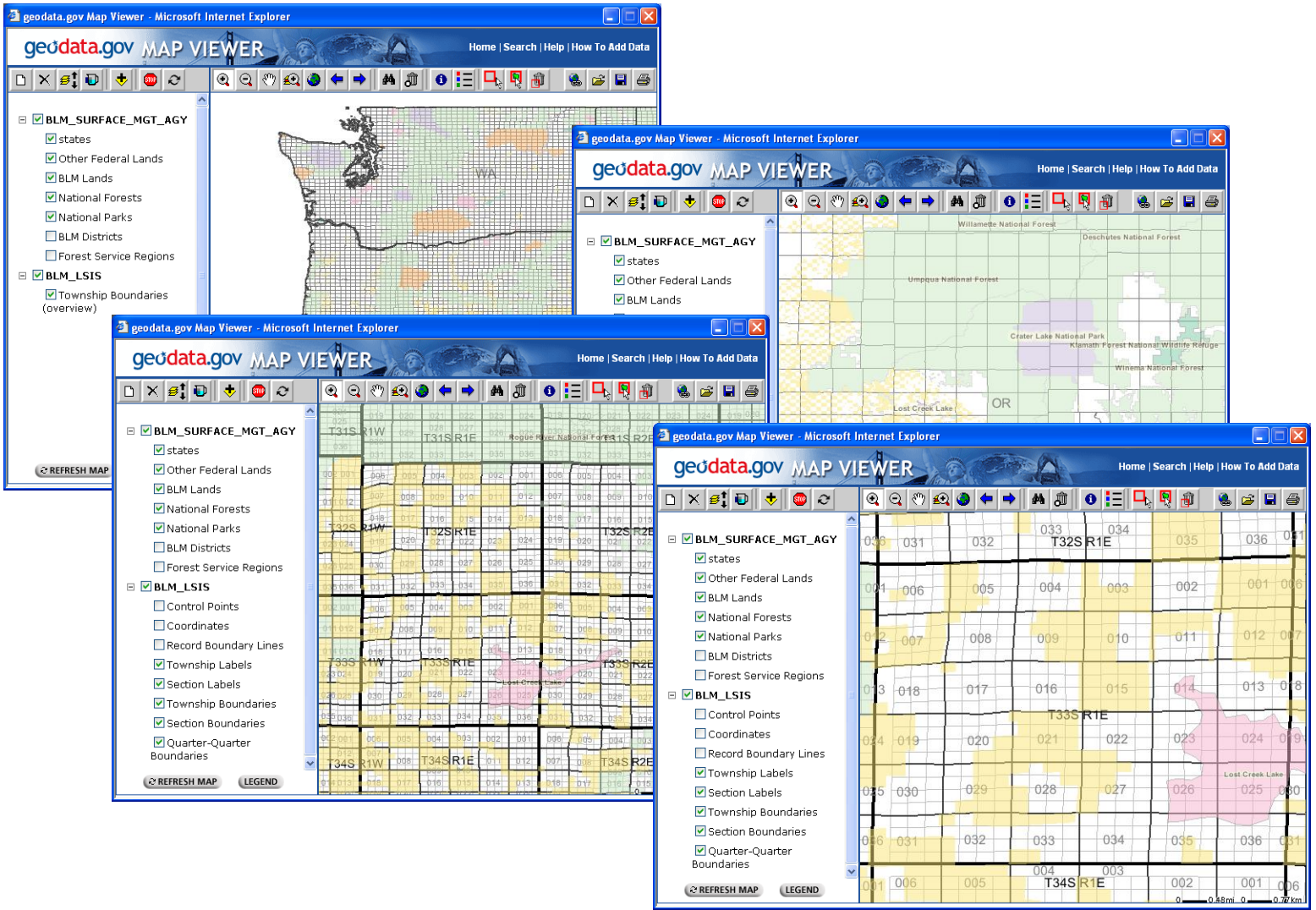
Make the new layer visible then zoom in for a closer look using the Zoom In tool.



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



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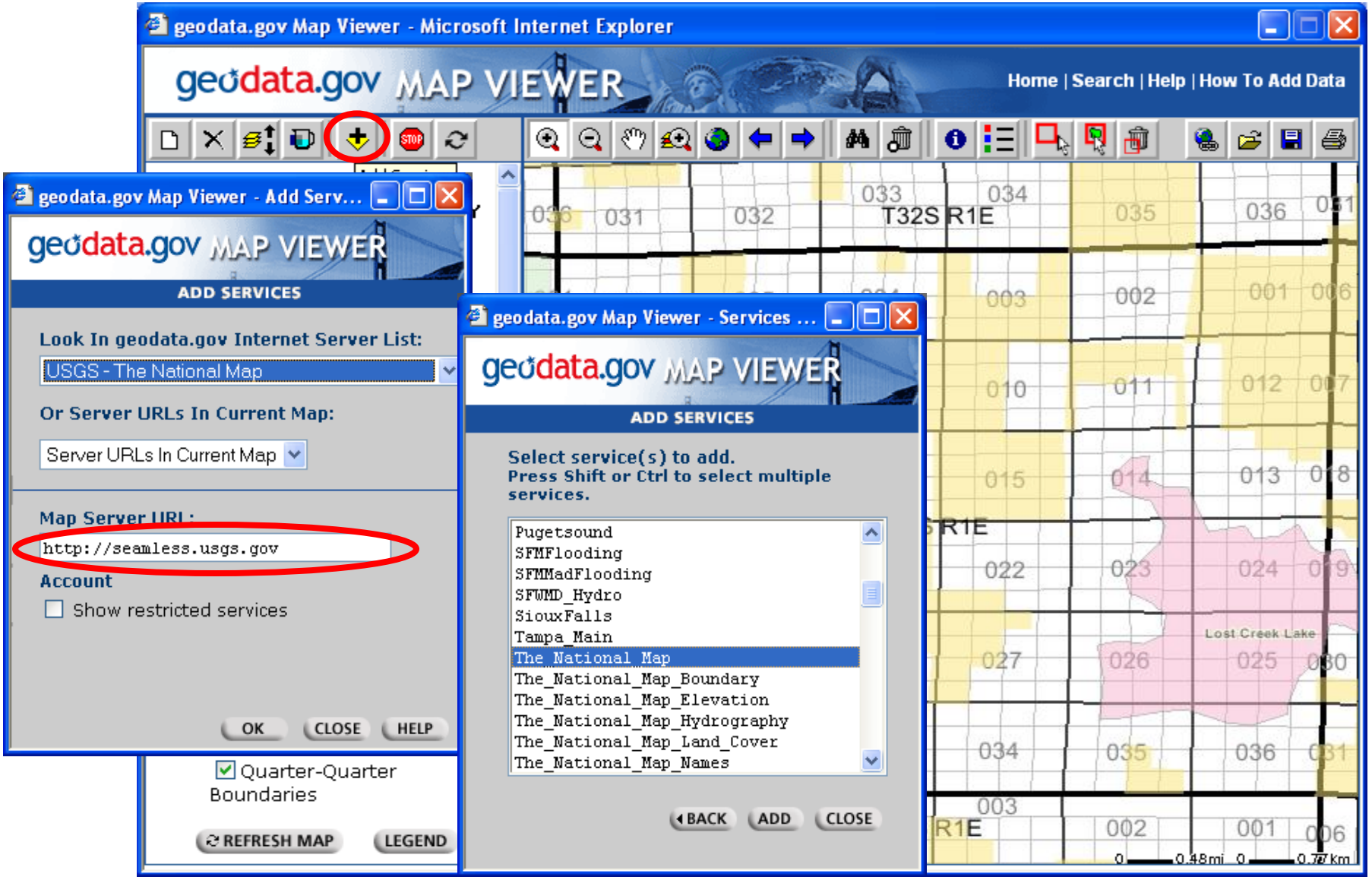
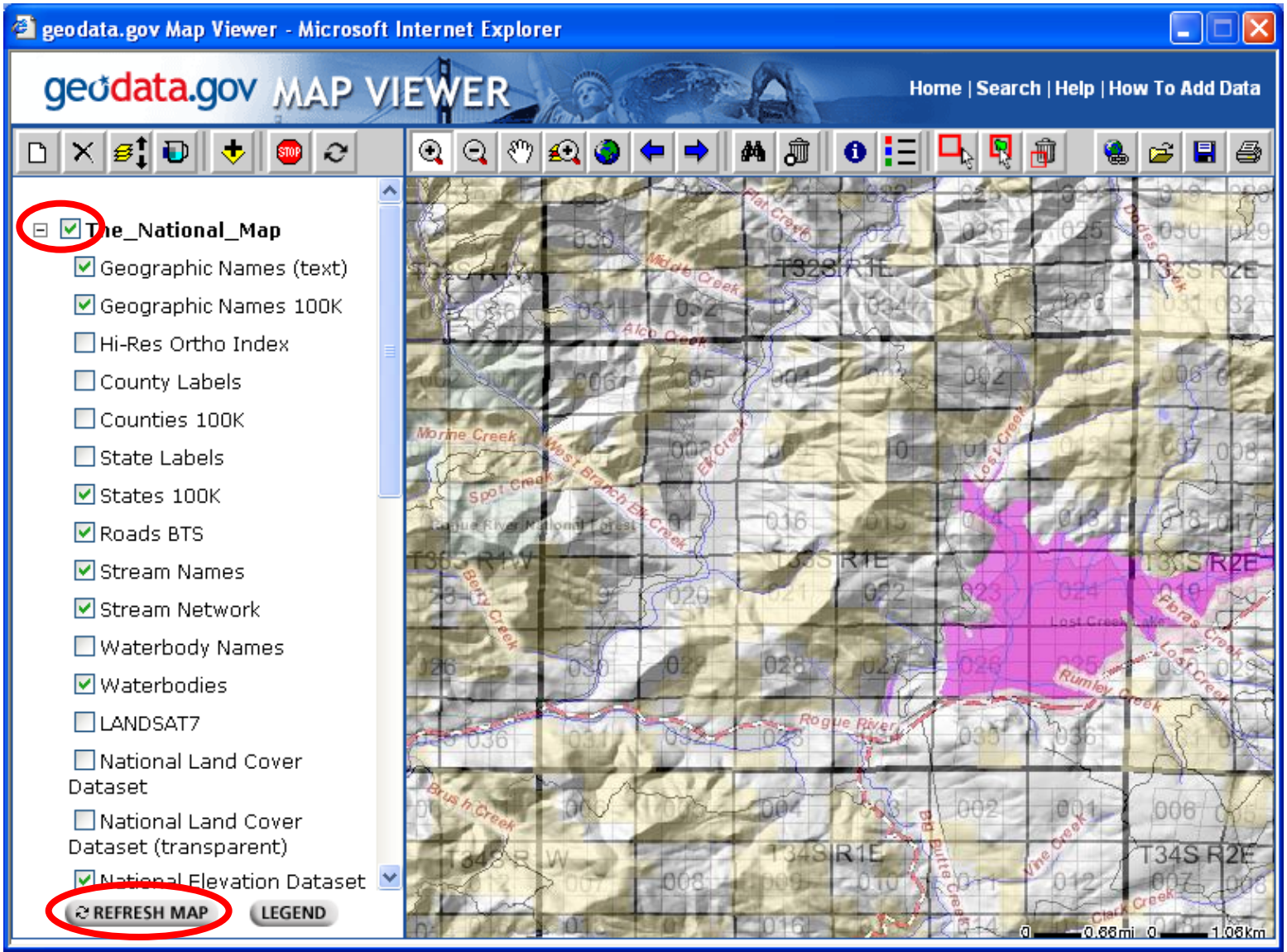
Additional layers can be added through the “Add Services” button.



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



GeoCommunicator

www.geocommunicator.gov

www.geocommunicator.gov

Questions?

- Contact:

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GIS Coordinator

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(303) 236-1984

jreitsma@blm.gov