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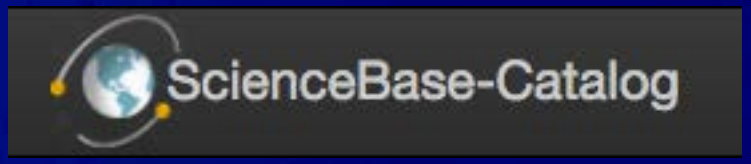
science for a changing world

ScienceBase as a Platform for Data Release



U.S. Department of the Interior
U.S. Geological Survey

What you will need:

- **Data** (preferably in common, open formats)
- **Metadata** for each dataset to be released in XML format. (FGDC CSDGM* or ISO**).
- Data and metadata must be **reviewed and approved for release** through the Information Product Data System (IPDS).
  - (refer to: http://www.usgs.gov/usgs-manual/im/IM-OSQI-2015-03.html)

Resources

Data Management Website: http://www.usgs.gov/datamanagement

Guidance for Checking Metadata with Data: http://www.usgs.gov/datamanagement/documents/CheckingMetadataWithData.pdf

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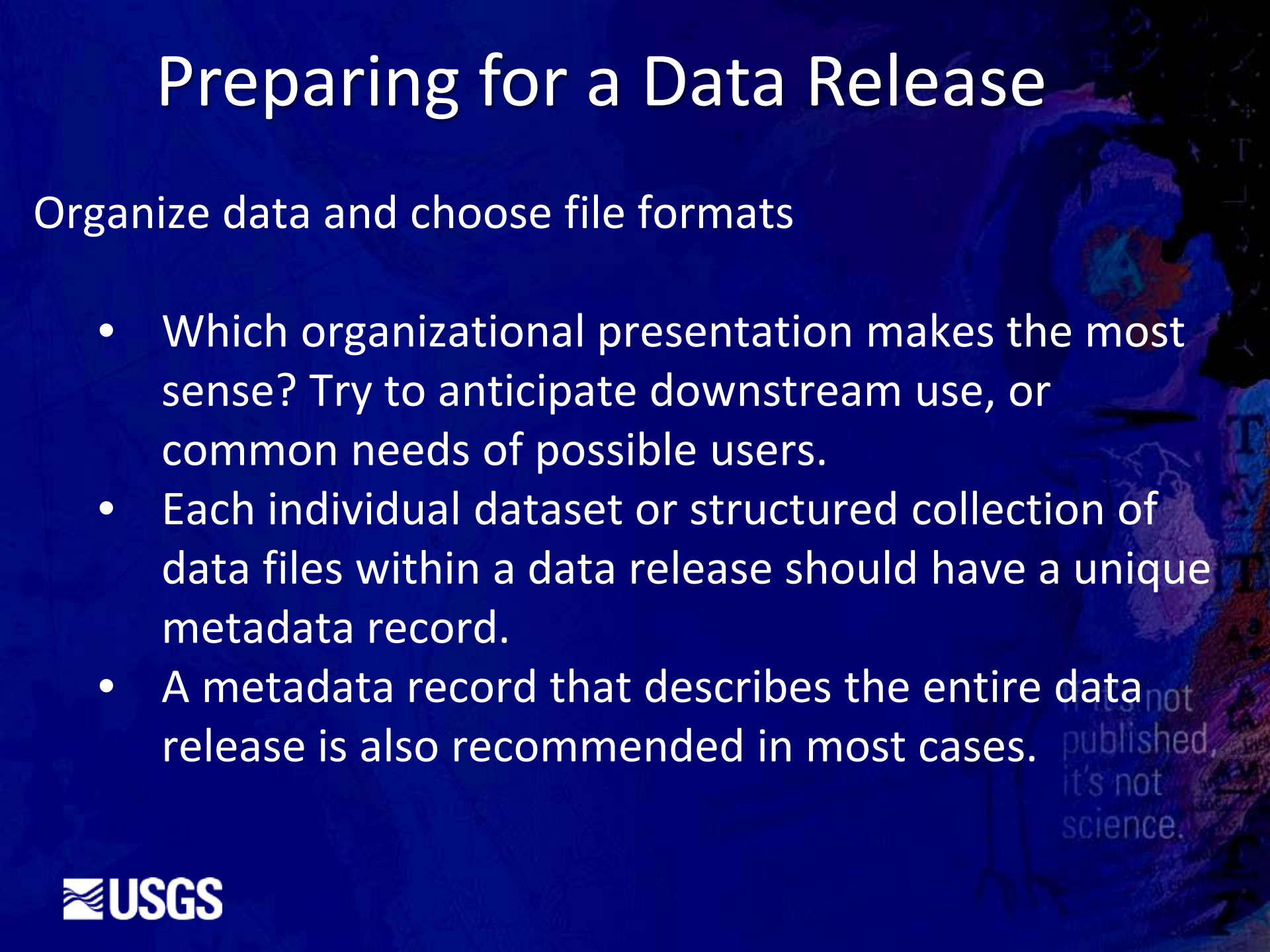
*Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata

**International Organization for Standardization

Preparing for a Data Release

Organize data and choose file formats

- Which organizational presentation makes the most sense? Try to anticipate downstream use, or common needs of possible users.
- Each individual dataset or structured collection of data files within a data release should have a unique metadata record.
- A metadata record that describes the entire data release is also recommended in most cases.



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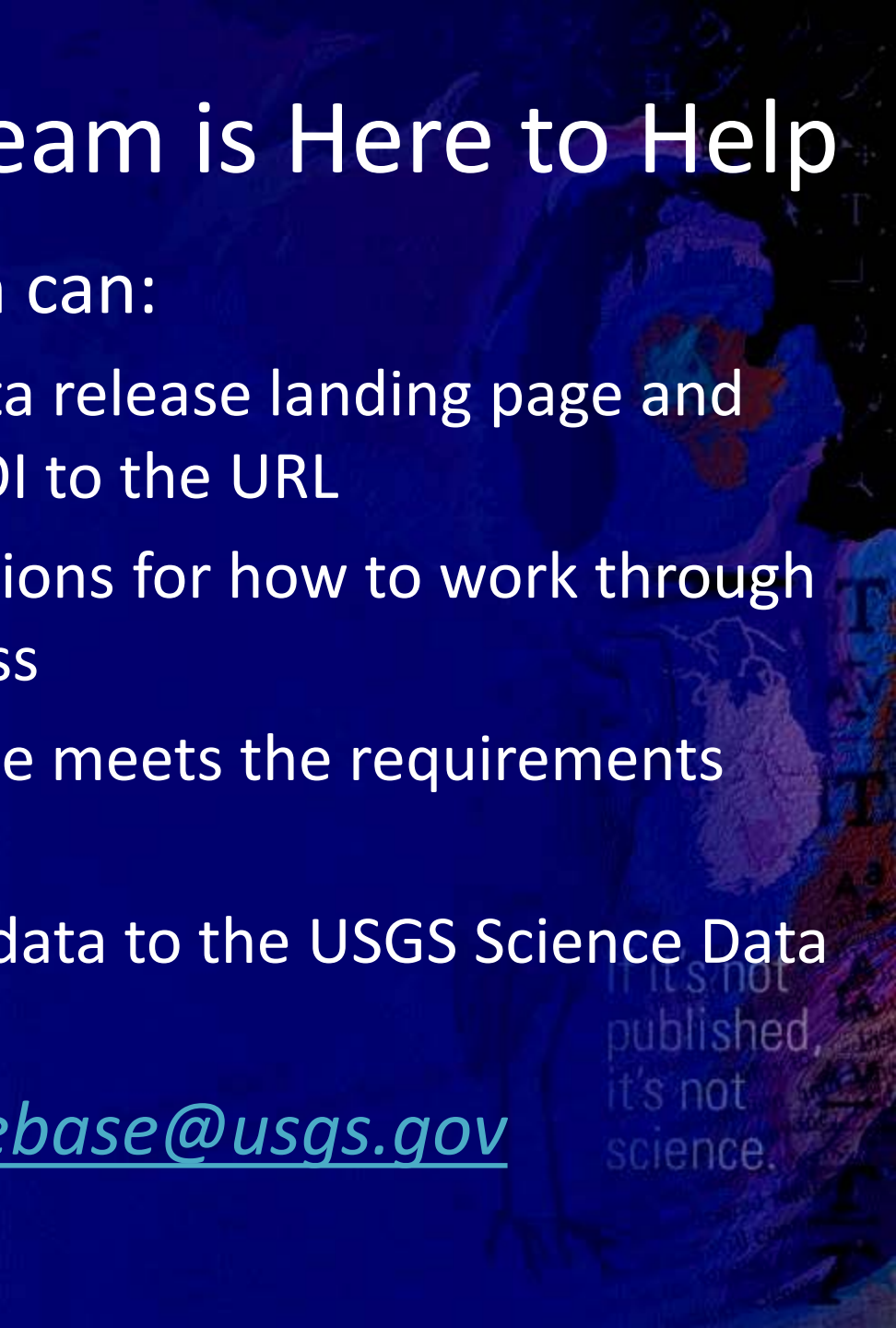
The ScienceBase Team is Here to Help

- The ScienceBase Team can:
  - Assist in creating a data release landing page and obtain a resolvable DOI to the URL
  - Provide recommendations for how to work through the steps in the process
  - Ensure the data release meets the requirements within ScienceBase
  - Arrange to send metadata to the USGS Science Data Catalog, if desired
- *Please contact* sciencebase@usgs.gov



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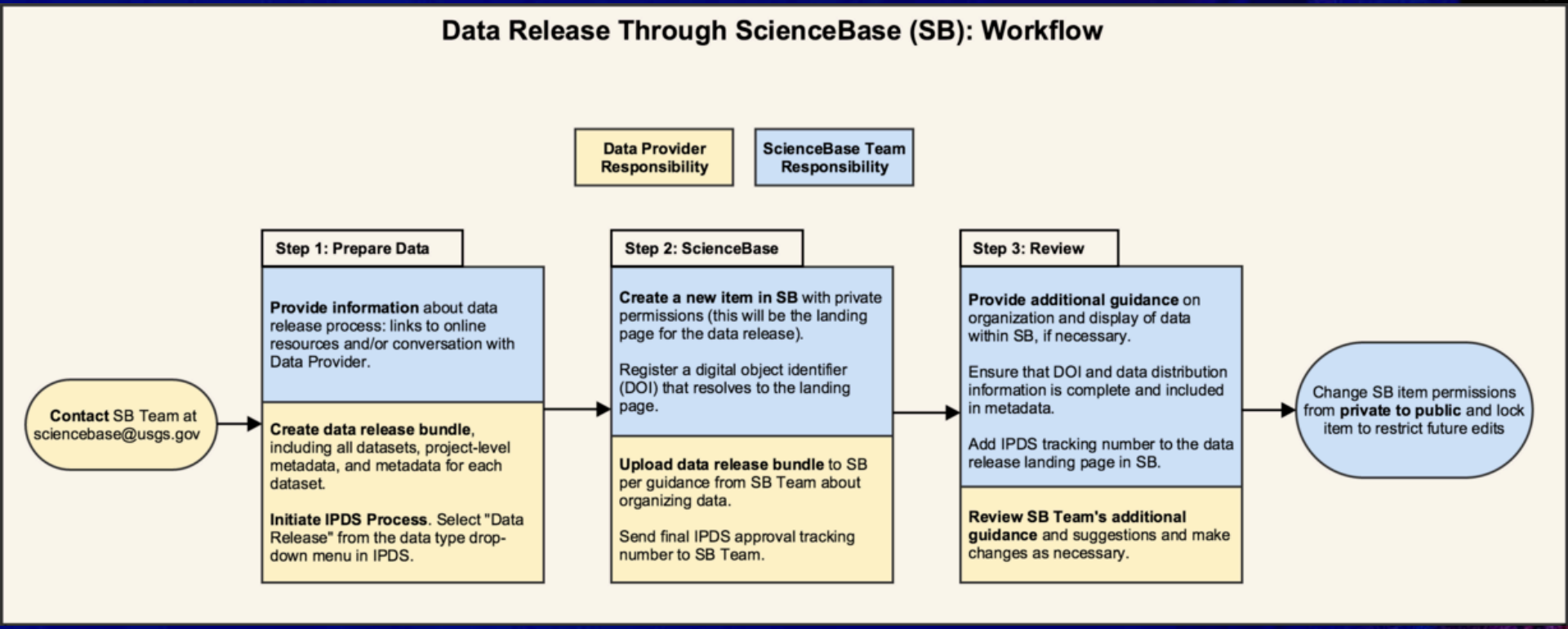
The Workflow



For more information: https://www.sciencebase.gov/about/content/data-release

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Step 1: Prepare Data

- Contact the ScienceBase team at sciencebase@usgs.gov
- Be prepared to provide:
  - Title, Authors (including initials and author order), Abstract
  - IPDS IP number for the data release
  - Type of data, file size, number of datasets
- The team helps create a landing page and issue a DOI.
  - Page will have controlled permission settings and won't be public while the data release is in progress

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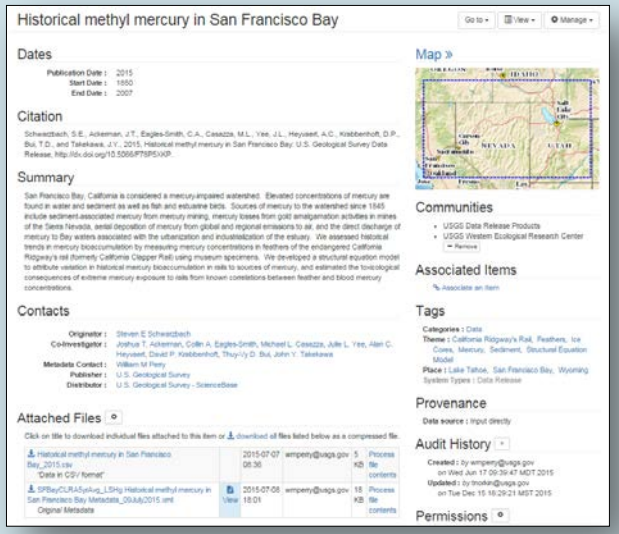
Step 2: ScienceBase

- Determine the best structure for your data

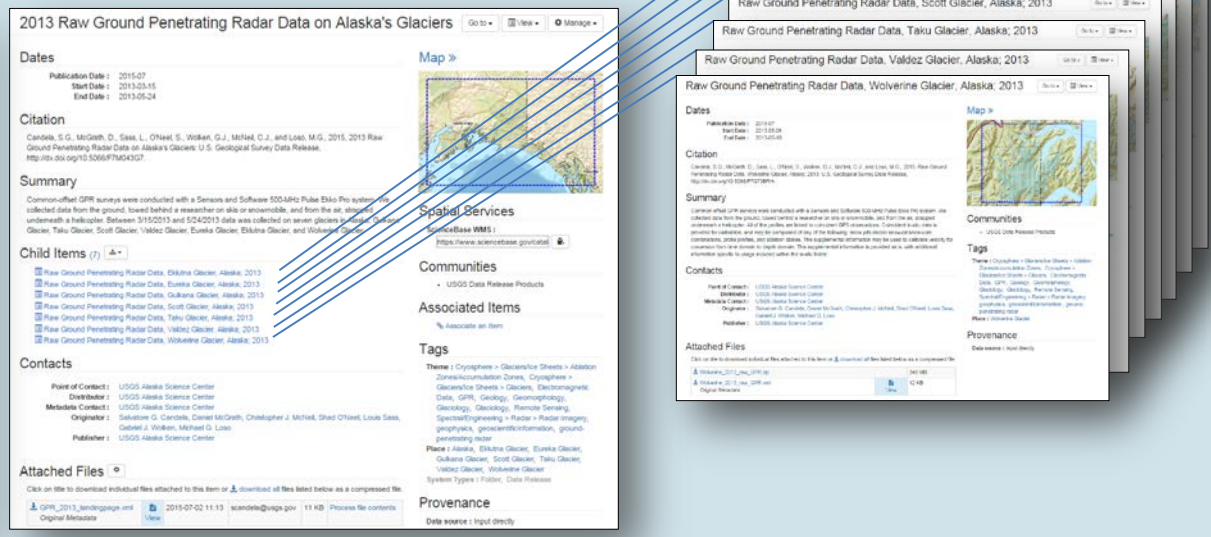
Single Dataset

One ScienceBase Page



Multiple Datasets

One Top Level Page and Multiple Child Items



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Step 2: ScienceBase

- Upload your metadata to ScienceBase to populate the necessary information for your item(s).
- If there are multiple datasets:
  - One metadata record describing the entire data release, to be uploaded to the top-level landing page
  - Metadata records for all individual datasets, to be uploaded to separate child items

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Create a Landing Page for a Single Table, with Metadata

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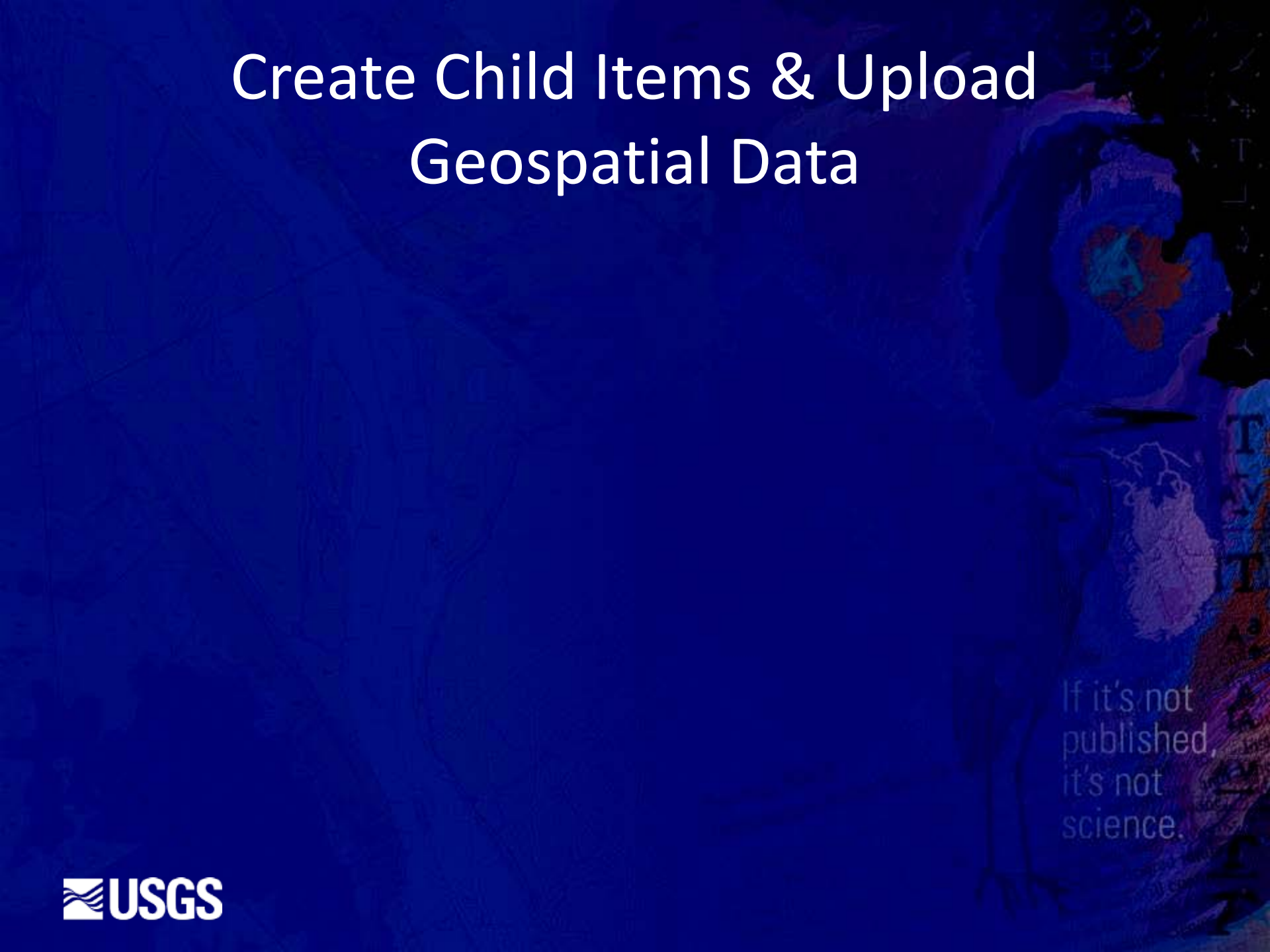
Create Child Items & Upload Geospatial Data



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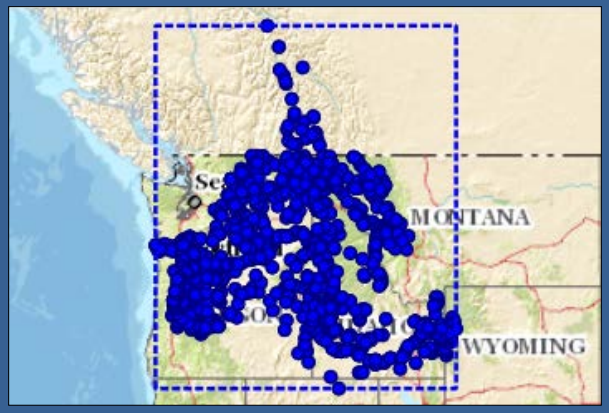
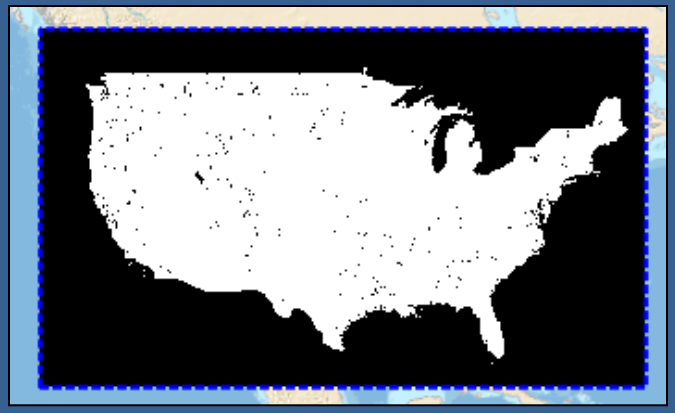
ScienceBase Geospatial Web Services

Shapefile



ScienceBase generates:
Web Map Service (WMS)
Web Feature Service (WFS)

GeoTIFF



ScienceBase generates:
Web Map Service (WMS)
Web Coverage Service (WCS)

https://www.sciencebase.gov/about/content/sciencebase-geospatial-services

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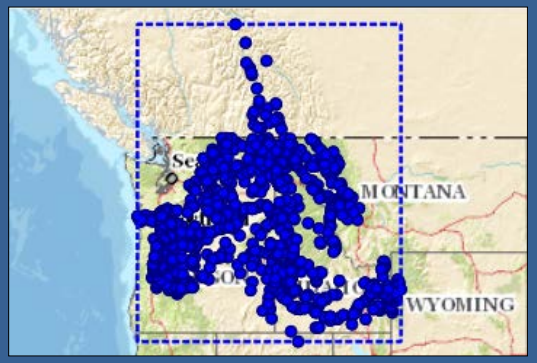
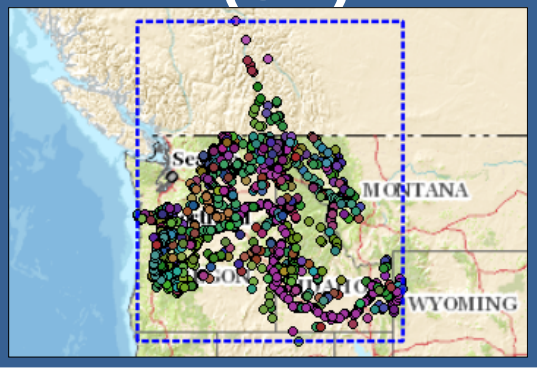
ScienceBase Geospatial Web Services

Shapefile



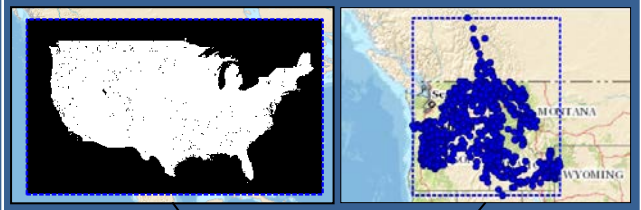
Service Definition (SD)



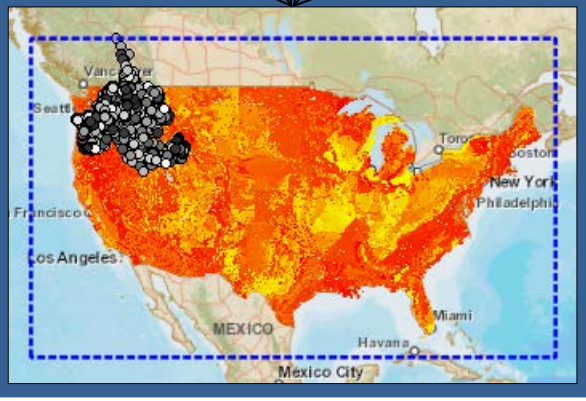
GeoTIFF

SD

Shapefile & GeoTIFF



SD



https://www.sciencebase.gov/about/content/sciencebase-geospatial-services

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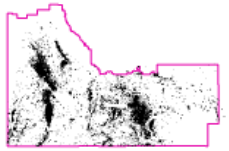
ScienceBase Geospatial Web Services

Digital Representation of Oil and Natural Gas Pad Scars in Southwest Wyoming-2012 Update

Go to ▾ View ▾

Dates

Publication Date : 2015
Time Period : 2012



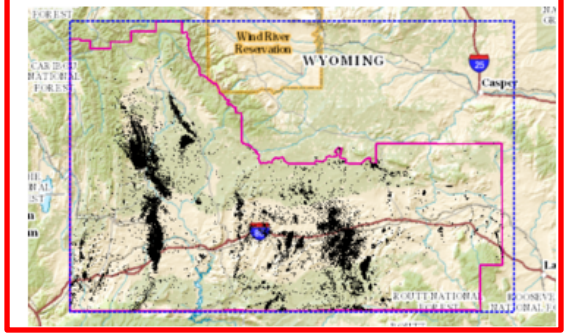
Summary

The recent proliferation of oil and natural gas energy development in the Greater Green River Basin of southwest Wyoming has accentuated the need to understand wildlife responses to this development. The location and extent of surface disturbance that is created by oil and natural gas well pad scars are key pieces of information used to assess the effects of energy infrastructure on wildlife populations and habitat. A digital database of oil and natural gas pad scars had previously been generated from 1-meter (m) National Agriculture Imagery Program imagery (NAIP) acquired in 2009 for a 7.7-million hectare (ha) (19,026,700 acres) region of southwest Wyoming (Garman and McBeth, 2014). Scars included the pad area where wellheads, pumps, and storage facilities reside and the surrounding area that was scraped and denuded of vegetation during the establishment of the pad. Scars containing tanks, compressors, the storage of oil and gas related equipment, and produced-water ponds were also collected on occasion.

This map displays data from U.S. Geological Survey Data Series report 934 (available at http://dx.doi.org/10.3133/ds934). This Data Series report updates the digital database for the five counties of southwest Wyoming (Carbon, Lincoln, Sublette, Sweetwater and Uinta Counties) and for a limited portion of Fremont County within the Wyoming Landscape Conservation Initiative (WLCI) study area using 2012 1-m NAIP imagery and

... *show more* ...

Map »



Spatial Services

ArcGIS REST Service :
https://www.sciencebase.gov/arcg

ArcGIS WMS Service :
https://www.sciencebase.gov/arcg

ArcGIS WFS Service :
https://www.sciencebase.gov/arcg

Contacts

Point of Contact : U.S. Geological Survey
Distributor : U.S. Geological Survey
Metadata Contact : Steven L Garman

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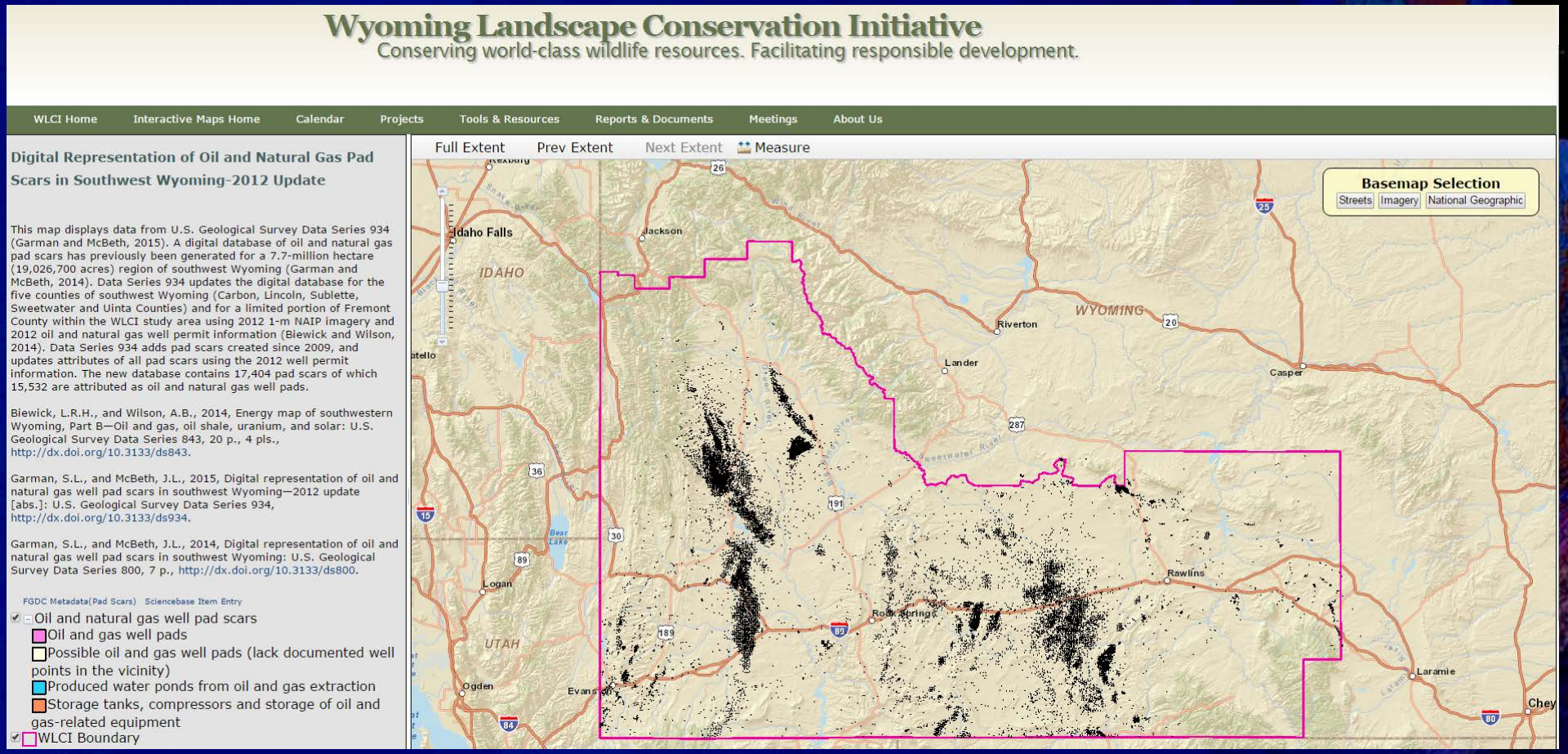
ScienceBase Geospatial Web Services

ArcGIS REST Service Example



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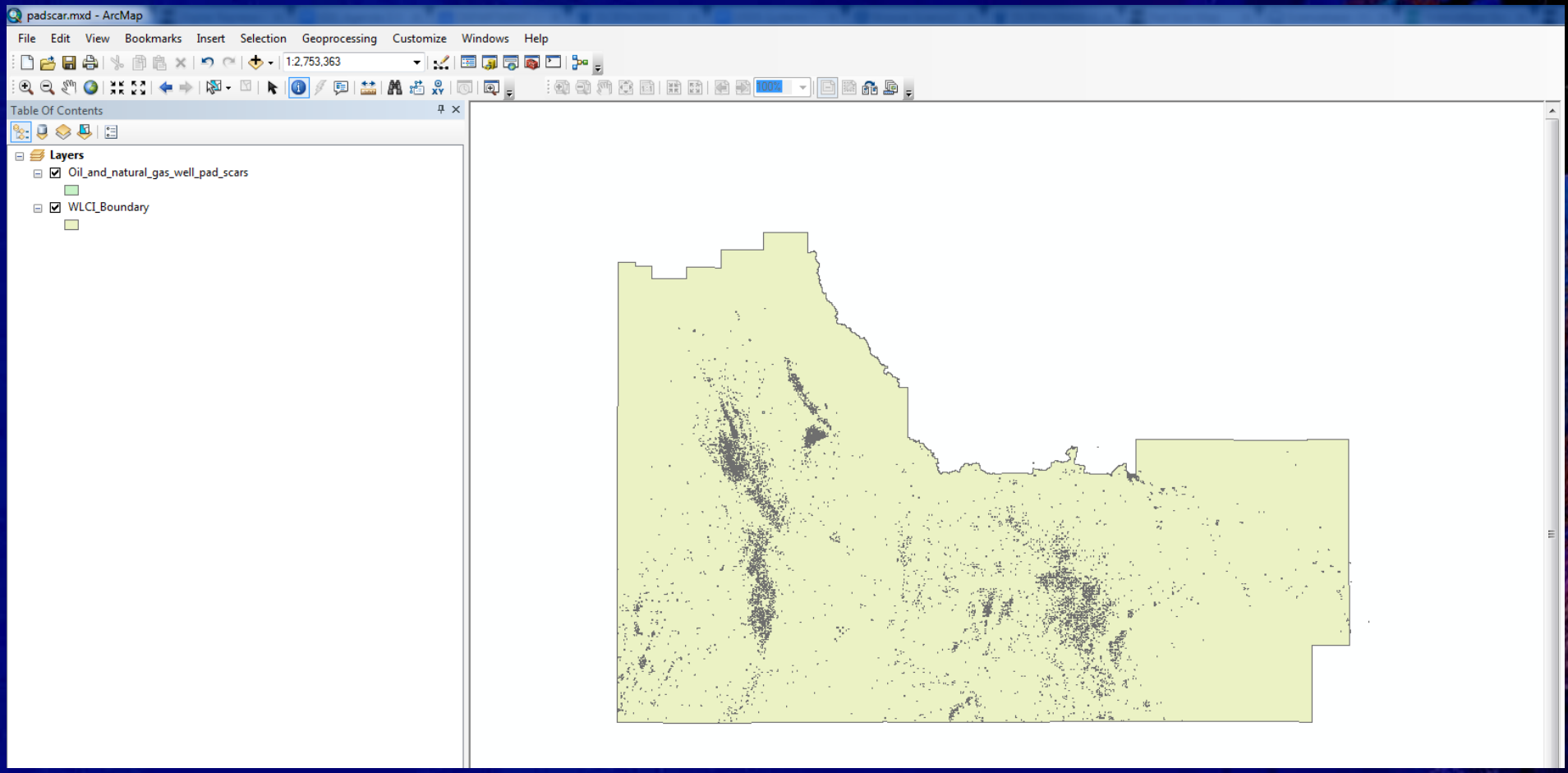
ScienceBase Geospatial Web Services

Web Feature Service Example



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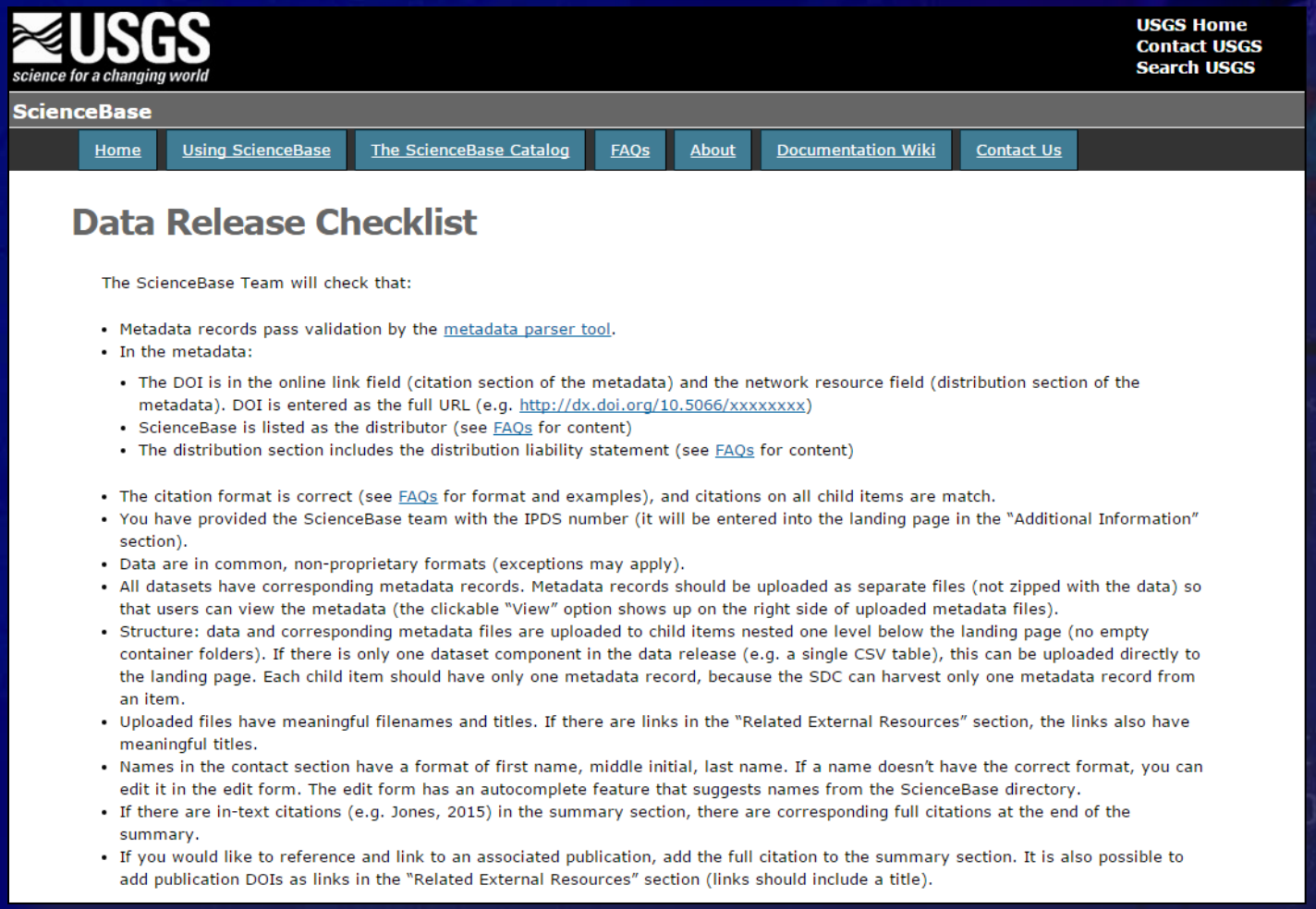
https://www.sciencebase.gov/about/content/connect-web-feature-service-wfs#overlay-context=content/view-sciencebase-items-spatial-data-viewers

Step 3: Review



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Data Release Checklist

The ScienceBase Team will check that:

- Metadata records pass validation by the metadata parser tool.
- In the metadata:
  - The DOI is in the online link field (citation section of the metadata) and the network resource field (distribution section of the metadata). DOI is entered as the full URL (e.g. http://dx.doi.org/10.5066/xxxxxxxx)
  - ScienceBase is listed as the distributor (see FAQs for content)
  - The distribution section includes the distribution liability statement (see FAQs for content)
- The citation format is correct (see FAQs for format and examples), and citations on all child items are match.
- You have provided the ScienceBase team with the IPDS number (it will be entered into the landing page in the "Additional Information" section).
- Data are in common, non-proprietary formats (exceptions may apply).
- All datasets have corresponding metadata records. Metadata records should be uploaded as separate files (not zipped with the data) so that users can view the metadata (the clickable "View" option shows up on the right side of uploaded metadata files).
- Structure: data and corresponding metadata files are uploaded to child items nested one level below the landing page (no empty container folders). If there is only one dataset component in the data release (e.g. a single CSV table), this can be uploaded directly to the landing page. Each child item should have only one metadata record, because the SDC can harvest only one metadata record from an item.
- Uploaded files have meaningful filenames and titles. If there are links in the "Related External Resources" section, the links also have meaningful titles.
- Names in the contact section have a format of first name, middle initial, last name. If a name doesn't have the correct format, you can edit it in the edit form. The edit form has an autocomplete feature that suggests names from the ScienceBase directory.
- If there are in-text citations (e.g. Jones, 2015) in the summary section, there are corresponding full citations at the end of the summary.
- If you would like to reference and link to an associated publication, add the full citation to the summary section. It is also possible to add publication DOIs as links in the "Related External Resources" section (links should include a title).

https://www.sciencebase.gov/about/content/data-release-checklist

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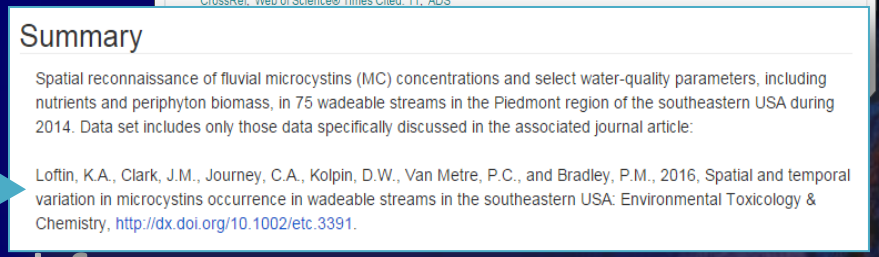
Completing your Data Release

- You can now:
  - Cite your data in your publication
  - Cite your publication in your ScienceBase data release
  - Send your metadata record for inclusion in the USGS Science Data Catalog



http://data.usgs.gov/datacatalog/
sciencedatacatalog@usgs.gov.

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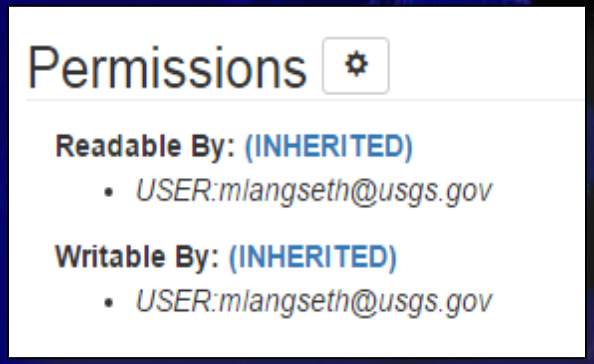
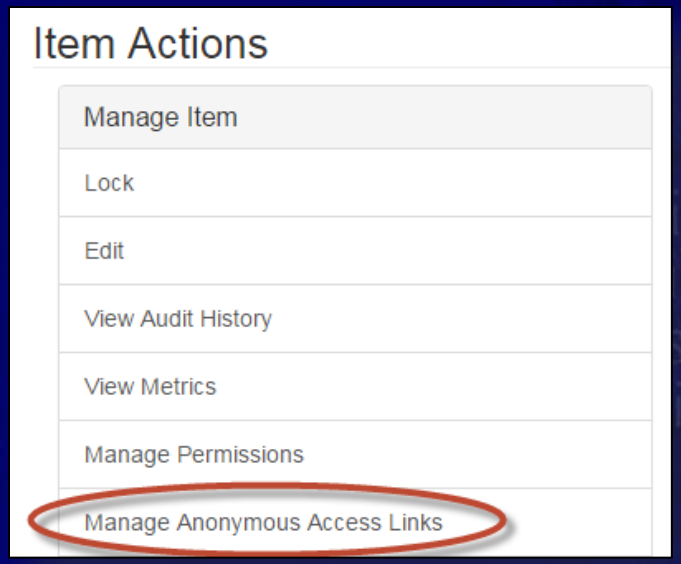
Additional Considerations

- Granting access to private ScienceBase items



- Conducting anonymous, external journal reviews using ScienceBase



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Thank You

Please email the ScienceBase Data Release Team with questions or comments

- sciencebase@usgs.gov

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