

# Creating and Exporting Metadata for Harvest

**WAGIC Presentation**

August 20, 2015

# Overall Process & Goal

## Web Accessible Folder (WAF)

- State agencies
- Office of the Chief Information Officer (OCIO)



## Washington State Geospatial Clearinghouse

- UW
- Harvests XML files from agency WAFs



## National States Geographic Information Council

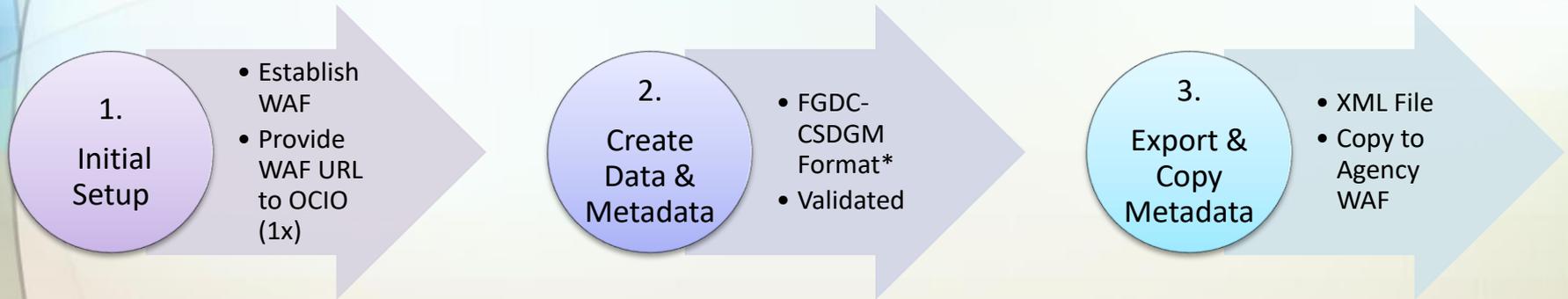
- Consolidation of national metadata
- Provide access to standardized, searchable ISO metadata



## Geospatial One Stop

- Final destination for XML files
- Process minimizes duplication and provides most up-to-date versions available

# Procedure Summary



# Individual Steps

1.  
Create  
Geospatial  
Data

2.  
Create/Edit  
Metadata

- By Geospatial Data Creator
- FGDC-CSDGM Format
- ISO Classification
- Descriptive Title

3.  
Export  
Metadata

XML File

4.  
Validate  
Metadata

- USGS Geospatial Metadata Validation Service

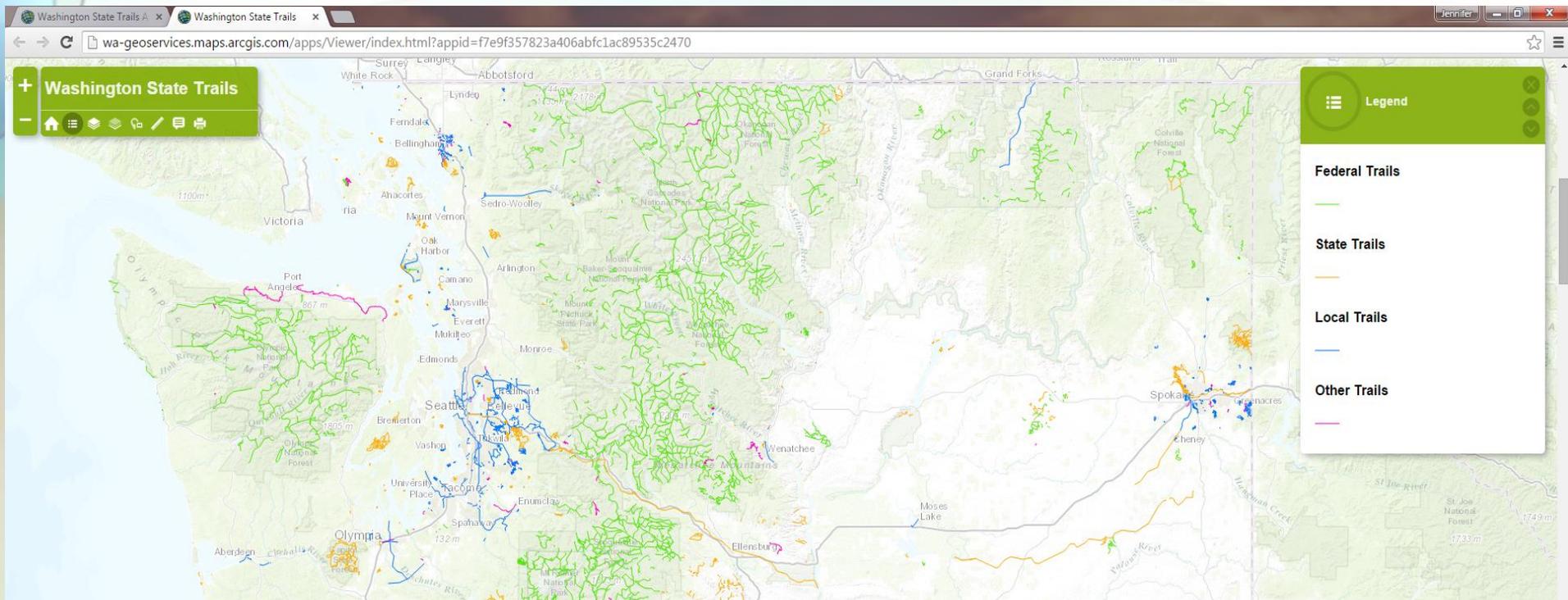
5.  
Correct  
Errors

- Errors? Fix & Repeat Steps 2-4
- Refer to FGDC Error Codes

6.  
Copy Final  
XML File to  
WAF

7.  
Update as  
Necessary

1.  
Create  
Geospatial  
Data



2.  
Create/Edit  
Metadata

- By Geospatial Data Creator
- FGDC-CSDGM Format
- ISO Classification
- Descriptive Title

ArcCatalog Options

General File Types Contents Connections Metadata Tables Raster CAD

Metadata Style

The style determines how metadata is viewed, exported, and validated, and which pages appear when editing metadata.

FGDC CSDGM Metadata

Metadata Updates

An item's intrinsic properties such as its name or number of features can be updated automatically in the metadata.

Automatically update when metadata is viewed.

Metadata Upgrade Notification

The internal storage format for metadata has changed. You can see FGDC-formatted metadata in the display as read-only information, but this content must be upgraded before it is available for editing.

Show metadata upgrade prompt.

[About managing FGDC metadata](#)

OK Cancel Apply

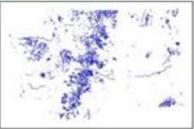
Item Description - Trails\_Master

Description Preview

Print Edit Validate Export Import

### Washington State Trails

File Geodatabase Feature Class



Tags

trails, Washington State, Washington, WA, recreation, transportation, public lands, GIS, geospatial

**Summary**

The 2015 Washington State Trails Database contains line features and use attributes which have been aggregated and standardized from many public sources (federal, state, and local entities). This database spans multiple time periods and has been collected and developed by management authorities using different methods, scales, and technologies.

**Description**

In 2007, Washington State legislators requested a trails database, but funding to complete that statewide project was not made available at the time.

In 2009, the Federal Government outlined the need for trails database schema in their Data Standards Review Committee, stressing the efficiency in management decisions that a streamlined database can provide.

*"The collection, storage and management of trail related data are important components of everyday business activities in many federal and state land-managing agencies, trail organizations and businesses. From a management perspective, trails data must often mesh closely with other types of infrastructure, resource and facility enterprise data."*

In 2014, the Washington State Office of the Chief Information Officer's (OCIO) Geospatial Program Office acquired a Nonhighway and Off-Road Vehicle Activities (NOVA) Program grant through the Washington State Recreation and Conservation Office (RCO) giving the OCIO initial funding to develop a statewide trails database based on Federal Geographic Data Committee standards. Using the same standard for all trails data will allow land managers and recreational users throughout the state to access and use the data regardless of administrative boundary.

*"Data standards will make it easier for trail information to be accessed and exchanged and used by more than one individual agency or group...Ease in sharing data increases the capability for enhanced and consistent mapping, inventory, monitoring, conditions assessment, maintenance, costing, budgeting, information retrieval, and summary reporting for internal and external needs."*

Along with streamlining data and facilitating efficiency in management practices across agencies, the database will provide a source of trails information that is open and free to the public.

Additional details about the project can be found here:

<https://ocio.wa.gov/initiatives/washington-state-trails-database-project>

**Credits**

**Federal:**

United States Departments: Census, Fish and Wildlife Service, Forest Service, National Park Service  
United States Bureau of Land Management  
United States Army Corps of Engineers

**State:**

# Link to Data Within Metadata

Item Description - DSHS\_AdultFamilyHome

Description Preview

Save Exit

Overview

- Item Description
- Topics & Keywords
- Citation
- Citation Contacts
- Contacts Manager

Metadata

- Details
- Contacts
- Maintenance
- Constraints

Resource

- Details
- Extents
- Points of Contact
- Maintenance
- Constraints
- Spatial Data Representation
- Content
- Quality
- Lineage
- Distribution**
- Fields
- References
- Geoprocessing History

### Distribution Information

▼ Distribution Format ✕

+ New Distribution Format

+ New Distributor

▲ Digital Transfer Options ✕

Unit of Distribution

Transfer Size

▲ Online Resource ✕

Linkage

Protocol

Profile

Name

Description

Function

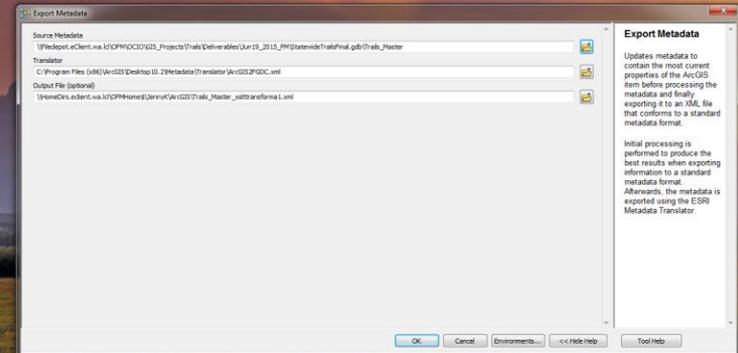
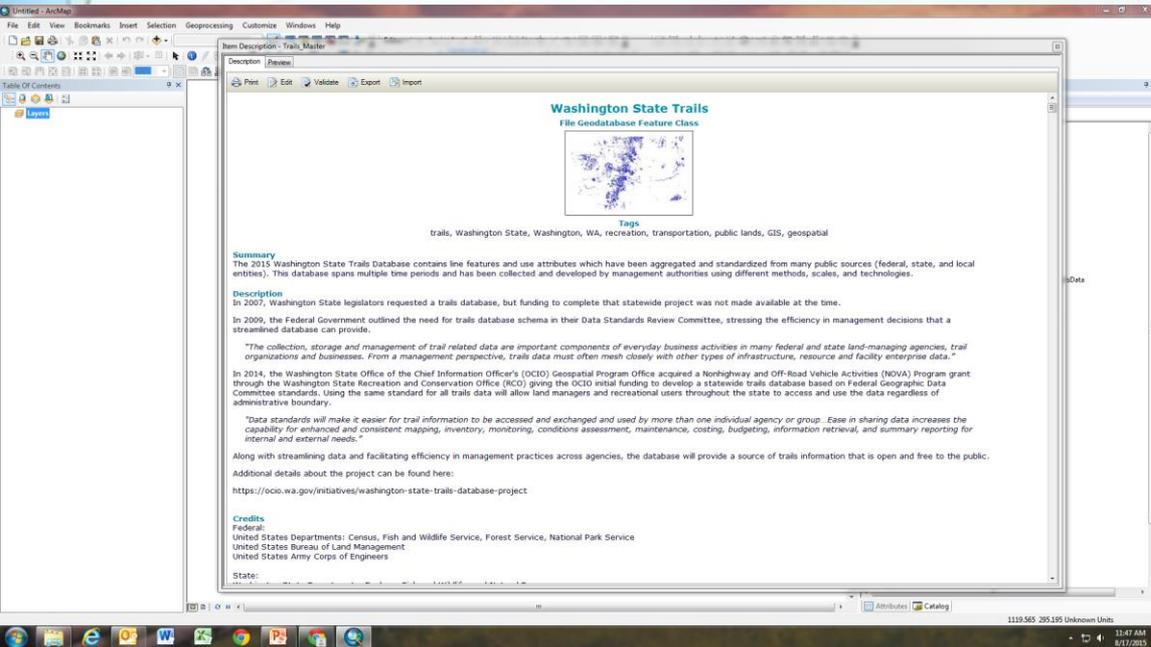
+ New Online Resource

▼ Offline Medium

+ New Digital Transfer Options

3.  
Export  
Metadata

XML File



4.  
Validate  
Metadata

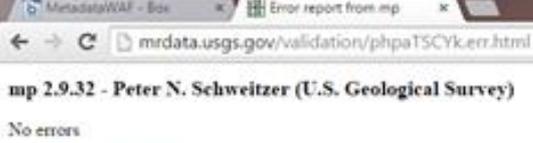
• USGS  
Geospatial  
Metadata  
Validation  
Service

<http://mrddata.usgs.gov/validation/>



- Notes:
- If your input file is XML, its name must be something.xml; don't name it .
  - Your input file really should have an extension indicating its type, such as .xml or .txt.
  - Input file must be smaller than 1024 kilobytes.
  - If you have lots of files to run, all at once, alternative procedures are possible.
  - Wanting metadata? Get tools and help at <http://geology.usgs.gov/tools/>
  - If your input file is XML, the language choice will affect the element and attribute names used.
  - This service will recognize elements from:
    - 1998 FGDC standard
    - Biological data profile
    - Shoreline profile
    - Research mapping profile
    - Linter extensions from USGS TM11-B4
  - but some structural rules of those profiles will not be enforced unless you work with ESRRI's ArcCatalog or ArcGIS?
  - This service should work if you export ArcGIS metadata to an FGDC XML file.
  - You may see warning messages about non-standard extensions to the 1998 FGDC standard.
  - If you input files in unlinked text and you get lots of errors, you could try to use the "View" menu.
  - No errors? That's good. But this metadata record also gets no errors.
  - This service is remarkably popular, so usage charts below show.
  - I want to have about any problems you encounter so that I can fix them. P

Output	Description
Error report	Listing of errors and warnings, prioritized.
Error listing	Raw text listing errors and warnings, for debugging.
Questions and Answers	Metadata re-expressed as a set of frequently asked questions and answers.
Outline	The metadata expressed in HTML using the USGS metadata profile.
Text	Indented text form of the metadata.
SGML	Standard Generalized Markup Language form of the metadata.
XML	Extensible Markup Language. Note the "View" menu.
ZIP	A Zip package containing all of these files.



Type	Description or line numbers	Line(s) (or count)
Severity 0: Informative warnings and upgrade notes		
Other	Info: input file = phpaTSCYk.xml	0
Other	Info: process date = 20150814	0
Other	Info: process time = 13:47:35	0
Warning	Missing <a href="#">Data_Quality_Information</a> (2) is mandatory if applicable in <a href="#">Metadata</a> (0)	0
Warning	Missing <a href="#">Distribution_Information</a> (6) is mandatory if applicable in <a href="#">Metadata</a> (0)	0

These results will remain available for the rest of the day.

Accessibility | FOIA | Privacy | Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey  
Page Contact Information: Peter Schweitzer  
Page Last Modified: Friday, 14-Aug-2015 13:47:36 MDT



Generated by [err2.html](#) 2.1.13 Fri Aug 14 13:47:35 2015

5.  
Correct  
Errors

- Errors? Fix & Repeat Steps 2-4
- Refer to FGDC Error Codes

ArcGIS Resources

ArcGIS Online Sign In English + esri

Home Communities Help Blog Forums Videos Search ArcGIS Help

## ArcGIS Help 10.2, 10.2.1, and 10.2.2

Resource Center

This is an archive. Documentation and other information about the most recent releases of ArcGIS for Desktop and ArcGIS for Server are now hosted on <http://desktop.arcgis.com/en/> and <http://server.arcgis.com/en/> respectively.

- Choosing a metadata style
- The ArcGIS metadata format
- Editing metadata
  - A quick tour of creating and editing metadata
  - Upgrading existing FGDC metadata from the Description tab
  - Editing metadata
  - About creating thumbnails
  - Creating thumbnails
  - Creating standard-compliant metadata
  - About validating metadata
  - Validating metadata
  - Metadata workflows
    - Creating and managing FGDC metadata
    - Illustrated guide to complete FGDC metadata
    - Differences between ArcGIS metadata and FGDC metadata
    - Creating a metadata template
    - Editing metadata for many ArcGIS items
    - Support for ISO metadata standards in ArcGIS for Desktop
  - Importing and exporting metadata
  - Printing metadata
  - Automatic metadata updates
  - Publishing metadata
  - Enclosing files in metadata
- NetCDF
- Network datasets
- Parcel fabrics
- Rasters and images
- Relationships and related objects
- Shapefiles
- Subtypes
- Tables
- Terrains
- TIN
- Topologies
- Catalog
- Services

1.12	(Security information) +
1.13	(Native Data Set Environment) +
1.14	(1)(Cross Reference)n

Both the Use Constraints and Data Set Credit elements can be edited on more than one page. Use Constraints can be edited on both the Overview - Item Description page and the Resource - Constraints page. Credits can be edited on both the Overview - Item Description page and the Resource - Details page.

**Overview - Item Description**

Credits: National Park Service, Yellowstone National Park (1.11 Data Set Credit)

Use Limitation: + New Use Limitation (1.8 Use Constraints)

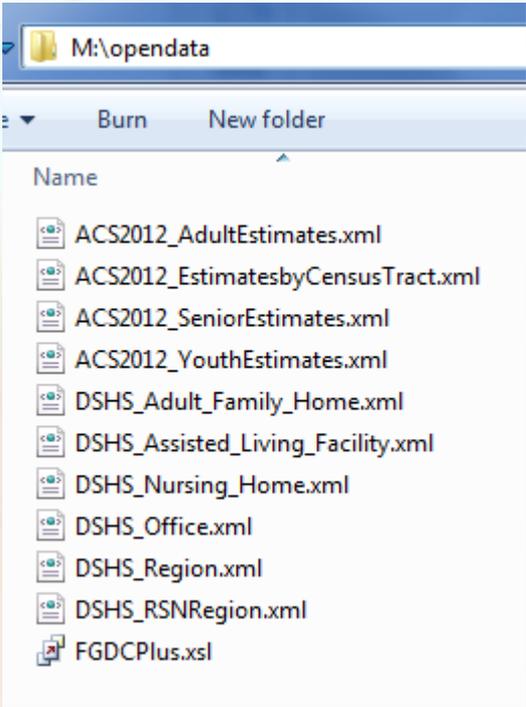
**Resource - Constraints**

Resource Constraints

+ New General Constraints (1.8 Use Constraints)

+ New Legal Constraints (1.7 Access Constraints)

6.  
Copy Final  
XML File to  
WAF



# Time to Harvest!

main/home.page

## Washington State Geospatial Clearinghouse

[Login](#) [Help](#) [About](#) [Feedback](#)

[HOME](#) [SEARCH](#) [BROWSE](#) [WHAT IS METADATA?](#) [CONTRIBUTORS](#) [LAUNCH MAP VIEWER](#)

### Welcome to the Washington State Geospatial Clearinghouse!

This Geospatial Clearinghouse provides a single point of access to geospatial information across Washington. The portal acts as a gateway to an extensive metadata catalog -- this is a master inventory where users can find standard information about available geospatial data sets. Feel free to explore the site and learn more about metadata, our contributing partners, search for geospatial information, or contribute your own metadata!

#### Background

The Washington State Geospatial Clearinghouse (WSGC) was established in 1998 as a result of a partnership between the Washington Geographic Information Council (WAGIC), the Washington Department of Information Services (DIS) and the University of Washington (UW) Libraries. An agreement was developed between DIS and UW to permanently host the clearinghouse platform at the UW Libraries.

The goal of the WSGC is to make access to spatial information technologies more efficient by helping to eliminate the duplication of spatial data and services through effective cooperation, standardization, communication, and coordination.

The Washington State Geospatial Clearinghouse is a node on the NSDI national network of spatial information servers. Through this resource you will be able to discover what spatial information is available for Washington State or for other geographic entities.

Please explore our Clearinghouse site and discover the data and services we offer.

#### Find Data

Enter Keywords

#### Contribute Metadata

Do you have metadata to contribute? [Contact us](#) to establish a publisher's account and begin adding your metadata today.

The minimum data elements needed for adequate information concerning geospatial data can be found at <https://ocio.wa.gov/policies/16000-spatial-data-management-policy-standards/16102-spatial-metadata-standard>

Metadata you contribute will also be automatically harvested by GOS (Geospatial One Stop) and will appear in the geodata.gov database.

Already have a publisher's account? [Login](#) to add/maintain your metadata.

This Geoportal was built using the Geoportal Server. Please read the [Disclaimer](#) and [Privacy](#) or [Contact Us](#).



washington state  
geography.wa.gov  
Geospatial Program  
Office  
Office of the CIO

# For More Information

The screenshot shows the Washington State Geography Portal website. The header features the logo "washington state geography.wa.gov geospatial portal" and a search bar with the text "a single source of quality government geospatial data resources". Below the header is a navigation menu with "Data & Maps", "Governance & Standards", and "Resources". The main content area has tabs for "Overview", "Data & Maps", "Services", and "Metadata". The "Metadata" tab is selected, showing a section titled "Find geospatial metadata" with a bulleted list of links: "Geospatial Clearinghouse", "Data Catalog", and "National Agriculture Imagery Program (NAIP) imagery metadata: 2006 | 2009 | 2011 | 2012". Below this is a "Metadata resources" section with links for "State metadata standards for Data | Application and data services", "ISO 19115 metadata topic categories", and "Esri metadata resources". The footer contains the text "Home | OCIO-GIT | WAGIC | data.wa.gov | Contact us".