



EPA Metadata Editor v5.0

Presented by:

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Welcome

- Introducing the new metadata editor – EME 5.0!
- Purpose of the EME 5.0 is to make metadata editing easier and improve the quality of metadata records – as you create new metadata and edit old metadata use EME 5.0
 - No deadline for using the new tool
- Feedback welcome!

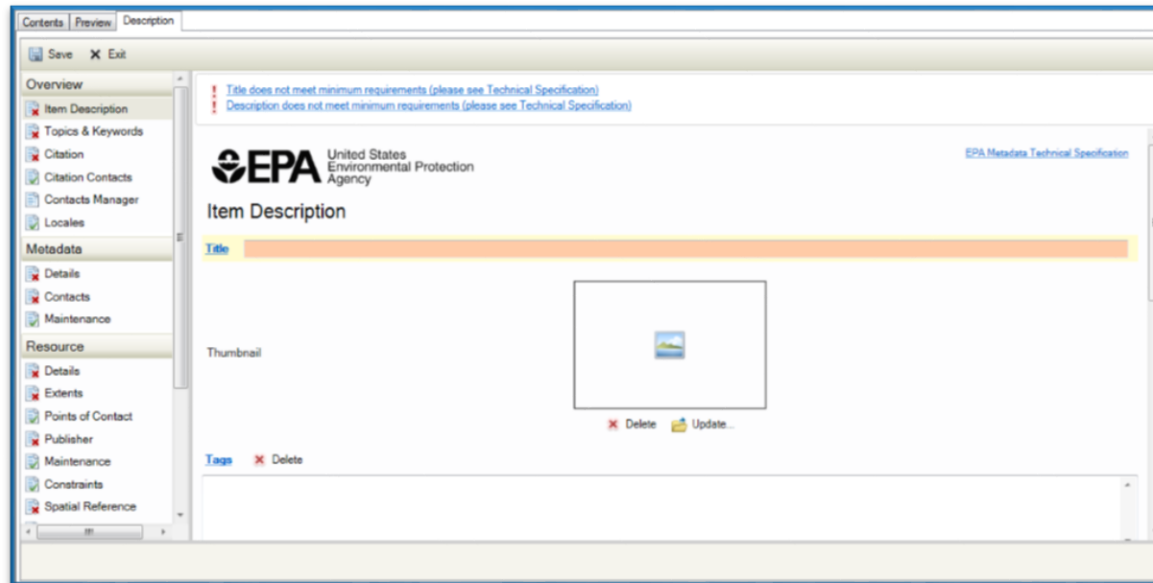


Introduction to EME 5.0

- EME 5.0 – What's new?
- Getting Started with EME 5.0
- Validation Tips
- ArcGIS Metadata, EDG & Data.gov
- EME 5.0 - Demo
- EME 5.0 - Important URLs

EME v5.0 New Features:

- It is integrated with Esri ArcGIS 10.4 and ArcCatalog metadata Editing Tools
- Fully implements the ISO metadata standard
- Metadata Field entries meet all Data.gov compliance requirements
- EPA specific dropdowns provided for many fields
- Mandatory fields highlighted





EME v5.0: What's New?

Benefits of using EME 5.0:

1. Integration of metadata with geospatial datasets
 - Bounding box coordinates
 - Spatial reference
 - Spatial data representation
 - Attributes
 - Geoprocessing history
2. Real-time validation
3. Consolidation of records (only one metadata record required for all distribution methods):
 - Web service
 - Data download
4. Best practices guidance included in tool



EME v5.0: Getting Started

Download EME 5.0:

1. [Visit New EME Website!](#)
2. [Download Installation package](#)

The screenshot shows the EPA website's "Geospatial Resources at EPA" page. The page features a navigation bar with "Environmental Topics", "Laws & Regulations", and "About EPA", along with a search bar. The main content area is titled "EPA Metadata Editor" and includes a description of the tool, a list of versions (v5.0, v4.0, v3.2.1) with their release dates, and a list of features for each version. The left sidebar contains links to various geospatial resources.

Geospatial Resources at EPA

Share Contact Us

EPA Metadata Editor

The EPA Metadata Editor (EME) is a simple geospatial metadata editor that allows users to create and edit records that meet [EPA metadata requirements](#).

EPA developed several major versions of the EME over the years. All installation files and source code for all versions of the EME can be found on the official [U.S. EPA GitHub site](#).

EPA Metadata Editor v5.0
Released March 2017

- Geospatial metadata editor
- Includes full support for ISO 19115 and ArcGIS Metadata
- [EPA Metadata Editor 5.0 Wiki](#)

EPA Metadata Editor v4.0
Released October 2014

- Non-geospatial metadata editor
- Provides core elements from ISO 19115 and supports OMB's Project Open Data Metadata Schema
- [EPA Metadata Editor 4.0 Wiki](#)

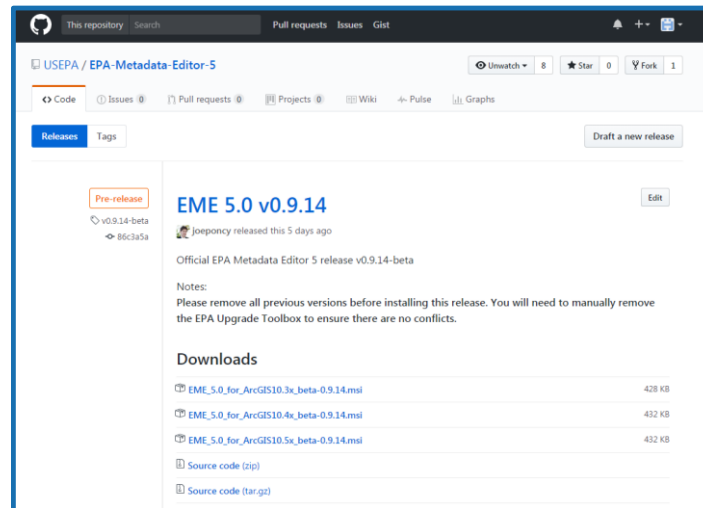
EPA Metadata Editor v3.2.1
Released October 2008

Geospatial Resources at EPA

- Geospatial Resources Home
- About EPA's Geospatial Program
- EPA Geospatial Data
- EPA Geospatial Applications
- Grants and Agreements with Geospatial Components
- Geospatial Policies and Standards
- Federal Geospatial Resources

Installing EME 5.0:

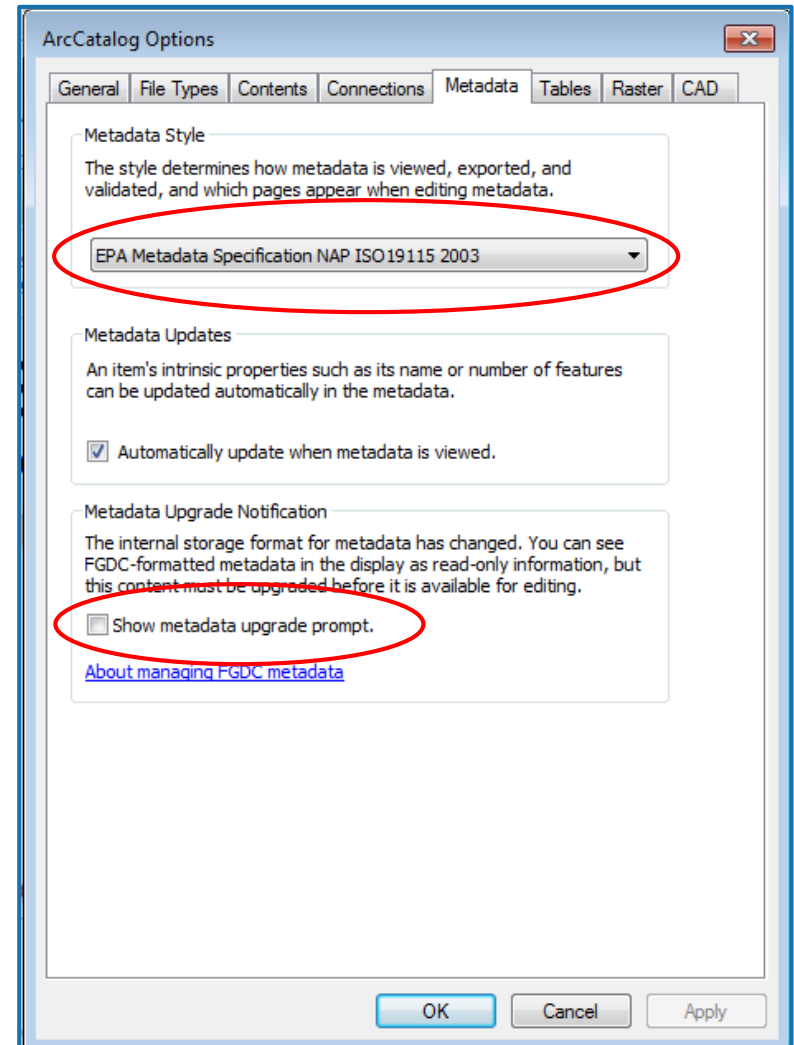
1. Uninstall old versions of EME 5.0
2. Run the installation file
3. It is not necessary to uninstall versions of EME prior to 5.0



Note: You may receive a security notice when installing EME 5.0, this can be ignored. The install package was scanned and no risks were identified.

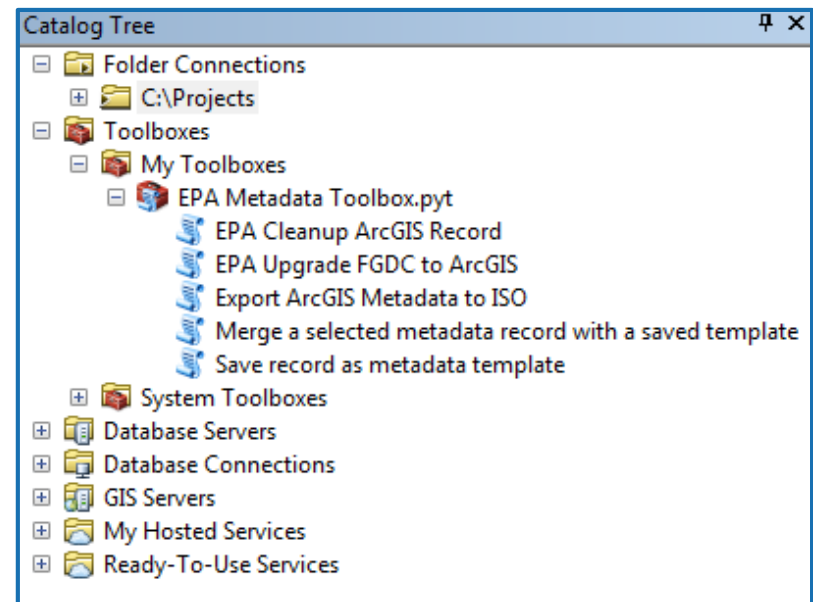
Enable New EME Tools:

1. Open ArcCatalog → Customize menu → ArcCatalog Options → Metadata
2. Select EPA Metadata Specification NAP ISO 19115 2003 as your Metadata Style
3. Uncheck box “Show metadata upgrade prompt”



EPA Metadata Toolbox:

- Appears in “My Toolboxes” folder in the Catalog Tree
- Contains 5 Tools:
 - EPA Cleanup ArcGIS Record
 - EPA Upgrade FGDC to ArcGIS
 - Export ArcGIS Metadata to ISO
 - Merge a selected metadata record with a saved template
 - Save record as metadata template

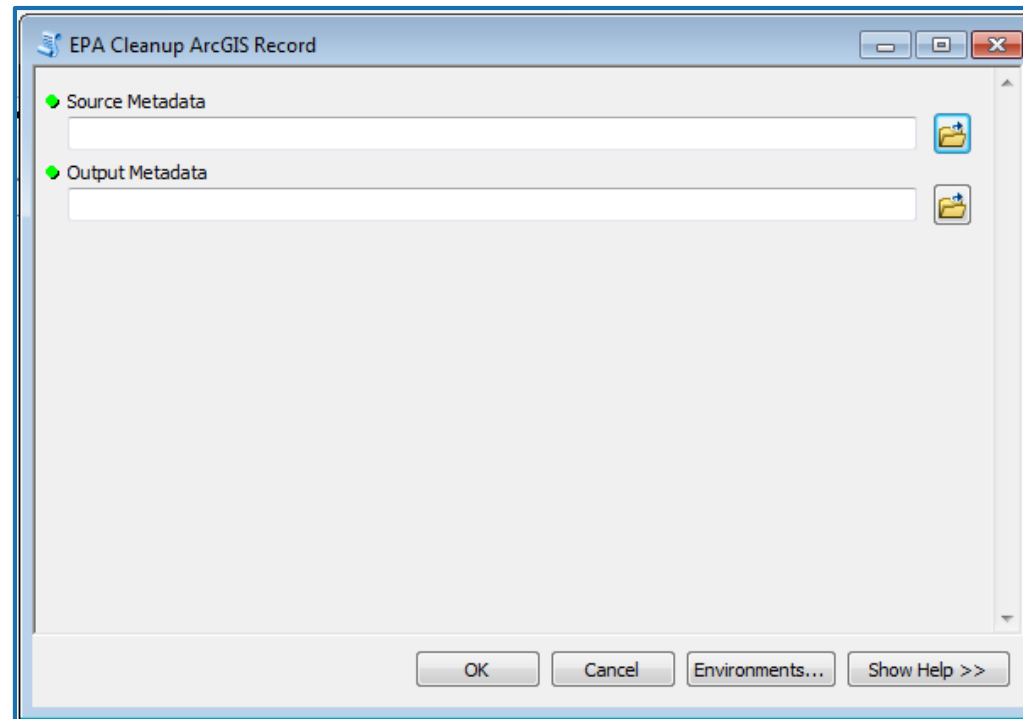




EME v5.0: Getting Started

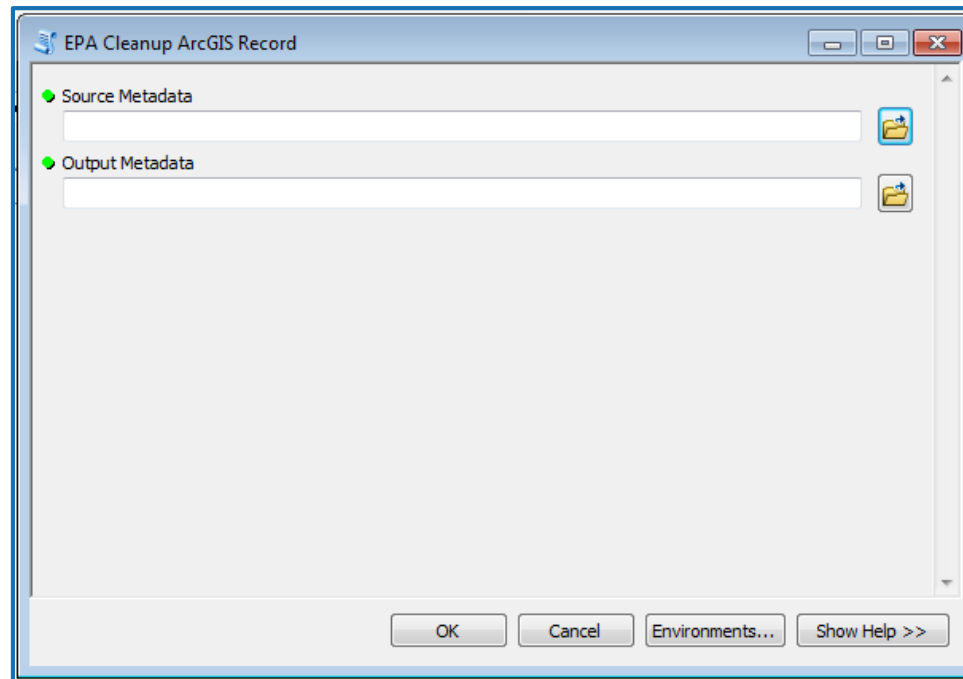
EPA Metadata Toolbox: *EPA Cleanup ArcGIS Record*

- For use when a metadata record has already been upgraded from FGDC CSDGM to ArcGIS format using the default Esri Upgrade Metadata tool.



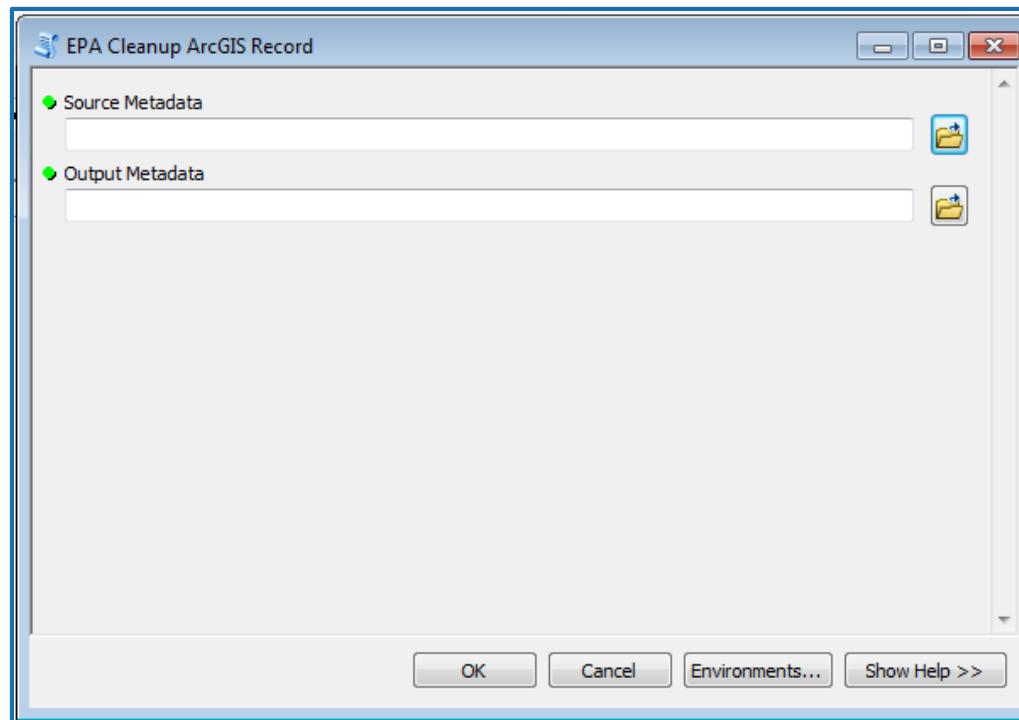
EPA Metadata Toolbox: *EPA Upgrade FGDC to ArcGIS*

- Used to upgrade all legacy FGDC CSDGM records to ArcGIS format.
- Aligns records with the EPA Metadata Technical Specification
- Ensures embedded UUIDs are recognized
- Removes legacy elements



EPA Metadata Toolbox: *Export ArcGIS Metadata to ISO*

- Streamlines exporting ArcGIS metadata to compliant ISO 19115
- Equivalent to using the Export Metadata tool with ArcGIS2ISO19139 as the translator

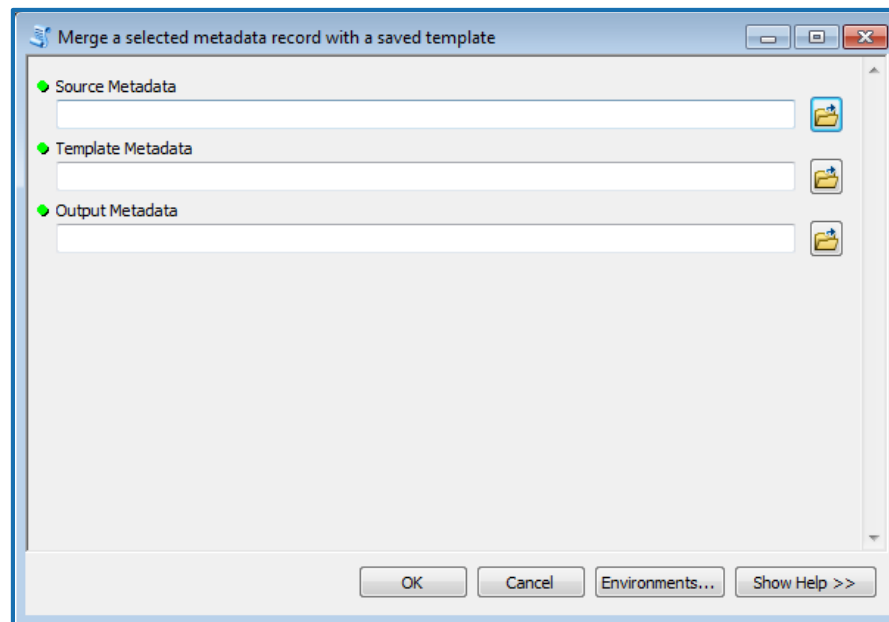


EPA Metadata Toolbox:

Merge a selected metadata record with a saved template

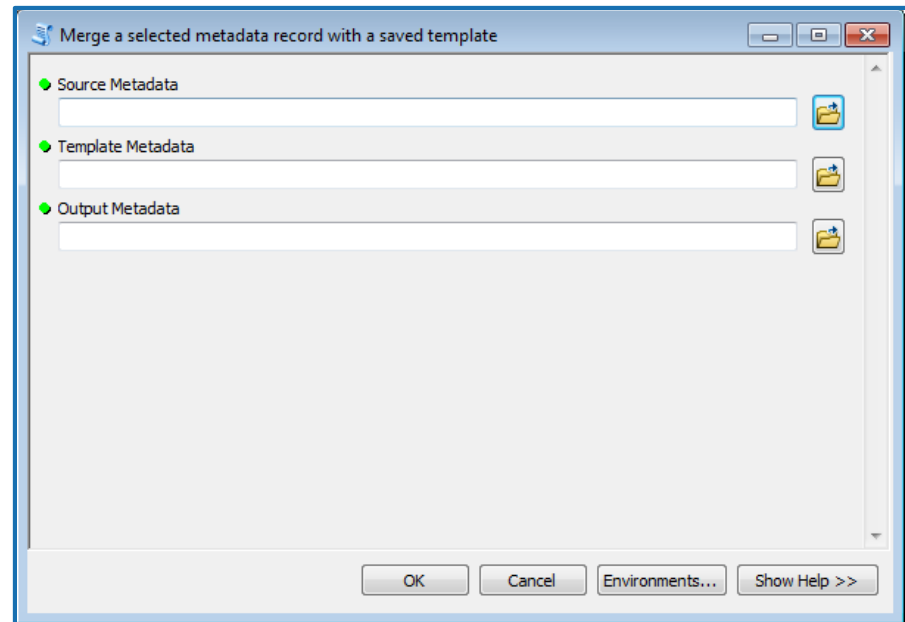
- Merges a selected metadata record with elements from a saved template
- Elements from the template record will overwrite their equivalents in the selected record
- Replaces only those elements that are common across many records

*Note: caution is urged
when using this tool*



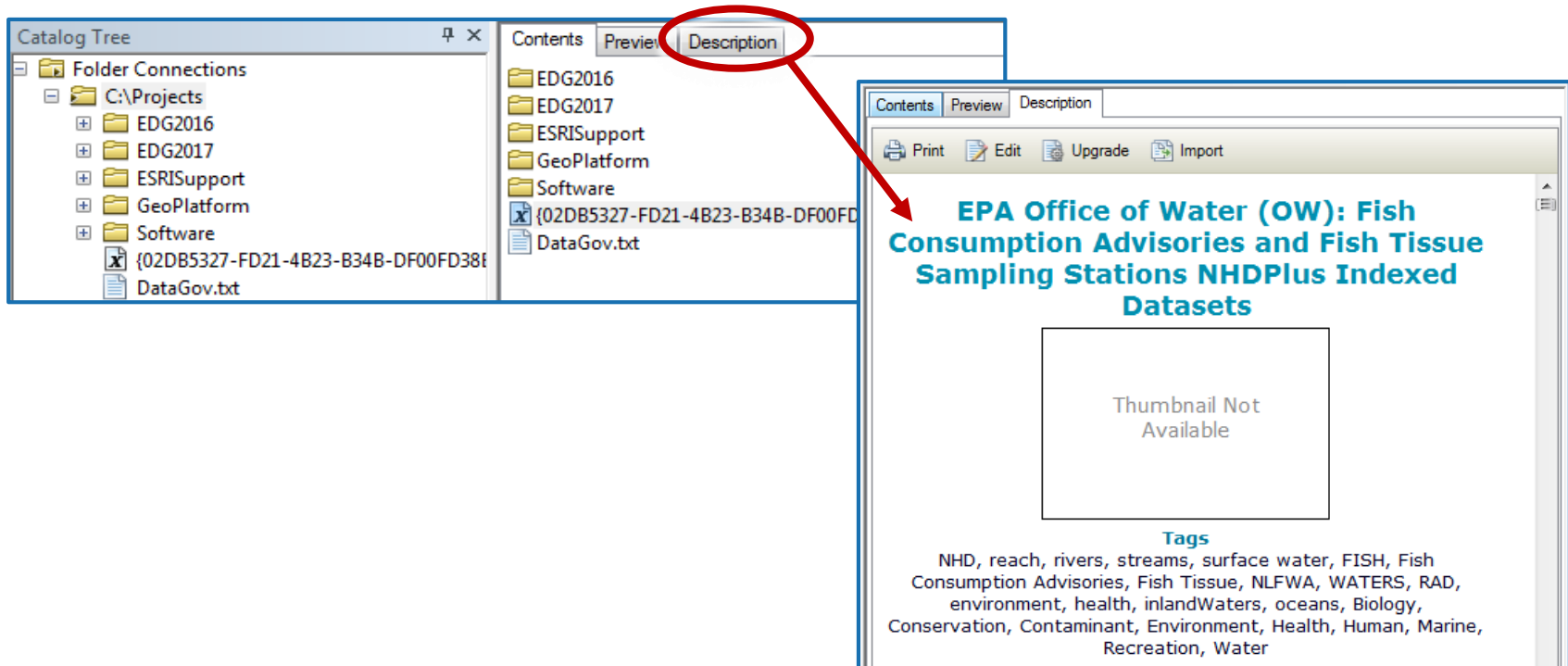
EPA Metadata Toolbox: *Save record as metadata template*

- Saves a metadata record as a reusable template
- Excludes elements that are unique in every record
 - Examples:
 - Title
 - Abstract
 - UUID
- Keeps common elements
 - Examples:
 - Metadata Contact
 - Publisher
 - Distribution Contact



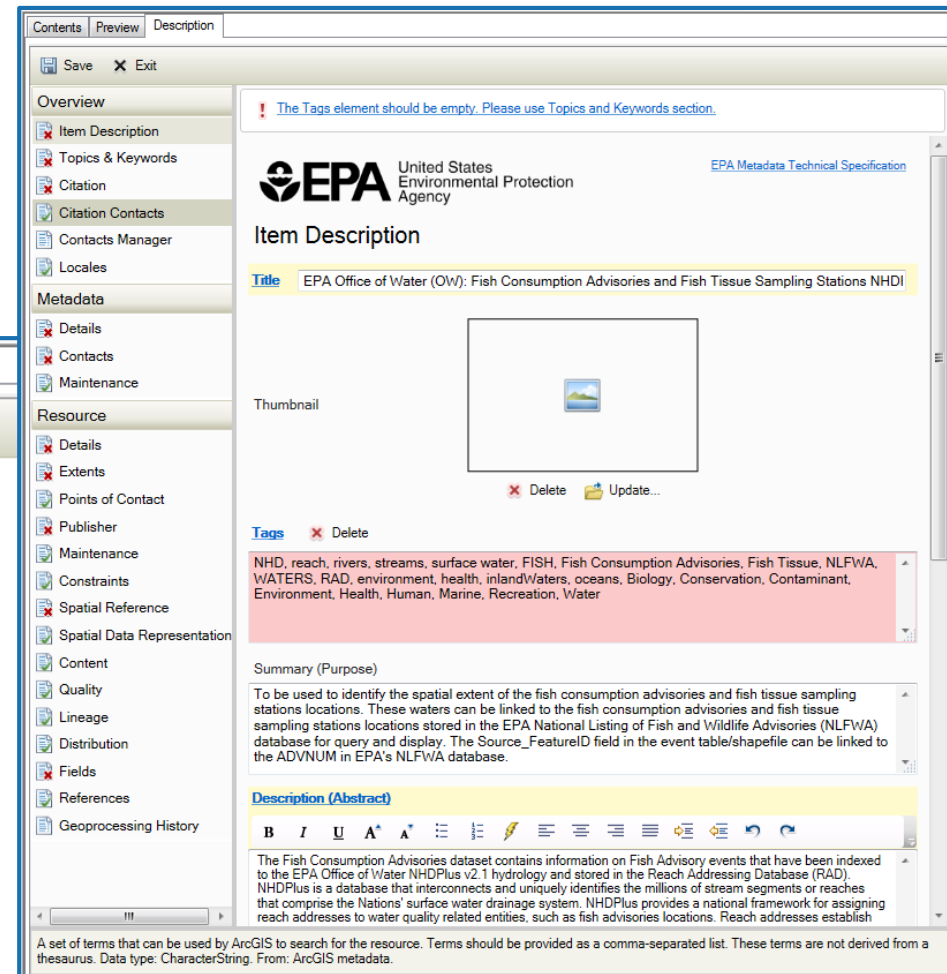
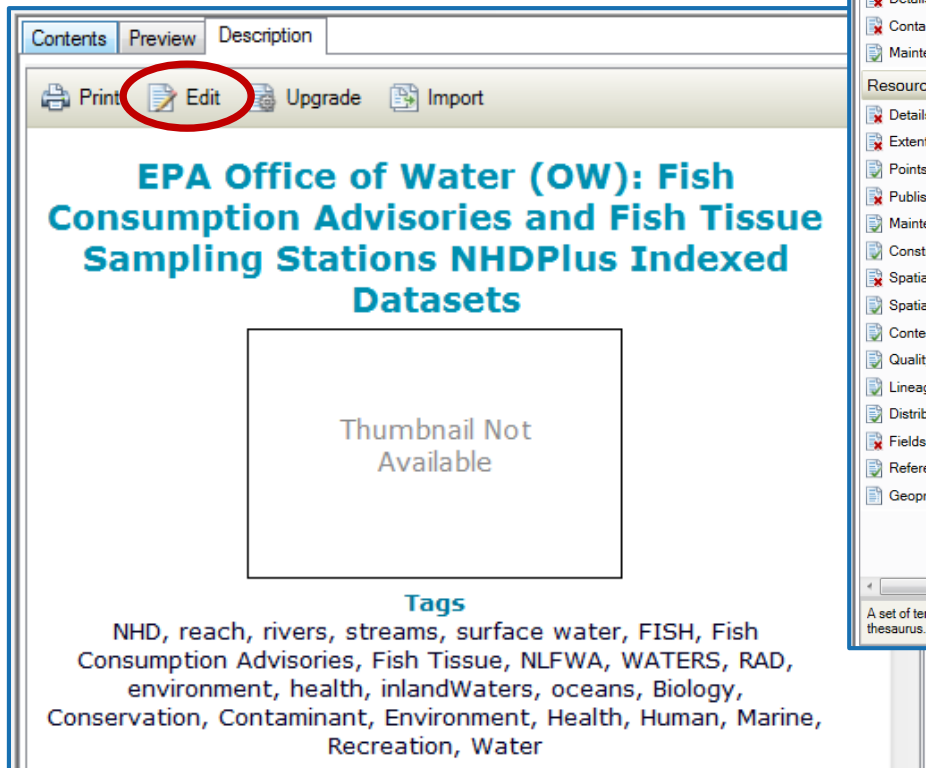
EME 5.0 Interface :

- To Edit Metadata using EME 5.0
 1. Navigate to an XML file or a GeoSpatial Dataset and click the **Description Tab**
 - Allows viewing of metadata records in ArcGIS metadata format



EME 5.0 Interface :

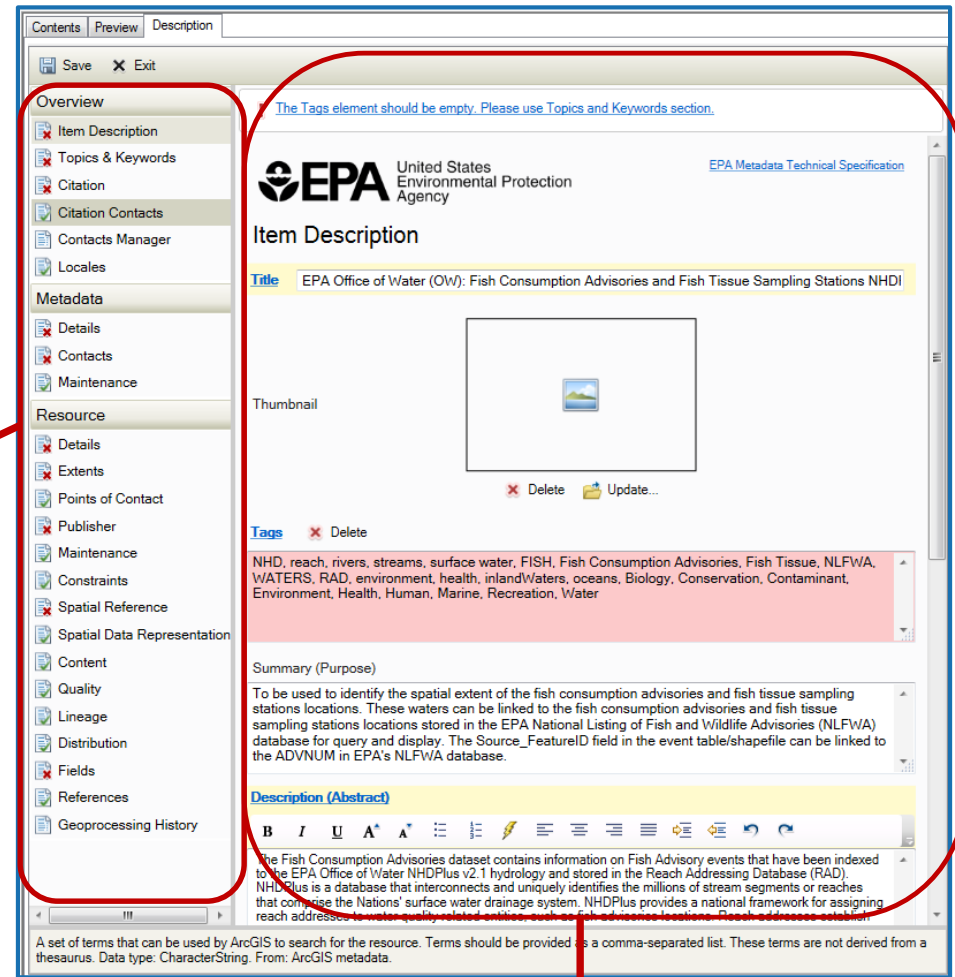
- To Edit Metadata using EME 5.0
 - Click the *Edit* button
 - Opens EME 5.0



EME 5.0 Interface :

- Organized within ArcCatalog in a Table of Contents
- Clicking on a page in the table of contents displays a set of metadata fields in the *Editing pane*

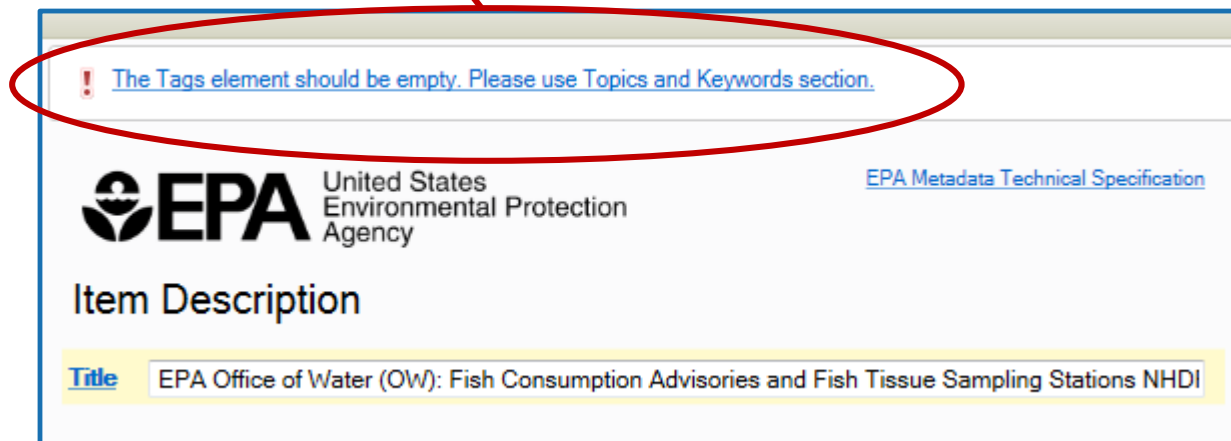
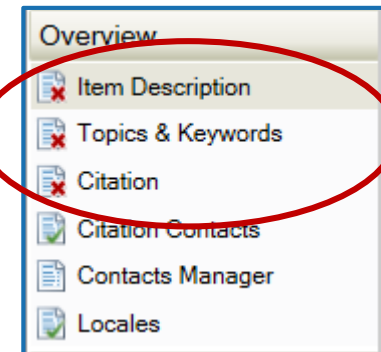
Table of Contents containing pages to be edited



Editing Pane

EME 5.0 Interface :

- Pages in the Table of Contents, symbolized with a Red X illustrate an error in the corresponding metadata fields
- Help text is found at the top of the *Editing pane* indicating the fields in the selected page that do not meet minimum metadata requirements

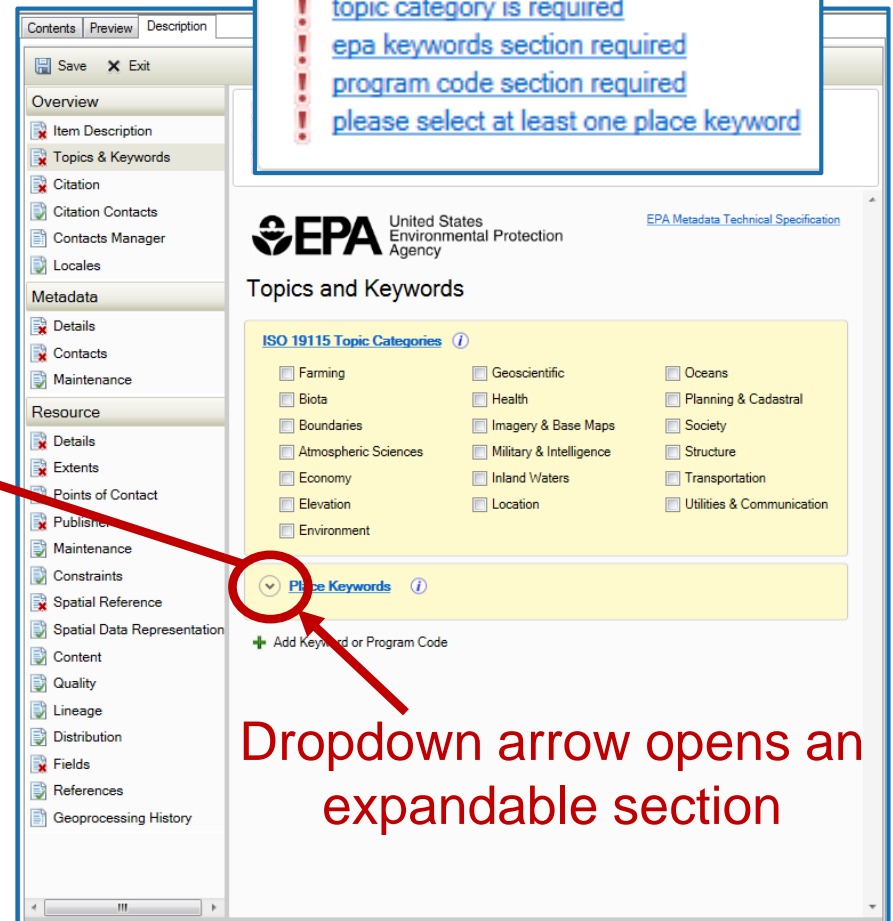
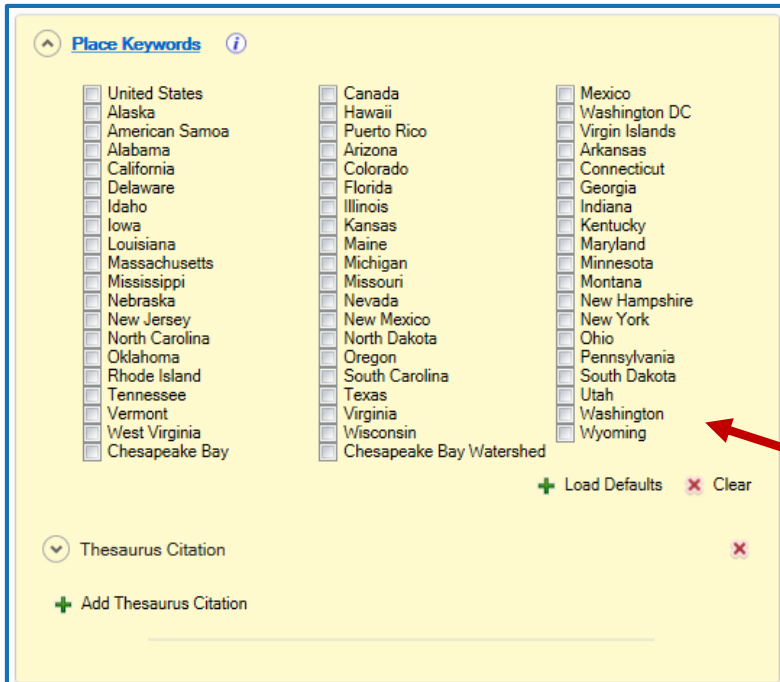




EME v5.0: Getting Started

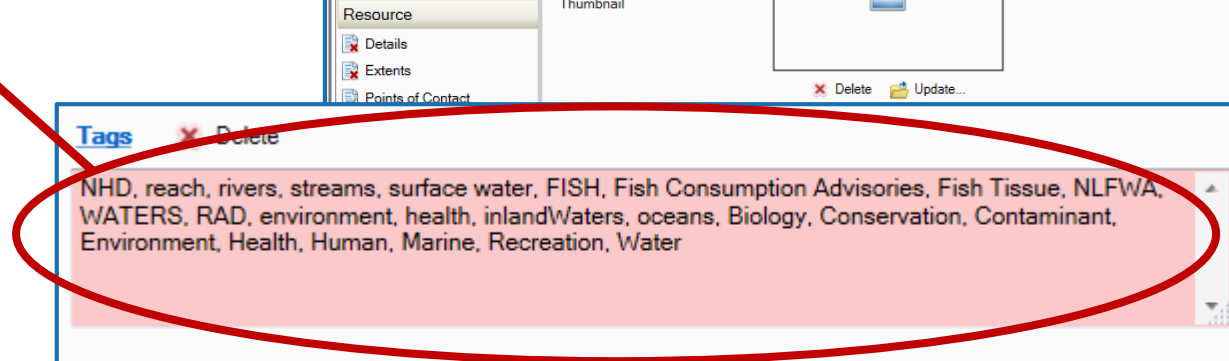
EME 5.0 Interface :

- Errors may not be immediately visible and instead a section needs to be expanded to find the element error.



EME 5.0 Interface :

- Invalid text fields needing correction are shaded in pink or peach within the *Editing pane*



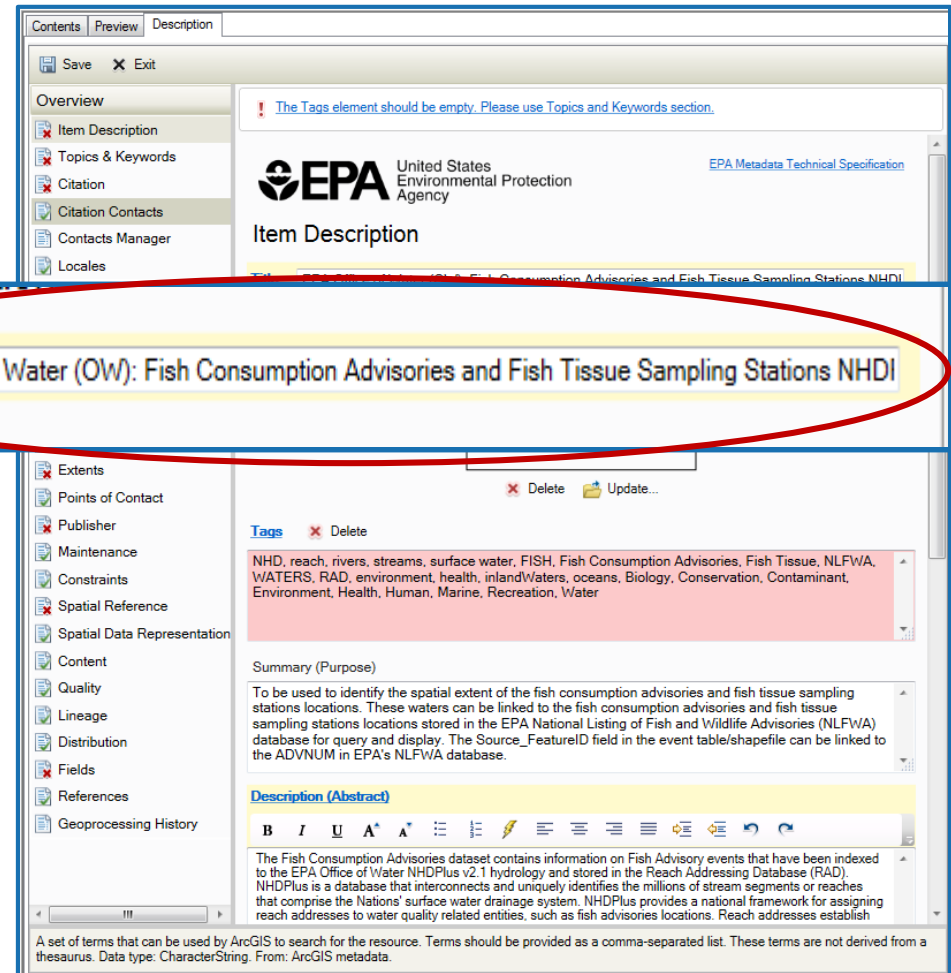
Note: dropdown and date fields do not support this coloring



EME v5.0: Getting Started

EME 5.0 Interface :

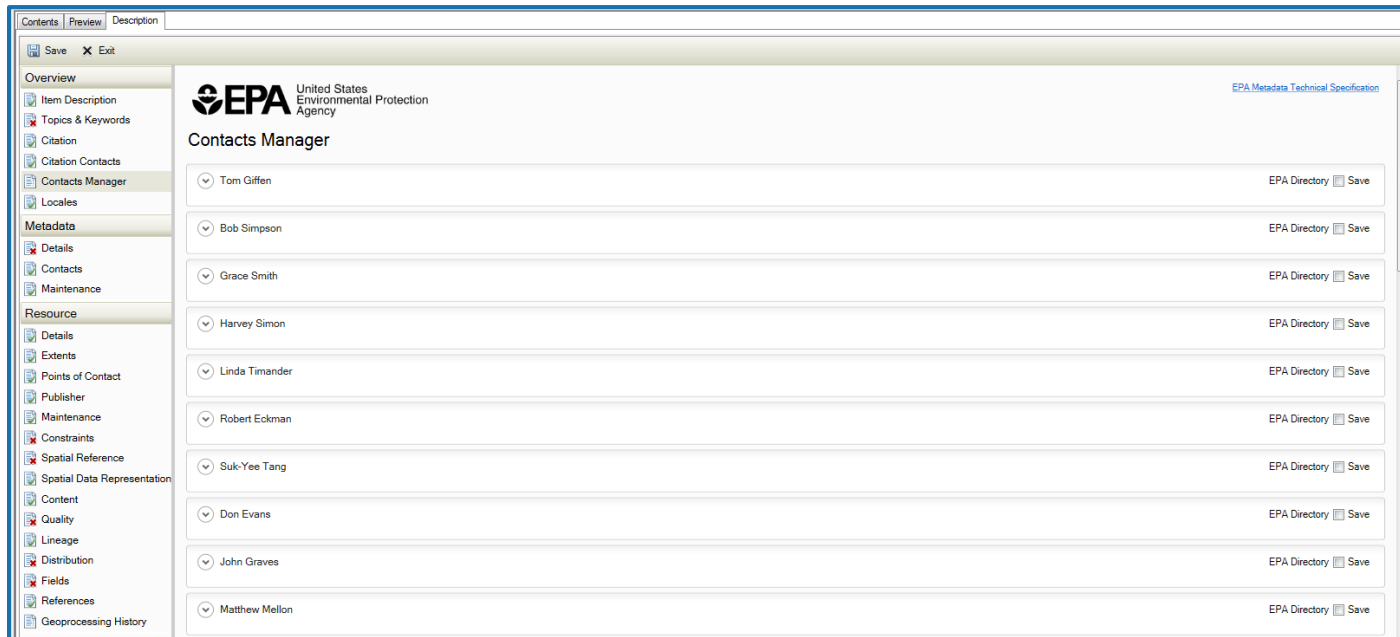
- Mandatory metadata fields are shaded in light yellow.



Note: mandatory fields may not be visible at first glance, because it is possible they are found in an expandable section

Contacts Manager:

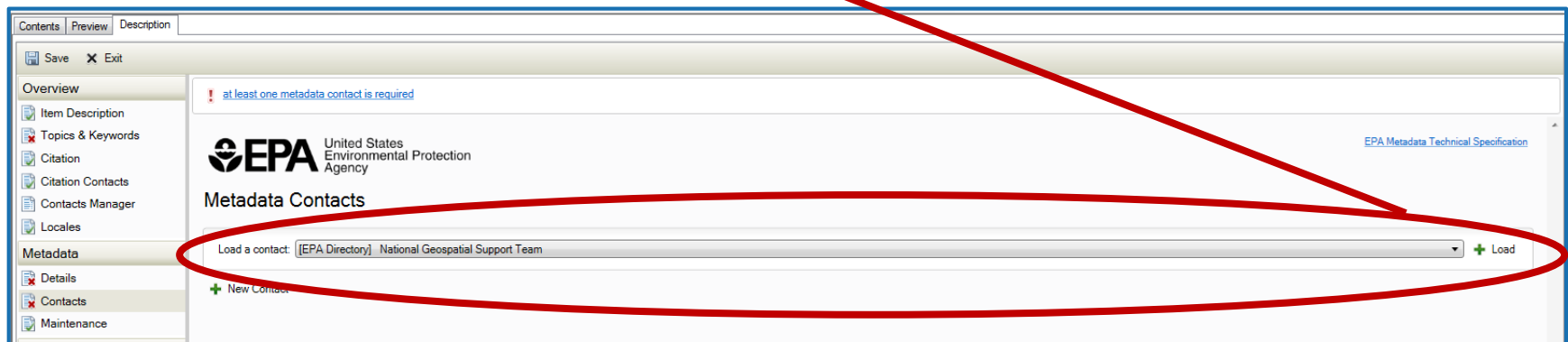
- Provides a list of pre-populated EPA Contacts
- Lists any contacts that are included in the current metadata document
- Local Contacts file can be shared with Colleagues



Note: Contact Details cannot be edited in the Contacts Manager page

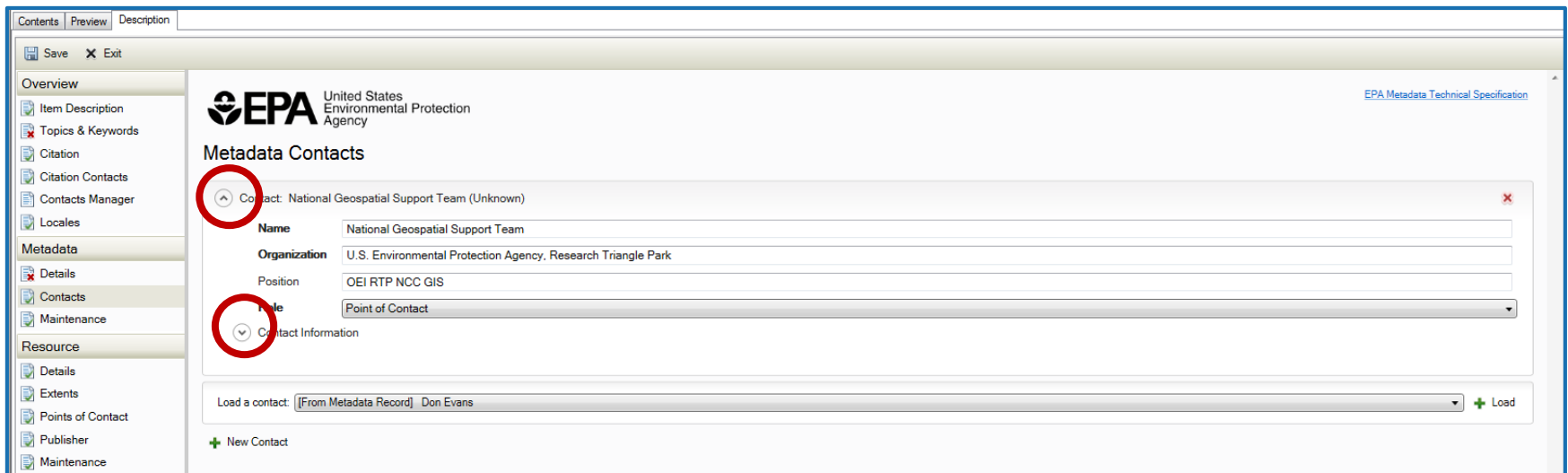
Contacts Manager – Editing Contacts:

1. Add contact to the metadata document in one of the following locations:
 - Citation Contacts
 - Metadata Contacts
 - Resource Points of Contact
2. Select the name of the metadata contact from the dropdown list and click Load.



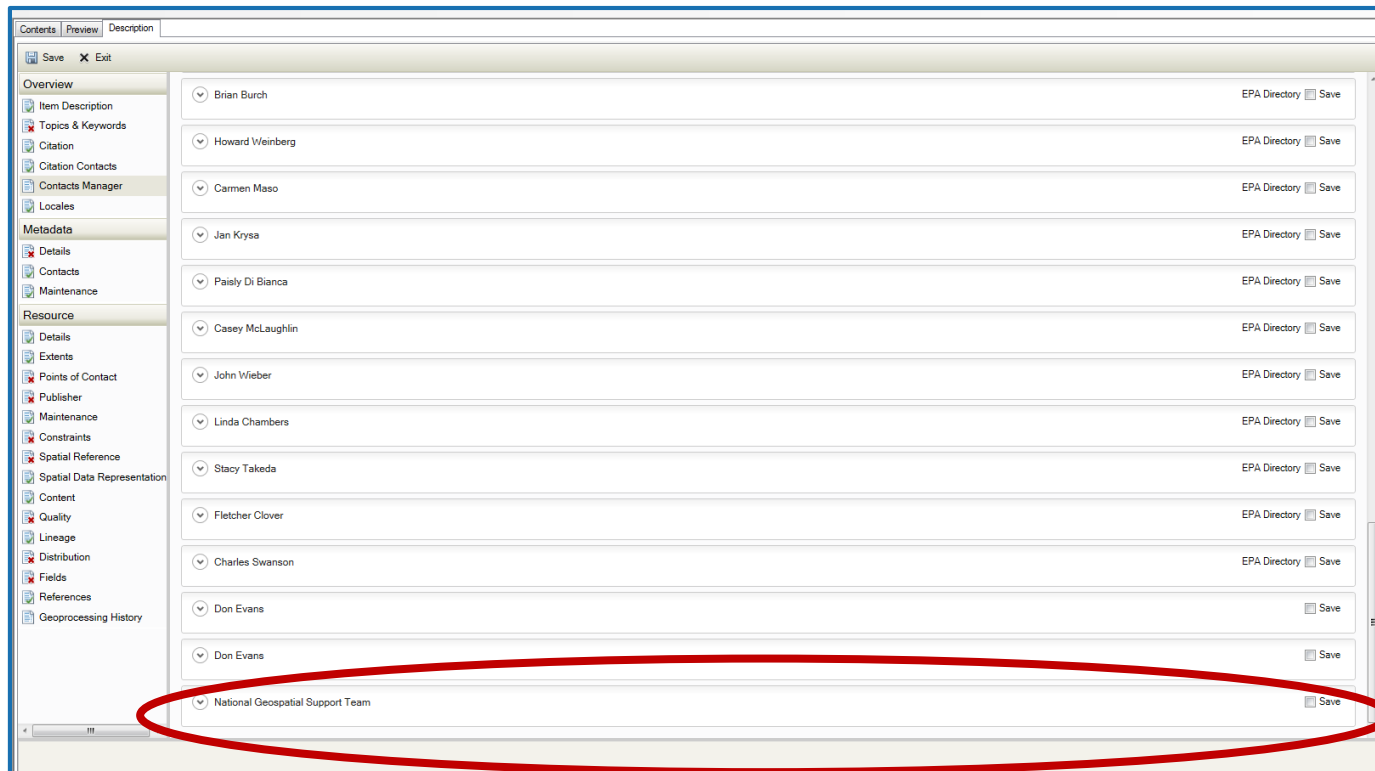
Contacts Manager – Editing Contacts:

3. When a contact is loaded, you can expand the section by clicking each down arrow



Contacts Manager – Editing Contacts:

4. New version of contact will appear at the bottom of the Contacts Manager Page

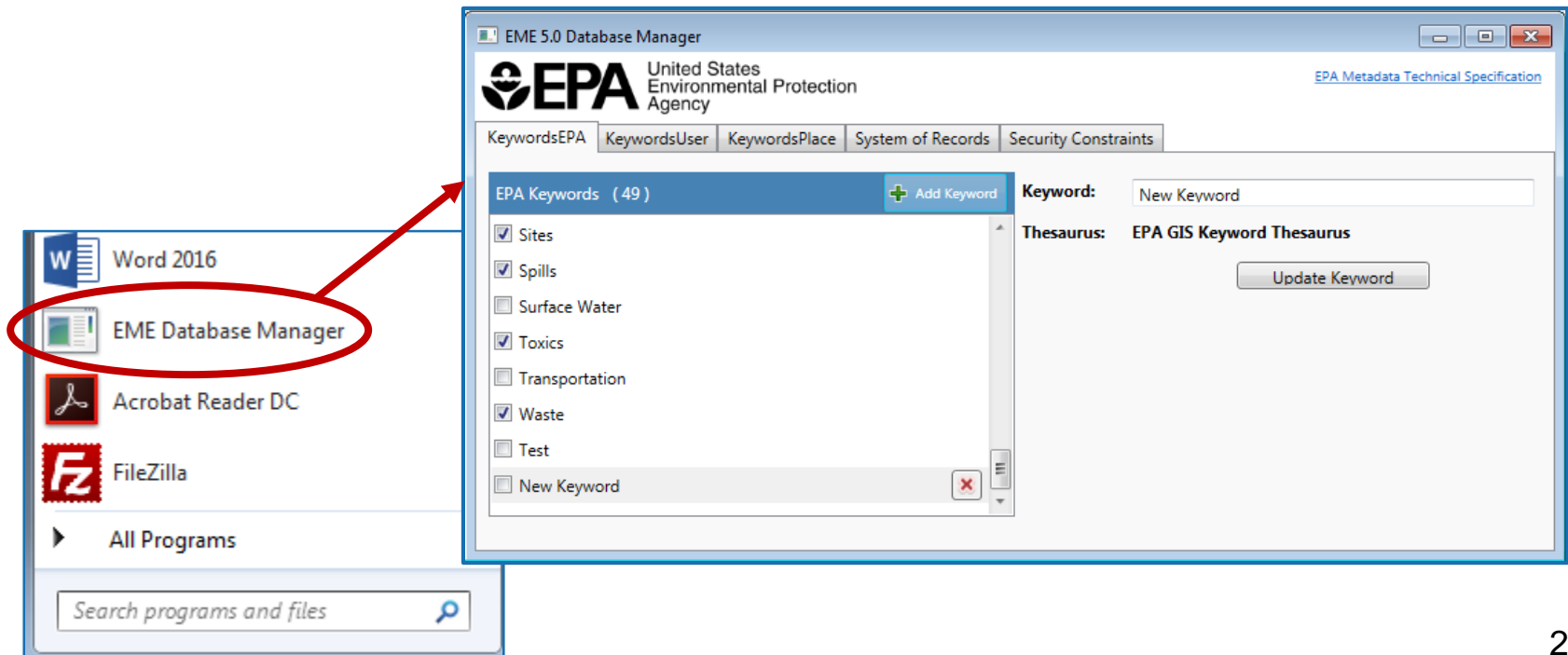




EME v5.0: Getting Started

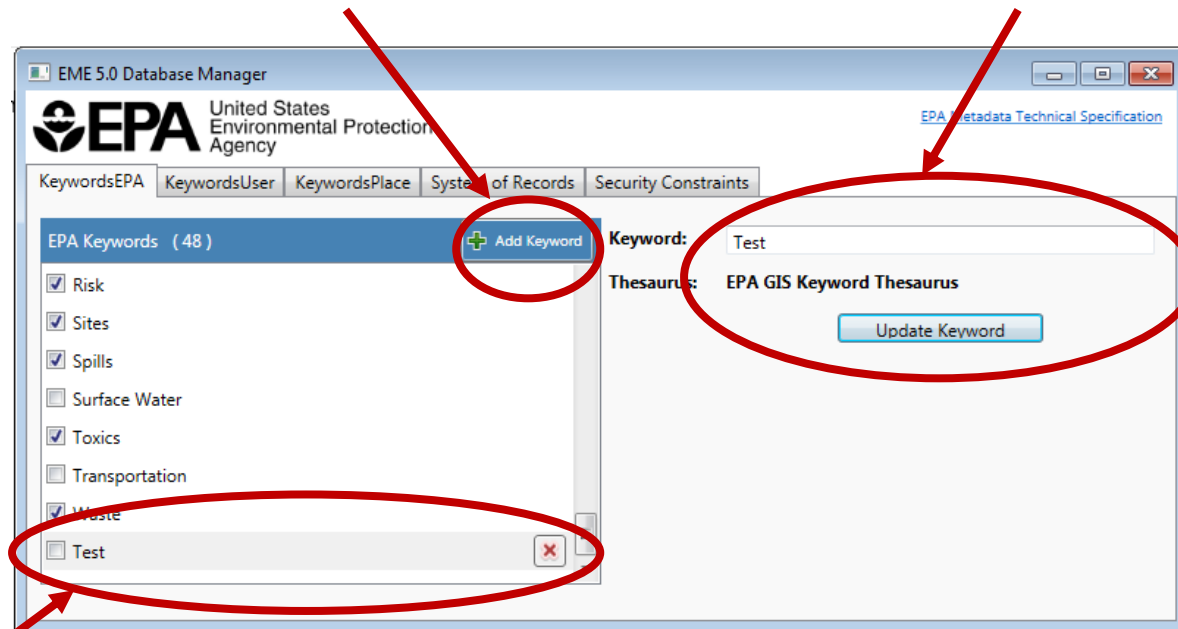
Database Manager

- No longer an MS Access Database
- Standalone Application found in Start Menu
- Used to manage Keywords, System of Records, and Security Constraints fields



Database Manager – Editing Defaults

1. Click *Add Keyword* or *Add Constraint* (depending on tab)
2. Add Keyword or Constraint in text box and click *Update*



3. New entry appears at the bottom of the defaults list

EME 5.0 Help:

- Mandatory fields link directly to their detailed guidance in the [EPA Metadata Technical Specification](#).

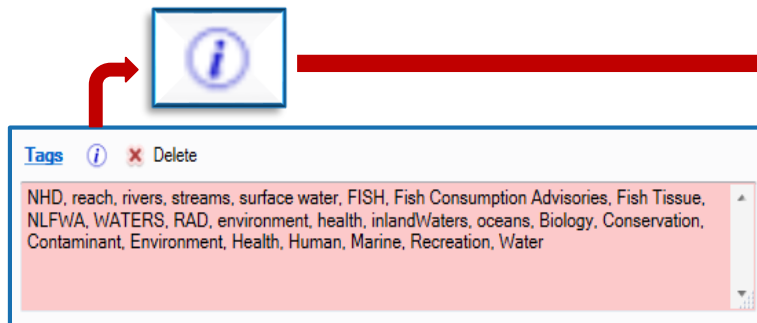
Field	Title
Required?	Always
Guidance	<p>Titles should be succinct yet descriptive including the topic, and, where relevant, temporal info, geography and related programs in a way that distinguishes from other, similar resources. To this end, EPA recommends the following template:</p> <p>{Subject, Geographic Extent, Relevant Time Period, Data Owner/Provider, Office/Region/Research Lab of Data Owner}</p> <p>Any individual component of this title template may be omitted if not applicable. For example, there is no need to include a date if data are frequently or continuously updated. Similarly, if the geographic extent is implicit in the subject, i.e. National Hydrography Dataset, it may be omitted provided that the actual extent of the data matches the extent implied in the title (an example of a dataset whose actual extent does not match the implicitly titled extent would be National Hydrography Dataset clipped to a given state). Geographic Extent should always refer to a place name, not a bounding box or coordinates. Spell out any acronyms.</p>
Accepted Values	Plain Text
Example	"Toxics Release Inventory (TRI) Locations, Oklahoma, 2012, EPA OIAA, EPA REG 66 WQPD"
ArcCatalog Editor Location	Overview > Item Description > Title and Overview > Citation > Titles > Title
ArcGIS Metadata XPath	/metadata/dataIdInfo/idCitation/resTitle

The screenshot shows the EPA logo and the text "United States Environmental Protection Agency". Below this is the heading "Item Description". In the top right corner, there is a link labeled "EPA Metadata Technical Specification". Below the heading, there is a highlighted text field containing "EPA Office of Water (OW): Fish Consumption Advisories and Fish Tissue Sampling St".

- A link to the complete EPA Metadata Technical Specification can be found in the top right corner of the Editing pane.

EME 5.0 Help:

- The  icon next to a field name links directly to that field's detailed guidance in the [EPA Geospatial Metadata Style Guide using EME 5.0](#).



Tags [special instructions MUST be followed]

Tags ⓘ Delete

Special instructions: Tags are required in EPA metadata. However, EME has disabled editing on this field as tags should NOT be added here. Instead, tags should be added in the "Topics and Keywords" page. See instructions for each of the individual topic/keyword sections in this Style Guide to add tags by type:

- [ISO 19115 Topic Categories](#)
- [Place Keywords](#)
- [EPA Keywords](#)
- [Program Code Keywords](#)
- [EPA Organization](#) (pending addition in future EME release)

If any tags exist in this field (i.e. from a previous version of the metadata) follow this process:

1. Determine if you want to keep any of the existing tags.
2. To keep tags, they must be added to your local EME database in User Keywords.
3. Once you have duplicated the desired tags from the Tags field to your User Keywords section, or if you determine that you do not want any existing tags, the tags must be removed from the Tags field by clicking "Delete."

NOTE: leaving any text in the Tags field renders the metadata invalid.

Guidance: Follow the special instructions above. If tags exist in this field they must be deleted or the metadata will be invalid.

[Metadata Technical Specification: Tags \(General\)](#)

[↑ Top of Page](#)

Validation Tips:

- When edits are made EME 5.0 automatically updates the “Date Stamp” field.
- Do not use the “*Validation*” button when validating metadata (it happens in real time)
- Do not include “Tags” in the Item Description page. Include them in the Topics and Keywords page
- Make appropriate Program Code selection from the OMB list within the Topics and Keywords page.
- More Validation Tips can be found on the [EME 5.0 wiki](#)



EME v5.0: ArcGIS Metadata, EDG & Data.gov

ArcGIS Metadata, EDG and Data.gov

- EDG Handles ArcGIS Metadata records the same as FGDC CSDGM records
 - Can be harvested to the EDG from the same Web Accessible Folders
 - Appearance within EDG will be similar to old records
- EDG performs a transformation on records to put them in ISO 19115 for data.gov harvests
 - Will improve behavior and appearance at data.gov

DEMO



EME v5.0: *Important URLs*

Download EME 5.0 –

- <https://github.com/USEPA/EPA-Metadata-Editor-5/releases>

EME 5.0 Fact Sheet –

- https://edg.epa.gov/data/Public/OEI/EMEv5Files/EME5_FactSheet_20170306.pdf

EME 5.0 Installation Guide –

- <https://github.com/USEPA/EPA-Metadata-Editor-5/wiki>

EME 5.0 Metadata Style Guide -

- <https://www.epa.gov/geospatial/epa-geospatial-metadata-style-guide-using-eme-5>

Questions/Help, email: edg@epa.gov



Questions?

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