

# Using a template and XML editing

The most recent CRITICAL HABITAT SPATIAL DATA STANDARDS document with full instructions, shapefile and metadata templates, and Critical Habitat data specifications can be found at [http://www.fws.gov/stand/standards/dl\\_crithab\\_www.html](http://www.fws.gov/stand/standards/dl_crithab_www.html)

## A) Obtain Template:

The template is located in the metadata class folder. It is named **CritHabMetadataTemplate.xml**. Open up your copy in **Notepad**. If you are not used to looking at XML files, this may be a bit confusing, but it has been formatted to be easier to interpret. Often XML files are not formatted to be easily interpreted (by humans). But we don't need to understand the file to update it today.

## B) Locational Replacements:

- i) The template has 28 placeholders that need updating for each file. They are surrounded by double asterisks in the xml file and can be updated with the "Replace" function. You can probably see several of these in notepad already. (It is a good idea to create a document with the 28 variables beforehand that you can copy and paste from. These are provided today.)
- ii) When you first obtain this template, you will need to incorporate your office information into it. Eleven of the placeholders relate to the originating office, so **most offices should only ever need to do this step once**. You can then save the template and use that revised version for all future critical habitats, unless your office information changes.
- iii) You can use "Edit"->"Replace..." (or Ctrl H) and then do a "Replace All" in Notepad to replace the variables in your local template with the correct values.
- iv) ***There are 11 locational replacements.*** Replace the following items (including asterisks) with the appropriate data in the working copy of your local template:

### Placeholder

**\*\*OFFICE\*\***

**\*\*CONTACT TITLE\*\***

**\*\*STREET\*\***

**\*\*CITY\*\***

**\*\*STATE\*\***

**\*\*ZIP\*\***

**\*\*VOICE\*\***

**\*\*FAX\*\***

### Examples of Replacement

Carlsbad Fish and Wildlife Office

GIS Branch Chief

6010 Hidden Valley Road

Carlsbad

CA

92011

760/431-9440 ext. 259

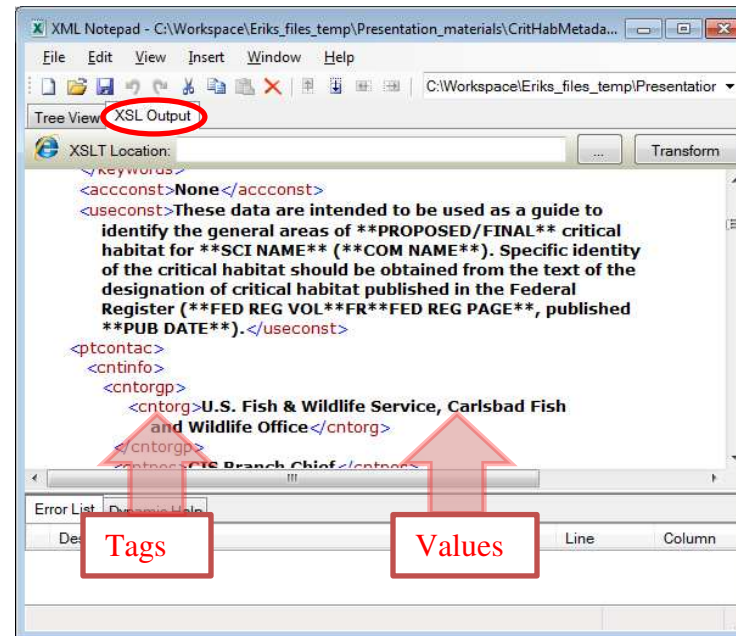
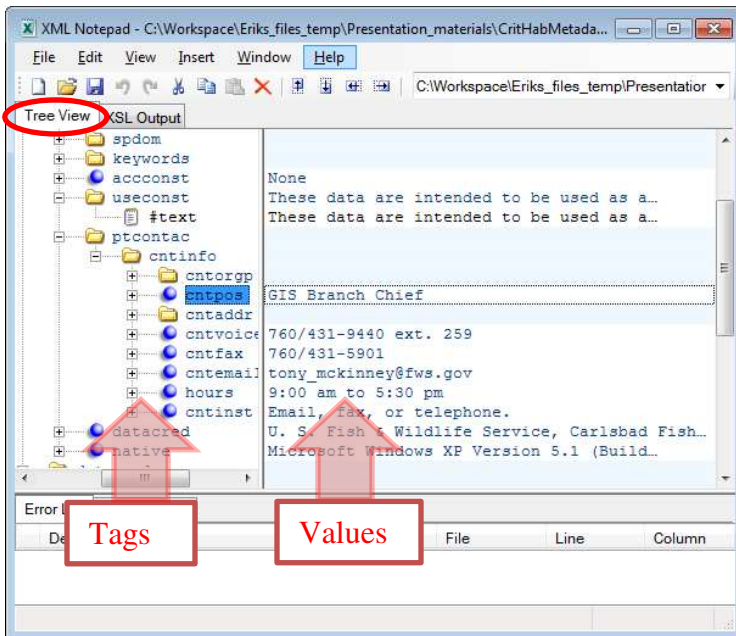
760/431-5901

**\*\*EMAIL\*\*** tony\_mckinney@fws.gov  
**\*\*HOURS\*\*** 9:00 am to 5:30 pm  
**\*\*CONTACT INSTR\*\*** Email, fax, or telephone

v) Save this locally updated version of template. Then close the file.

**C) File Specific Replacements:**

- i) Now you need to update the template again for your particular critical habitat. **Make a copy of your local template.** Next time you need to make critical habitat metadata, you can start from this step. Open your metadata file again, this time in **Notepad XML**.
- ii) Notepad XML opens on the Tree View tab. Click on the XSL Output tab. You can see all of the same information that you saw in Notepad, but formatted so that tags are a different color and in separate lines with different indentations. This is a little easier to interpret. Scroll down a bit and you can see the edits you made earlier to the location variables.



- iii) If you click back on the Tree View tab, you still see the same information, but the tags are all in the left pane, and the values within tags are in the right pane. You can open or close tag sets to go down through the hierarchy. You can see what values are in each field, and edit them if you want. We won't edit line by line in Notepad XML today, but the formatting can make it a handy way to edit in some situations.
- iv) There are **17 more replacements** which are specific to each critical habitat. Notepad XML lets us use a Replace function just like Notepad (Edit->Replace... or Ctrl H). Replace the following items (including asterisks) with the appropriate data in the working copy of your local template:

**Placeholder**

**\*\*SCI NAME\*\***  
**\*\*COM NAME\*\***  
**\*\*PLACE KEYWORD\*\***  
**\*\*SHAPE NAME\*\***  
**\*\*PROPOSED/FINAL\*\***  
**\*\*FED REG VOL\*\***  
**\*\*FED REG PAGE\*\***  
**\*\*PUB DATE\*\***  
**\*\*DESCRIPTION OF GIS PROCESS\*\***  
  
**\*\* PROC DATE\*\***  
**\*\*ACCURACY\*\***  
**\*\*MAX\_X\*\***  
**\*\*MIN\_X\*\***  
**\*\*MAX\_Y\*\***  
**\*\*MIN\_Y\*\***  
**\*\*FEATURE TYPE\*\***  
**\*\*FEATURE COUNT\*\***

**Replacement Example**

Jobberous Minimus  
 Little Brown Jobber  
 NCTC  
 FCH\_Jobberous\_Minimus\_20140528 (this is the name of the CH shapefile without the .shp)  
 Final  
 99  
 9999 (*Note: This is the page number that the rule starts on*)  
 20140528 (for May 28, 2014. Format: YYYYMMDD)  
 Critical habitat polygons were determined by a field crew identifying suitable habitat for Little Brown Jobbers. Crews first created 100m transects to identify suitable habitat areas, then walked the perimeter to get polygon vertices. The crew sampled with a Trimble GeoXT, set to record only with a horizontal accuracy of less than 5 meters. Data was collected in July 22<sup>nd</sup>, 2013, when habitat types were clearly discernable by field crews.  
 20130722 (date of process described)  
 5 meter  
 -77.7992238281632  
 -77.8090771951993  
 39.488745170647  
 39.4818350171412  
 GT-polygon composed of chains  
 1

v) **Save and Close.**

**D) Clean out old metadata:**

Delete the existing “FCH\_Jobberous\_Minimus\_20140528.shp.xml” file for your shapefile. This cleans out any existing metadata, and should avoid the potentially lengthy “Geoprocessing History” in your metadata. (I usually rename the file rather than deleting it, so I can reference the geoprocessing history later if needed.)

**E) Set Metadata Style (if needed):**

Open ArcCatalog. From the “Customize” pull-down menu select “ArcCatalog Options...” Select the “Metadata” tab and select “FGDC CSDGM Metadata” from the “Metadata Style” pull-down menu if it is not already selected.

**F) Copy and rename Metadata:**

- i) Make a copy of your metadata with your values copied and pasted in the same directory where your shapefile resides. Rename your metadata file as “FCH\_Jobberous\_Minimus\_20140528.shp.xml”
- ii) Open **ArcToolbox**, select **Conversion Tools > Metadata > Upgrade Metadata**
- iii) Select your shapefile as Source Metadata.
- iv) Select **FGDC\_TO\_ARCGIS** as the Upgrade Type. This will make your metadata visible in the ArcCatalog and ArcMap Description tab.

**G) Check Metadata:**

Review the metadata, and make everything is correct.

*(Note: The upgrade does result in the loss of one FGDC metadata element: **Point\_and\_Vector\_Object\_Information**. This is a known problem. **The metadata document that you created from the template is fully FGDC compliant.**)*

**H) Possible Additional Edits:**

You may add additional information (additional process steps, location keywords), either via ArcCatalog or editing the XML.