

## Interim Tools for Metadata Management

While BLM works toward establishing a standard process for metadata content and collection, a temporary approach is proposed to ensure that metadata requirements are met to the best of the Bureau's ability. The purpose of this document is to provide some general guidance for compliance with this metadata requirement.

The 5 steps to metadata success are:

### 1. Review and understand the Content Standard for Geospatial Metadata

In order for the metadata files to properly load into the centralized system, they must conform to a specific format defined by the Federal Geographic Data Committee (FGDC) Content Standard for Geospatial Metadata. Details regarding this format can be found in the Metadata Workbook made available on the FGDC website: [http://www.fgdc.gov/metadata/meta\\_workbook.html](http://www.fgdc.gov/metadata/meta_workbook.html)

### 2. Obtain and install a metadata management tool

Several \*free\* tools exist to assist users in collecting FGDC compliant metadata. Reviews that evaluate the pros and cons of each one can be found on the FGDC website: <http://www.fgdc.gov/metadata/toollist/metatool.html>. If you are looking to get started without doing a whole lot of tool evaluation, TKME is a well-documented, compliant tool that is widely used throughout the GIS community.

TKME / XTME – This tool will allow metadata editing or the creation of a metadata record from scratch. It formats the major metadata headings and allows entry in a form like interface. The tool runs stand-alone either on Unix or Windows and there are no requirements of having ESRI software or spatial data present in order to generate a metadata record. The AIX source can be found at:

<http://geology.usgs.gov/tools/metadata/aix.shtml>

...and the Windows version can be found at:

[http://geology.usgs.gov/tools/metadata/all\\_win.exe](http://geology.usgs.gov/tools/metadata/all_win.exe)

If you are documenting an ESRI data set, you might consider the following tools:

FGDCMETA.AML – This tool is written in Arc Macro Language (AML) which must be executed from ARC/INFO. It captures many of the “coverage specific” elements such as projection information, the geographic extent, and Entity and Attribute information (item listing only). It can be downloaded from:

<http://www.isgs.uiuc.edu/nsdihome/webdocs/fgdcmeta.html>

**Note:** Some knowledge of AML is helpful as you may want to customize the default entry fields.

ArcView Metadata Collector v2.0 Extension –  
<http://www.csc.noaa.gov/metadata/text/download.html>

This form based tool works from ArcView and collects some of the basic spatial reference information of a coverage or shape file that the user is currently working on. It resembles a “wizard” interface, walking the user sequentially through the various sections of the metadata while providing samples for reference. Templates for each section can be created and saved for re-use in subsequent metadata records. **Note:** Metadata created from other systems can be displayed from this tool but may not be able to be edited.

### **3. Create a metadata record that reflects the data theme you will be managing.**

Once you create one metadata record, you can re-use about 75-80% of the content in subsequent metadata records. The most difficult aspect of metadata collection is defining the content and description of the data set. Several examples exist on the Internet that can be used as a guide. As BLM’s metadata efforts evolve, better guidelines for standardization will become available. For now, reference the BLM examples on the following web sites:

BLM Colorado - <http://www.co.blm.gov/metadata/cothemes.htm>

BLM Oregon - <http://www.or.blm.gov/gis/gsd/complete.html>

BLM Clearinghouse - <http://www.blm.gov/nhp/what/geospatial/clearinghouse.htm>

### **4. Ensure FGDC compliance by validating the metadata record with the Metadata Parser Tool.**

The Metadata Parser (MP) is part of the metadata toolkit available from <http://geology.usgs.gov/tools/metadata/>. This tool is run on a command line and will check the input metadata file (formatted Ascii text) for compliance with the FGDC content standard. Errors are written out to an error file for review. The tool can also be used to generate an HTML format file that could be used for serving over the internet.

### **5. Forward your metadata record to the BLM metadata clearinghouse.**

Once your data set passes through the parser without errors, post it to the BLM clearinghouse. Email your FGDC-encoded SGML file and an HTML copy (both are output options from the metadata parser) to: [Metadata\\_Mail@or.blm.gov](mailto:Metadata_Mail@or.blm.gov). Your metadata record will be loaded to the BLM metadata clearinghouse (at the first of each month) and can be located by anyone doing a search on BLM data through the clearinghouse.

Please keep in mind that these instructions and the interim metadata clearinghouse are temporary. After a formal process for metadata collection and maintenance is established in the BLM, all collected metadata will be transitioned. It is important for the integrity of the data that the metadata records be kept up to date. As BLM metadata management standards are established, specific training will be provided. Until that time, please catalog the data sets you have to the best of your ability using the methods outlined in this document. Further information on metadata is available on the FGDC website: <http://www.fgdc.gov/metadata/metadata.html>.