Minnesota Metadata Editor (MME) Issues

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Nancy Rader et al.

**Jim's Gonsoski’s Comments** are in blue

**Note: MnGeo responses to Jim’s comments, entered on March 5-6, 2014, are focused on the question, *“Is this a fix/enhancement that the Met Council is comfortable pursuing?”***

**Purpose of List:** This list collects bugs and suggested enhancements from people who have been using [MME v.1](http://www.mngeo.state.mn.us/chouse/mme/index.html) . Unless otherwise stated, comments refer to the standalone, portable version of MME (not to the installed version or to the experimental version that uses ArcGIS 10 stylesheets). If you add to this list, please put your name after each comment in case we need more info.

**Why Now?** Nearly all features of MME work pretty darn well. However, we need to catch anything that will be a problem as MME becomes more widely used to create metadata for the Minnesota Geospatial Commons and in response to [new data sharing legislation](http://www.mngeo.state.mn.us/councils/statewide/HF1390.1.pdf)[[1]](#footnote-1). Even if we decide to pursue an MGMG (Minnesota Geographic Metadata Guidelines) tool within ArcGIS10, MME will remain important since it’s a free standalone.

**What’s Next?** First assess whether the issue pertains to MME or whether it is actually an issue with the MGMG metadata guidelines, metadata policies or something else; if not MME, move to a separate list.

Then classify the MME items into “must have” and “nice to have” and assess for feasibility and level of effort.

Then allocate resources, etc. to do the work. Since Jim Gonsoski created the tool (by customizing the EPA’s EME tool source code) and Met Council uses it, Jim G. will help assess the items for feasibility and level of effort. Then we will prioritize what to fix and options to do that work.

# Bugs or Areas of Confusion

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| **A**  **B**  **C**  **D**  **E**  **F**  **F2**  **G**  **H**  **I**  **J**  **K**  **L**  **M**  **N**  **O**  **P**  **Q**  **R**  **S**  **T**  **U** | **Tab 2**   * If a record is opened that has coordinates other than UTM (e.g., State Plane), then Coordinate System Information is grayed out. Same with Geographic coordinates. (Nancy)   *More details about Geographic Coordinates from Susanne:* Issues with spref section:  It’s tricky to get ’geographic’ since it is not technically a horizontal coordinate scheme. It is ‘no projection’, not a projection.  If you fill in geographic from the pulldown list it creates a different set of tags inside <spref> than if you fill in UTM.  If geographic the tags  <geograph> and <latres> and <longres> get created.  If UTM  the tags  <planar><gridsys><gridsysn> get created to hold the horizontal coordinate scheme.  Because the HTML conversion uses the contents of “<planar><gridsys><gridsysn>” to decide what to associate with horizontal coordinate scheme, “Geographic” never shows up as a Horizontal Coordinate Scheme – the field stays blank in the HTML. Ditto Horizontal Units.  Also if you bring into MME an XML that originally had the ‘geographic’ set of <spref> tags or the ‘UTM’ set of <spref> tags, and try to edit over it, the tags you want may just not be there and you may not be able to enter the data and it is a mess.  The only way I could fix was by cutting and pasting XML tags. For example, in the NHD\_24K\_Minnesota record, I actually pasted the ‘planar’ set of tags into the XML document, and added the ‘Geographic’ manually. Then when MME creates the HTML the ‘geographic’ is in the output. An inelegant solution, but maybe better than hand-editing the HTML, because the next time you edit in the MME and write out a new HTML file you have lost that edit. (Susanne)   * Users trying to input county coordinates by default are running into problems – details are in their emails (Renee Rosenow, Stearns Co., and Matt Koukol, Ramsey Co.). May be due to their misunderstanding of how to edit interrelated tables or how to set up and use the default options? If so, add description of workflow to training materials. If not, troubleshoot what’s wrong. * Datum menu choices should include “NAD27” (and “WGS84”?). There are additional choices for NAD83 as well (e.g., “NSRS2007” and “HARN”) – check with Pete Jenkins. (Nancy)   **Jim's Comments**: Information and formats for coordinate system information is configured through the HorizCoordSys\_cluster table in the application's Access database. This table offers the most commonly used information, but can be customized further to handle special needs. It is not a simple matter to configure this information. But it can be done with a little trial and error. To further complicate matters, many of the XML tags used to describe this information -- in FGDC, for example -- are not used in MGMG 1.2. In cases where a particular user needs a particular coordinate system for all their data, the easiest way to accomplish this is to create one or more custom database records to suit their needs.  MnGeo 03/05/14: Regardless of what problems may or may not exist in the table mentioned above, or what misconceptions on this subject may plague fledgling metadata authors, are we to assume that the Met Council is only interested in issues that involve the UTM projection; specifically Zone 15? Are those projections in which county coordinates are cast – specifically for the 7 Metro counties – important to your internal business?  Is “custom database records” the same as a “template” that has the coordinates correctly entered which people could start with and never have to touch the coordinate fields? If so, perhaps we could work with Matt Koukol to create a template for Ramsey County. If that were successful, we could do develop templates for other counties.  All FGDC tags are not in the table, but are all tags in the table also in the FGDC standard? There should not be that many projections used under normal conditions, and no real exotic ones, but it’s understood that additional details – e.g., concerning horizontal and vertical datum – will need to be added from time to time. We focused on Ken Whitehorn’s list for County Coordinates (i.e. MnDOT’s) when developing the MGMG. These have no FGDC counterparts.  We’ve talked in the past about the possibility of using EPSG codes (for example, see those for several variations of Minnesota State Plane Coordinates: <http://spatialreference.org/ref/epsg/?search=Minnesota&srtext=Search> instead of these fields, but perhaps this can only be done in the ISO19115 standard. Also, we would need to find out the procedure to add county coordinate EPSG codes to the master list if they were not already there.  Problems reported by Stearns County are still not well understood. We will make it our task to document their issues.   * Adding detailed entity and attribute information: The workflow and terminology is unclear. In the Detailed tab, information entered into “Label” area of the Table(s) and Field(s) sections disappears (Matt Koukol, Ramsey Co.). Hal has provided a clear workflow explanation that solved the problem. This needs to be added to help / training. (Nancy) * If you start with records created with other tools that used the FGDC or Esri editors, MME doesn’t always save edits to the Lineage field (Steve Palka)   **Jim's Comments**: This is true. MME will not alter tags that are not its own. The issue with the Lineage field is that MGMG uses one little 'step' to store everything related to lineage whereas every other convention uses a separate 'step' for each step. The unfortunate outcome of this sharing of standards is that MGMG does not include any of the other steps that may already be there and instead creates a new step to store the lineage. Fixing this would require a bit of work.  MnGeo 03/05/14: Steve Palka of our staff reports that he pastes multiple processing entries into the MME Lineage field, but can’t save them. We will verify this.  Your comment that every other convention uses steps is inaccurate. For example, NOAA contracts with NSGIC to create 1000s of geospatial metadata records in a very terse format that does not require detailed lineage reports. If you want to see Mark’s eyes glaze over, mention to him the RAMONA format, more recently incarnated as “GIS Inventory.” MnGeo began supplying metadata to the GIS Inventory by standing up the requisite web accessible folder earlier this year  We should clarify how MME works. MGMG uses the **first** step from the FGDC standard to store all lineage information, not a **new** step. So, it’s understood that any lineage info contained in later steps (process steps or source info) in an existing record created with an FGDC editor wouldn’t be shown or be editable via the MME interface; however, once the record is opened in MME, it should show the contents of the first FGDC step in the MGMG Lineage field and any edits to that field made via the MME interface should be able to be saved and edited.   * ~~The Spatial Extent of Data element is given the short name supplinf. Is this correct? (Jim K.)~~ *~~[need to check this – Nancy]~~*   **Jim's Comments**: Yes, it is.  MnGeo 03/05/14: Not an issue. We recommend deleting this bullet.  **Tab 3**   * Using “Tools 🡪 Refresh From Database” sometimes deletes the contents from the “Online Linkage” field. (Nancy)   **Jim's Comments**: This is probably a bug. We should fix this.  MnGeo 03/05/14: Need for fix documented and acknowledged.   * If you start with records created with other tools that used the FGDC or Esri editors, MME doesn’t save edits to the Metadata Standard – Standard Link field (Steve Palka)   **Jim's Comments**: I'd have to check this. It is likely that the incoming information is stored in a different set of tags that those that MGMG uses. Nothing to fix.  MnGeo 03/05/14: We believe there is something to fix. Please check and let us know if you concur.  **Other**  Help:   * [CHM files are problematic for Window](http://stackoverflow.com/questions/11438634/opening-a-chm-file-produces-navigation-to-the-webpage-was-canceled)s. Users often get a “Navigation to the webpage was canceled” error when they click on Help 🡪 Contents. Consider providing the HTML to MnGeo to post separately, and linking to a general web page for help. (Dolbow) Jim G. has provided a PDF version I will post on the MME page. That helps, but we still need a format that we can edit outside of MME. (Nancy) **Solution**: Post MME-specific help online (this is relatively short – most of the CHM file describes MGMG elements and can be replaced by a link to the MGMG). Remove the CHM from MME and point the help link to the online help. Could also include a help document in the download zip file and note the web address where people could check for any updates. (Nancy) * Computer crashes after double-clicking the MetadataEditor.exe to open the program (Renee Rosenow, Stearns Co.). **Problem solved**: Crashes were due to running MME from a network drive (diagnosed by the county “network guy”). Running a local copy has solved this problem so far. * Date field inputs:   More help and error checking on formatting of date inputs. Unless you click on the “today” button and edit to follow the format, chances are what you type in will either become wrong or not be in the standard searchable format.  Examples:   * 7/2013 becomes 13/7/20 * 072013 becomes 13/0720 * July 7, 2013 stays July 7, 2013   **Possible solution**: Require user to enter dates in specific format (i.e. using month, day, year pick lists) so dates can be stored and displayed properly (Jim K.)  **Jim's Comments**: MGMG defines this as a 'free date' -- whatever that means. Neither the application nor anyone else knows.  MnGeo 03/05/14: MGMG documentation indeed handles this issue loosely. I believe however that we tightened this up as time went by, forcing dates into a standard format for indexing and date search purposes. The control may have been applied in Pete’s converter (WMETA32) or in the MGMG Editor for ArcCatalog 8 & 9. For example, when running a date search in GeoGateway, the format is identified thusly: Dates from 01/01/2005 to 03/05/2014. I (cc) will delve into this.   * Format of XML output:   MME strings a whole bunch of tags together into one long line. The tool we used previously (Pete’s converter (wmeta32.exe)) created an xml with a single tag per line, then a linebreak. When everything is on one line, it is harder to read. Also, when you index a record using the Z39.50, the tags are not recognized, titles do not appear correctly on the search results page, and the search does not work because the tags were not recognized.  **Pete’s fix in linux** (where we index our records) is the ‘tidy’ command:   * tidy –xml –m filename.xml (to replace the old xml file with the cleaned up one) OR * tidy –xml > newfilename.xml (to create a new xml file with a new name, preserving the old one)   (Susanne)  **Jim's Comments**: Any XML editor will format XML for you and allow you to edit it. Any useful text editor will do the same. If you open the file in any browser it will format it properly as well. Introducing line breaks into the actual format will break most XML editors and will cause it to format poorly in other type of text editors, IMHO.  MnGeo 03/06/14: Need to contact Susanne and Pete for more information.  **Suggestions for Possible Enhancements**  **Tab 1**   * Change Spatial Extent of Data field to a text box, not a single line text entry box. (Nancy)   **Jim's Comments**: Yes, good idea. This should be fixed.  MnGeo 03/06/14: Improvement request documented and acknowledged.  **Tab 2**   * Add fields for Vertical Datum (very important for LiDAR data) (Nancy)   **Jim's Comments**: Yes, good idea. These should be added. But I'm not sure where and under what tag structure. More research needed and a specific specification needs to be created.  MnGeo 03/06/14: FGDC Identifier 4.2.1.1 Altitude Datum and 4.2.1.3 Altitude Units   * Perhaps if I could access the Help this would be clarified, but I am not clear on the way to use or for what purpose to use the Permissible Values in the lower left. I have only gotten Enumerated to work and I like the output, but the others are unclear. (Karl) * It would be great if you could type in the combo-box to add a new value under Table(s) or Field(s) in the right side panel. Also, this whole section on the Detailed Tab could likely be simplified. Choose a name for the Source Table and hard code it. Attributes would be a good example of a simple straightforward name that the huge majority of the time would work. (Karl) * Clarification of the use of the Overview Tab of Entity and Attribute Information would be appreciated. I have seen it used to list out attributes, but not as cleanly as the table generated by the Detailed Tab. Perhaps this section could be merged with the Detailed Tab if it was pared back a little and then it would be easier to see what was on each and make better use of both sections. (Karl)   **Jim's Comments**: Hal was the requestor for this capability -- and remains its chief proponent. He can provide additional help on workflow that can be added to online help for this set of components. Even on a good day, it remains, by design, a kludgey mess.  MnGeo 03/06/14: We agree this is confusing and will seek clarification from Hal.  **Tab 3**   * ~~If this is only going to be used to edit MGMG standard metadata, it would be great if the standard would override whatever comes in. In most cases it is already right and in all other cases I have used the D button to correct an outdated link to the standard. (Karl)~~   **Jim's Comments**: Opinion.  MnGeo 03/06/14: We believe this is related to a previous item identifying that under certain conditions MME creates an incorrect link to the metadata standard. Overriding input may not be a good idea anyway, especially since the link to MGMG or its name could change in future.   * ~~Add “Distributor” field to the interface. Currently, there’s a field in Tab 1 for “Publisher” but that is not always the same as the Distributor.~~   **~~Jim's Comments~~**~~: Opinion. Anyone else agree?~~  **Mark’s Comment**: Distributor is already included in the third tab. This is a non-issue.  MnGeo 03/06/14: Agreed; this is not an issue. Sorry. We recommend deleting this bullet.  **Other**   * Creating hotlinks in the html: * Add https:// to the list of urls that are hotlinked (Nancy)   **Jim's Comments**: This is a bug that should be fixed.  MnGeo 03/06/14: Problem documented and acknowledged.   * If a url is in parentheses, the beginning works (http:// but the end paragraph is included in the hotlink html) thus breaking the link. Can this be programmed not to happen or do users need to put a space in between the parentheses and the url? (Nancy)   **Jim's Comments**: Putting URLs in parentheses is something you just shouldn't do. I have a rather long list of things 'you just shouldn't do' that is available on request. Don't date outside your species, for example.  Hmm… sounds like an interesting list.  MnGeo 03/06/14: Points taken; no extra-species comingling and URLs should not be wrapped in parentheses. Can a check be inserted, however, to detect when a URL happens to end in a [)], []], [.], [,] or [;] preceding a space, so that the hyperlink created does not include that errant character? This would be particularly helpful if/when multiple URLs are provided and separated with a character not intended to be part of the URL (and not a space).   * Display the initial part of the url in the hotlink (e.g., the “http://” and “ftp://” parts). This would save a step of retyping them back in when cutting-and-pasting a url from an existing record to a new record.   **Jim's Comments**: This is a bug that should be fixed.  MnGeo 03/06/14: Problem documented and acknowledged.   * Is there a way to edit the contact information from the editor window rather than the database? If information is brought in from an existing record, can it be entered into the database in one step rather than needing to be manually added? (Nancy)(Karl [seconded])(everyone seconds!) * Is there a way to ensure that the “Address Type” field is populated? [Data.gov](http://www.data.gov/) (inexplicably) requires that this field be populated. We can have “Mailing and Physical” be the default, but it’s not easy to enter it. Currently, you need to open the Contacts Database and fill in that field. This is not a big problem if you’re creating a contact, but it’s a real pest if you’re starting from an existing record with contacts that are not already in your contacts database. (Nancy)   **Jim's Comments**: Adding contact information editing directly into the application will require reformatting at least one of the pages to fit it in plus more instructions to handle special needs.  MnGeo 03/06/14: Being able to edit Contact information via the interface would go a long way to making MME more user-friendly.  Because “Address Type” is a requirement in Data.gov we feel it’s important to implement, either through the interface or via some more automated way. Is such an implementation out of scope for the Met Council?  Examples of *special needs* would be appreciated.   * Is there a way to display content from repeating fields in the FGDC and ISO standards in the editor window and in the html? When opening an xml record created with an FGDC or ISO editor, MME will only display the content of the first instance of a repeating field (the content is in the xml). This is especially apparent in theme keywords, place keywords, and lineage. For example, for a list of two theme keywords: * FGDC: each theme keyword is bracketed by a <themekey></themekey> pair of tags, like so: so: <themekey>elevation</themekey><themekey>LiDAR</themekey> * MGMG: Each keyword in the list of keywords is separated by a comma, and the whole list is bracketed by a <themekey></themekey> pair of tags, like so: <themekey>elevation, LiDAR</themekey>   When opening the FGDC record in MME, MME only displays the first keyword “elevation”. The situation is even messier in Lineage, since the FGDC/ISO divides Lineage into “source” and “process steps” repeating fields.  **Jim's Comments**: This is a can of worms I would rather not open. There are ways of representing certain sets of information using the data base tables but a committee would be needed to decide what's appropriate. It may be possible to expand the help to include a better way to store these.  MnGeo 03/06/14: We would appreciate your thoughts on implementing a viable fix, even if the Met Council regards this as a non-essential change.   * A similar problem is found with some of the contact fields if <cntorgp> is present, as well as <cntperp> each with the child tags <cntper> and <cntorg>. If only <cntorgp> is fully populated even if you chose an existing contact from the drop down, it will not populate the proper tag <cntperp> and children. I have been correcting the XMLs manually to remove the extraneous tags and populate the correct ones. (Karl)   **Jim's Comments**: This is another case of something that is not a part of MGMG but may be included in other metadata files and confuses things when brought into the MME. Some situations must be handled manually. This is one of them.  MnGeo 03/06/14: We will seek more details from Karl and ask Susanne Maeder to evaluate.   * We need to rethink the boilerplate text that is put into “Online Linkage” in the html file. Currently, it says that people will be able to download the data. This is not true for services and is confusing people, especially those looking to download air photos. (Nancy)   MnGeo 03/06/14: If we change the boilerplate text, it will need to be updated in the MME function that creates the HTML.   * ~~Show short names in tooltip help (mouse rollover) along with the element definition (Jim K.)~~   **Jim's Comments**: This would require a lot of work with minimal benefit to a few.  MnGeo 03/06/14: We checked with Jim K. and confirmed that it is not a widely useful feature. In fact it would more likely confuse many users. This information is available in the help file. We recommend that it be removed from this list.   * Remove indications that MME was developed by MnGeo alone. * Do not have the program install in a folder called “MnGeo” (Nancy)   **Jim's Comments**: The application needs to have an identity and a publisher. At the time, MnGeo seemed like a good choice. The DNR, for example, chooses to use 'default' which indicates nothing and confuses everyone. Something like 'Minnesota' is also too generic. MnGeo seems like a good compromise as it is reasonably meaningless while still allowing some sort of uniqueness. I would argue that it should stay as-is.  MnGeo 03/06/14: It’s agreed that the software needs an identity, and that MnGeo’s role in helping to morph it into existence, along with the roles of a number of significant and gifted partners, is important to document. How that notion gets intertwined with Nancy’s comment – don’t name the install folder “MnGeo” – requires more explanation than provided. An install directory named “MME”, for example, seems to-the-point and appropriate. If there are technical reasons that make this a bad idea, we’d certainly reconsider.   * Remove references to the installed version of the editor and to the ArcGIS stylesheets (Nancy) * Install instructions * Webpage * Help file (check this)   **Jim's Comments**: This can be handled when the help pages are updated.  MnGeo 03/06/14: Understood. |

# Other Larger Issue Comments

Current risk: Jim Gonsoski is the only person who is able to edit the MME code, including the embedded CHM help file. (Nancy)

**Jim's Comments**: A good solution is to get the source code pushed up to a GITHUB repository so that all and sundry may have at it. The help should just be kept in-house.

MnGeo 03/06/14: That’s probably a good idea. Understanding that a more robust standard is probably in Minnesota’s future, it’s probably not a fiscally sound idea to spend lots of money to spiffying up MME, but to promote the Geospatial Commons to a broad clientele in the short haul, we think we need to make it as easy to use as we can. I would appreciate any further ideas, comments and suggestions that Mark and Jim have on this broader point regarding MME’s future.

As more people use the tool, it’s expected that more bugs and enhancements will surface. So, we need a plan for ongoing tool maintenance. (Nancy)

MME needs additional educational/training materials in addition to what is provided in the built-in help. This was beyond the scope of the [Metadata Workgroup](http://www.mngeo.state.mn.us/workgroup/metadata/index.html). (Nancy)

MnGeo 03/06/14: Outside the scope of this document; however, the help materials need to be coordinated with updates to the software and more help is part of “promoting to the broad clientele in the short haul.”

1. “A release of data under this subdivision must include metadata or other documentation that identifies the original authoritative data source.” [↑](#footnote-ref-1)