

3.0 FEMIS GIS Migration and Configuration

This section provides the instructions to migrate/upgrade and configure the FEMIS GIS to v1.4.7. This process can occur without overwriting any customization that has been done for your EOC.

The v1.4.7 migration and configuration of GIS files on the servers should proceed as follows:

- For each server at the site, determine which of the following three situations applies.
 1. The server contains FEMIS v1.4.6 GIS files that have not been customized or altered in any way.
 2. Some customization changes have been made to the v1.4.6 GIS files on the server, but the EOC does not wish to preserve those customizations.
 3. Some customization changes have been made to the v1.4.6 GIS files on the server, and the EOC wishes to preserve those customizations.
- On one of the servers in Group 1, perform a complete GIS server upgrade (Section 3.1, Migrating the FEMIS GIS from v1.4.6 to 1.4.7).
- On each of the remaining servers in Group 1 and all of the servers in Group 2, delete all of the existing GIS files and replace them by copying all of the GIS files from the server on which the initial GIS server upgrade was performed (see previous bulleted item). See Section 3.2, Copying the v1.4.7 GIS Files to the Other Servers, for detailed instructions.
- On each of the servers (if any) in Group 3, perform an individual GIS server upgrade (Section 3.1). This is necessary to preserve customization changes.

Note: As a precaution, you should backup the /home/femis/gis directory, which has v1.4.6 on the server, using `cp -rp /home/femis/gis /home/femis/gis146` before making any changes to the GIS files.

3.1 Migrating the FEMIS GIS from v1.4.6 to v1.4.7

The FEMIS Setup program will not be able to install the GIS to the PCs until the GIS upgrade has been completed. The GIS upgrade will be performed from a PC with FEMIS V1.4.6 installed and the upgraded files will be written to the server.

Note: If possible, select a PC on which the GIS has not been customized for performing this migration process.

1. Install the v1.4.7 PC COTS on one PC. See Section 4.1, Installing the PC COTS, for instructions. For the FEMIS GIS migration from v1.4.6 to v1.4.7 to proceed, the PC that the v1.4.7 FEMIS GIS migration is performed on **must have the v1.4.7 PC COTS, a v1.4.7 Oracle database, and a valid C:\WINNT\FEMIS.INI file**. If there is not a current C:\WINNT\FEMIS.INI file, see Section 3.1.5.4, Editing the FEMIS.INI File for the GIS Upgrade.
2. Open a telnet window from a PC, and login as user femis.
3. Go to the FEMIS GIS directory.

```
cd /home/femis/gis
```
4. Run the chmod_gis.sh script

```
chmod_gis.sh
```
5. Exit the telnet window.
6. Map i:\ drive on the PC to the server /home/femis/ directory. Connect to the drive as the user femis.
7. Copy the i:\gis\femisgis_utilities.apr file to the local GIS directory.

3.1.1 Upgrading the femisgis.ini Files to v1.4.7

Complete the following steps to upgrade the femisgis.ini files to v1.4.7 from a PC with FEMIS v1.4.6 installed, v1.4.7 COTS, and a valid C:\WINNT\FEMIS.INI file as specified in Step 1 above.

Note: The following steps may encounter files permissions on destination files placed on the UNIX server. Adjust permissions accordingly on the UNIX file server to allow file placement to occur.

1. Map i:\ drive on the PC to the /home/femis directory on the server if not done so already. Connect to the drive as the user femis.
2. Open the FEMISGIS_UTILITIES.APR on the PC by double clicking on the file using Windows Explorer. The file is usually located in C:\femis\gis directory but can be on a different drive if the GIS was installed in a different location than the default. This will start ArcView GIS v3.1.1.
3. Select Upgrade INI V146 -> V147 from the Utilities menu.

A file dialog box displays requesting the name of an ini file on the UNIX server.

4. Find and select i:\gis\<site code>_apr\fgis_lg.ini. Click OK.

A file dialog box displays requesting the name of an ini file on the UNIX server.

5. Find and select `i:\gis\<site code>_apr\fgis_md.ini`. Click OK.

A file dialog box will open requesting the name of an ini file on the UNIX server.

6. Find and select `i:\gis\<site code>_apr\fgis_sm.ini`. Click OK.

3.1.2 Checking the Upgraded v1.4.7 femisgis.ini Files

1. Map `i:\` drive on the PC to the `/home/femis` directory on the server, if not done so already. Connect to the drive as the user `femis`.
2. Open the `FEMISGIS_UTILITIES.APR` on the PC by double clicking on the file using Windows Explorer. The file is usually located in `C:\femis\gis` directory but can be on a different drive if the GIS was installed in a different location than the default. This will start ArcView GIS v3.1.1.
3. Select Check INI Themes from the Utilities menu. A file dialog box displays. Find the Large `femisgis.ini` file (`fgis_lg.ini`) and click OK. This will create a message box and error log file of missing themes from the `femisgis.ini` files in the local GIS directory. Click OK. If there are any missing themes reported, see Section 3.1.5, Troubleshooting the Migration.

A message box will appear reporting any duplicate theme names or theme legend names in the `femisgis.ini` file. If there are duplicate theme and/or legend names, open a text editor and change the theme name and/or legend name to a unique name. Save the file and repeat Step 3 of above.

4. Repeat Step 3 for the Medium (`fgis_md.ini`) and Small (`fgis_sm.ini`) files.

Note: If there are INI files for each EOC (e.g., Maryland), the `fgis_sm.ini`, `fgis_md.ini`, and `fgis_lg.ini` files must be upgraded for each EOC.

3.1.3 Upgrading the Zone Theme

Note: The following steps may encounter files permissions on destination files placed on the UNIX server. Adjust permissions accordingly on the UNIX file server to allow file placement to occur.

1. Map `i:\` drive on the PC to the `/home/femis` directory on the server, if not done so already. Connect to the drive as the user `femis`.
2. Copy `i:\gis\femisgis_utilities.apr` to the local GIS directory on the PC from which the upgrades will be performed if not already done so in previous steps.

3. Open the FEMISGIS_UTILITIES.APR on the PC by double clicking on the file using Windows Explorer. The file is usually located in C:\femis\gis directory but can be on a different drive if the GIS was installed in a different location than the default. This will start ArcView GIS v3.1.1.
4. Select Upgrade Zone Theme from the Utilities menu.
5. Select the CSEPP On-Post EOC Code at the database login window, and click OK.
6. Login at the ODBC Login prompt with the Database user name (<Application Schema>a) and password.
7. At the Enter Zone Filename prompt, select the zone theme name. Due to varying naming conventions, the zone theme name and path differs by CSEPP site. To find the zone theme name, check the \\gis\<sitecode>_apr\femisgis.ini file Zone entry. The Path field will contain the zone theme name.
8. Verify the table is populated with new fields. The zone theme table will be updated with data from the FEMIS database and the zone theme table fields will be rebuilt. After the database has been queried, and the zone theme table is updated, click on the Tables icon in the femisgis_utilities.apr project and open the new table. The table should be populated with new fields (Shape, Zone_id, Zone, Type, Par_pad, Risk_area, Objectname, Objecttype, Objectid, and Population) and records for each zone. If not, see Section 3.1.5.2, Checking the Zone Theme Upgrade.

3.1.4 Upgrading the General Hazard Zone Theme

Note: The following steps may encounter files permissions on destination files placed on the UNIX server. Adjust permissions accordingly on the UNIX file server to allow file placement to occur.

Note: Perform the following steps only if a general hazard zone theme has been added to your site.

1. Map i:\ drive on the PC to the /home/femis directory on the server if not done so already. Connect to the drive as the user femis.
2. Copy i:\gis\femisgis_utilities.apr to C:\FEMIS\GIS on the PC from which the upgrades will be performed.
3. Open the FEMISGIS_UTILITIES.APR in ArcView GIS v3.1.1.
4. Select Upgrade County Zone Theme from the Utilities menu.
5. Select the EOC Code of the Owner of the General Hazard theme (usually the State EOC that contains the depot) at the database login window, and click OK.

6. Login at the ODBC Login prompt with the Database user name (<Application Schema>a) and password.
7. At the Enter Zone Filename prompt, select the general hazard zone theme name. Due to varying naming conventions, the general hazard zone theme name and path differs by CSEPP site. To find the general hazard zone theme name, check the \\gis\<sitecode>_apr\femisgis.ini file county entry. The Path field will contain the general hazard zone theme name.
8. Verify the table is populated with new fields. The general hazard zone table will be updated with data from the FEMIS database. After the database has been queried, and the general hazard zone theme table is updated, click on the Tables icon in the femisgis_utilities.apr project and open the new table. The table should be populated with new fields (Shape, Zone_id, Zone, Type, Par_pad, Risk_area, Objectname, Objecttype, Objectid, Eoc_name, and Population) and records for each zone. If not, see Section 3.1.5.3, Checking the General Hazard Zone Theme Upgrade.
9. Close the femisgis_utilities.apr.

3.1.5 Troubleshooting the Migration

Note: If you have not encountered any problems with the GIS migration, you should skip this section and proceed to Section 3.2, Copying v1.4.7 GIS Files to Other Servers.

If the GIS Migration from v1.4.6 to v1.4.7 did not run successfully, you may have experienced one of the following errors:

- If there were errors experienced during the migration of the femisgis.ini files to v1.4.7 while performing the procedures in Section 3.1.1, Upgrading the femisgis.ini Files to v1.4.7, then see Section 3.1.5.1, Checking the v1.4.6 femisgis.ini File.
- If there were errors experienced during the migration of the Zone theme to v1.4.7 while performing the procedures in Section 3.1.3, Upgrading the Zone Theme, then see Section 3.1.5.2, Checking the Zone Theme Upgrade.
- If there were errors experienced during the migration of the General Hazard Zone theme to v1.4.7 while performing the procedures in Section 3.1.4, Upgrading the General Hazard Zone Theme, then see Section 3.1.5.3, Checking the General Hazard Zone Theme Upgrade.

3.1.5.1 Checking the v1.4.6 femisgis.ini File

The migration of the femisgis.ini files from v1.4.6 to v1.4.7 consists primarily of changes to the data records and minor formatting. Errors in the migration of the v1.4.6 femisgis.ini files will be a result of: 1) the migration scripts cannot find/read the files or 2) the v1.4.6 files are not in the correct format.

Perform the following checks.

- The i:\ drive is mapped to /home/femis as user femis.
- When prompted, the files selected to be upgraded are

```
i:\gis\i:\gis\i:\gis\
```

- The v1.4.6 files are not read-only.
- The femisgis.ini files are in a valid v1.4.6 format (see next section below).

File Format for v1.4.6 femisgis.ini

The first lines of the femisgis.ini file are commented out using a single apostrophe at the beginning of the line ('). These lines are ignored.

[FEMIS_VERSION] – This portion contains information about the version and size of the file. The version should be 1.4.6, the size should be SMALL, MEDIUM, or LARGE and both should have an equal sign (=) as a delimiter. See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
[FEMIS_VERSION]  
FEMIS Version=1.4.6  
FEMISGIS Size designation=MEDIUM
```

[SITE CODE] – This portion should be the 4-character CSEPP site code. The delimiter is an equal sign (=). See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
[SITE_CODE]  
SiteCode=ANAD
```

[DEFAULT_HAZARD_THEME] – This portion is the default GIS theme. The theme should be zone. The delimiter is a colon (:). See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
[DEFAULT_HAZARD_THEME]  
Theme Name: zone
```

[PROJECTION_PARAMETERS] – This portion is the projection information for the GIS. The femisgis.ini file must have information for the Central Meridian, Reference Latitude, False Easting, False Northing, Scale, and Spheroid. Each parameter is followed by a colon (:) and then the parameter information. See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
[PROJECTION_PARAMETERS]
Central Meridian: -87
Reference Latitude:0
False Easting: 500000
False Northing: 0
Scale: 0.99953
Spheroid: SPHEROID_CLARKE1866
```

[AREA_OF_INTEREST] – This portion is the extent of the area of interest. Each parameter is followed by a colon (:) and then the parameter information. See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
[AREA_OF_INTEREST]
origin: -126.00| 23.00
size: 58.00| 27.00
```

' C. Theme parameters – This portion of the femisgis.ini file contains an explanation of the records in the [STATIC_THEMES] and [DYNAMIC_THEMES] sections. All lines in the Theme Parameters section, including the Theme Parameter heading, must be commented with a single quote character ('). See the example below and in the example v1.4.6 femisgis.ini file at the end of this section.

```
' C. Theme parameters
'each line of the input table contains the following theme data in sequence:
'0 "Theme", Theme name in the FEMIS Database Femis Object table. Null "" otherwise.
```

[STATIC_THEMES] – This portion of the femisgis.ini file contains the theme attributes for each static theme in the GIS. See the Theme Comments section for more information about each parameter. There should be 21 items with 20 pipe character (|) delimiters in each record. The fields in the femisgis.ini file are Theme Name, FEMIS Accessible, Type, Load Flag, Visible Flag, Display Order, Label Field, Object Lookup Category, Default Legend, Classification Field, Min Scale, Max Scale, Legend Name, Customize Flag, Symbol, Color, Size, Back Color, Outline Color, Path, and Alternative Prefix. See the example v1.4.6 femisgis.ini file at the end of this section.

[DYNAMIC_THEMES] – This portion of the femisgis.ini file contains the theme attributes for each dynamic theme in the GIS. See the Theme Comments section for more information about each parameter. There should be 21 items with 20 pipe character (|) delimiters in each record. The fields in the femisgis.ini file are Theme Name, FEMIS Accessible, Type, Load Flag, Visible Flag, Display Order, Label Field, Object Lookup Category, Default Legend, Classification Field, Min Scale, Max Scale, Legend Name, Customize Flag, Symbol, Color, Size, Back Color, Outline Color, Path, and Alternative Prefix. See the example v1.4.6 femisgis.ini file at the end of this section.

3.1.5.2 Checking the Zone Theme Upgrade

The migration of the zone theme from v1.4.6 to v1.4.7 depends on a valid v1.4.6 zone theme and a v1.4.7 Oracle database. Errors in the migration of the v1.4.6 zone theme will be a result of: 1) the migration

scripts cannot find/read the zone theme files, 2) the v1.4.6 zone theme files are not in the correct format, or 3) the FEMIS v1.4.7 database was not found.

Perform the following checks.

- The i:\ drive is mapped to /home/femis as user femis
- When prompted, the file selected to be upgraded is

i:\gis\\zone\.shp *
- The v1.4.6 file (<zone theme name>.dbf) is not read-only.
- The zone theme table files are in a valid v1.4.6 format. The v1.4.6 zone theme file should contain the following fields: Shape, Zone_id, Zone, Type, Par_pad, Risk_Area, Objectname, Objecttype, Objectid.
- The zone names (Zone and Objectname records) must have a one-to-one correspondence with the zones in the FEMIS database's ZONE table. To verify, open the FEMIS Data Manager, select ZONE from the list of tables and click Open.
- There must be a one-to-one correspondence with the number of records in the GIS zone theme and the FEMIS database's Zone table. The GIS zone theme table may not have more than one record with the same Zone field record or Objectname field record. (For a given record, the Zone field record must match the Objectname field record of the same record.) For example, a zone theme table cannot have two Zones named 3-A; however, if the zone table has a Zone field and an Objectname field, both should contain 3-A.
- Users must log into the FEMIS database as user name <Application Schema>a and password. If a user name <Application Schema> is entered, the migration will not complete successfully.

Note: Due to varying naming conventions, the Zone theme name differs by CSEPP site. To find the Zone theme name, check the femisgis.ini files Zone entry. The Path field will contain the Zone theme name.

3.1.5.3 Checking the General Hazard Zone Theme Upgrade

Note: This section only applies to those sites that have added a general hazard zone theme (e.g. county-based general hazard zone.)

The migration of the general hazard zone theme from v1.4.6 to v1.4.7 depends on a valid v1.4.6 general hazard zone theme and a v1.4.7 FEMIS database. Errors in the migration of the v1.4.6 general hazard zone theme will be a result of: 1) the migration scripts cannot find/read the general hazard zone theme

files, 2) the v1.4.6 general hazard zone theme files are not in the correct format, or 3) the FEMIS v1.4.7 database was not found.

Perform the following checks.

- The i:\ drive is mapped to /home/femis as user femis.
- When prompted, the file selected to be upgraded is

i:\gis\\< general hazard path>\<general hazard zone_theme_name>.shp *
- The v1.4.6 file (<general hazard zone theme name>.dbf) is not read-only.
- The general hazard zone theme files are in a valid v1.4.6 format. The v1.4.6 general hazard zone theme file should contain the following fields: Shape, Zone_id, Zone, Type, Par_pad, Risk_Area, Objectname, Objecttype, Objectid.
- The general hazard zone names (Zone and Objectname records) must have a one-to-one correspondence with the general hazard zones in the FEMIS database's ZONE table. To verify, open the FEMIS Data Manager, select ZONE from the list of tables and click Open.
- There must be a one-to-one correspondence with the number of records in the GIS general hazard zone theme and the FEMIS database's Zone table. The GIS general hazard zone theme table may not have more than one record with the same Zone field record or Objectname field record. (For a given record, the Zone field record must match the Objectname field record of the same record.) For example, a general hazard zone theme table cannot have two general hazard zones named Jackson; however, if the general hazard zone table has a Zone field and a Objectname fields, both should contain Jackson.
- Users must log into the FEMIS database as user name <Application Schema>a and password. If a user name <Application Schema> is entered, the migration will not complete successfully.

Note: Due to varying naming conventions, the general hazard zone theme name and path differs by CSEPP site. To find the general hazard zone theme name, check the femisgis.ini files Zone entry. The Path field will contain the general hazard zone theme name.

3.1.5.4 Editing the FEMIS.INI File for the GIS Upgrade

Since the FEMIS Setup program could not be used to install the GIS, some manual editing of the FEMIS configuration files may be needed. Edit the %WINDIR%\FEMIS.INI file in a text editor to set the GIS paths as follows:

Go to the [FemisGis] section and edit the following parameters, if they are not correct. Add the values if they do not exist.

```
[FemisGIS]
GISTopDirPC=<DRIVE>\FEMIS\GIS\<SITE CODE>
ViewmarkDir=M:\GIS\Viewmark
GISEditScript=<DRIVE>\FEMIS\GIS\<SITE CODE>\FEMISGIS.APR
GISTopDirNFS=X:\GIS
GISTopDirUNIX=/home/femis/gis
GisSize=unknown
```

where <DRIVE> is the drive specification for the GIS installation, such as C:\.

Add or edit the following parameters as needed, in the [FEMIS Misc] section.

```
[FEMIS Misc]
ExerciseNum=0
Site Code=<site code>
EOC Code=<eoc code>
```

Add or edit the following parameters as needed, in the [<site code>] section.

```
[<site code>]
_GISTopDirPC=<DRIVE>\FEMIS\GIS\<SITE CODE>
_ViewmarkDir=M:\GIS\Viewmark
_GISEditScript=<DRIVE>\FEMIS\GIS\<SITE CODE>\FEMISGIS.APR
_GISTopDirNFS=X:\GIS
_GISTopDirUNIX=/home/femis/gis
```

Save the file and exit.

3.2 Copying v1.4.7 GIS Files to Other Servers

Copy the GIS files from the server on which you performed the first GIS migration/upgrade to all of the other servers that do not have customization changes which need to be preserved.

1. Preserve the old GIS data on each server. Log into the remote server(s) and enter the following commands:

```
% cd /home/femis/gis
% mkdir bkp
% mv <site code>* bkp
```

2. Create a tar file of the upgraded GIS. This may take a while.

```
% cd /home/femis/gis  
% tar cf - <site code>* | compress > <site code>_gis.tar.Z
```

3. Use FTP to copy the tar file to the target server.

```
%ftp <server name>  
Name: femis  
Password: <femis password>  
ftp> cd /home/femis/gis  
ftp> bin  
ftp> put <site code>_gis.tar.Z  
ftp> bye
```

where <site code> is your site code (lower case), such as anad.
<server name> is the host name of the server you are copying to.
The aserisk (*) is a literal asterisk for wild card expansion.

Note: Alternative methods to FTP may be used to distribute the tar file, especially at larger sites where the number of FTP transfers would be high . However, these methods involve opening security doors that may require EOC-to-EOC coordination to accomplish. One mechanism that can work especially well is the UNIX servers' automount capability and the /net file system. These alternative methods require a good consistent network connection to work well. If this is questionable at a site, use the above described FTP method.

4. Log on to the server to which you copied the tar file and extract the tar file with the following commands:

```
% telnet <server name>  
login: femis  
password: <femis password>  
% cd /home/femis/gis  
% zcat <site code>_gis.tar | tar xf -
```

5. Repeat Steps 2-4 for all of the servers that do not have customization changes that need to be preserved.

3.3 Completing the Installation on This PC

Go to Section 4.4, Configuring the PC, to continue and complete the installation on this PC.

Example of a FEMIS GIS.INI file.

'fgis_lg.ini ("large" femisgis.ini for ANAD) -- 01/19/99 (IEM)

[FEMIS_VERSION]
FEMIS Version=1.4.6
FEMISGIS Size designation=LARGE

[SITE_CODE]
SiteCode=ANAD

[DEFAULT_HAZARD_THEME]
Theme Name: zone

[PROJECTION_PARAMETERS]
Central Meridian: -87
Reference Latitude:0
False Easting: 500000
False Northing: 0
Scale: 0.99953
Spheroid: SPHEROID_CLARKE1866

[AREA_OF_INTEREST]
origin: -126.00| 23.00
size: 58.00| 27.00

' C. Theme parameters

'each line of the input table contains the following theme data in sequence:

- '0 "Theme", Theme name in the FEMIS Database Femis Object table. Null "" otherwise.
- '1 "FEMIS Access", Feature themes: Yes or no flag of whether the theme is in the Femis object table Image themes: None or the name of an image catalog to be created. The image catalog should be described in one of the entries of this ini file.
- '2 "Type", Theme feature type; it must be one of: Image, ImgCat, point, line, polygon, event.
- '16.LoadFlag Load the theme ("Yes"), do not load the theme ("No").
- '3 "Status", Theme visibility status when forming the apr.
- '17 DisplayOrder #1 is the theme at the top of the table of contents, and is loaded last (on top of all the other themes).
- '4 "Label Field", Field name used as the default labeling field.
- '5 "Obj Category" Femis theme category; it must be one of the types listed in the _HOME\lookup\obj_type.lut file. Currently: zone, abpc, igloo, facility, tcp, road, siren, known_p. If it is "None", then the theme may not be classified using the look up tables. The classification field should also be set to "simple".
- '6 Default legend. Enter "simple" for a simple legend to show up, or "classify" for a classification legend.
- '7 "Classification Field", The field name to be used in a classified legend. The classified legend will be loaded provided it exists, otherwise it will be created and then loaded. This may happen when the user wants to toggle the simple/classified legend.
- '8 "Min Scale", Below the minimum scale, the theme is not displayed.
- '9 "Max Scale", Above the minimum scale, the theme is not displayed.
- '10 "Legend Name", Name desired for the legend.
- '18 Customize The Customization Flag is meaningful only in the Dynamic themes:"Yes" Yes -- Use the current symbolization parameters in this theme line in the INI file (do not overwrite when dynamic theme is updated). No --> Allow symbol parameters in this line of the INI to be overwritten with values from DB when dynamic theme is updated. N/A is for static themes.
- '11 "Symbol", Symbol number to be used in a simple classification.
- '12 "Color", Foreground and outline color for theme symbols, if they can be colored.
- '13 "Size", Symbol size.
- '19 BackGround Color BackGround Color of polygonal symbols

'20 Outline Color Outline Color of polygonal symbols

'14 "Path" Appended to the Home value specified in the femis.ini file for the gis data.

'15 "Alternate prefix" Used as a prefix to the "Path" instead of the Home value. Only the load themes script uses this prefix to locate and read alternate source directory for big files. Any auxiliary files will be written using the Home prefix.

'21 Dynamic Theme True or false flag set by the location of theme in the ini file. (in the static or dynamic theme section)

[STATIC_THEMES]

'Theme 'Name	FEMIS Access	Type	Load Flag	Visible Flag	Display Order	Label Field	Object Lookup Category	Default Legend	Classifi- cation Field	Min Scale	Max Scale	Legend Name	Customize Flag	Color Symbol	Back Color Size	Outline Color Color	Path	Alternate Prefix	
anad500k	None	Image	Yes	off	72	None	None	None	None	400000	1000000	Map Image 1:500K	N/A	0	0	0	0	5	images\anad500k.tif none
anad_250k	None	Image	Yes	off	71	None	None	None	None	150000	400000	Map Image 1:250K	N/A	0	0	0	0	5	images\anad250k.tif none
anad100k	None	Image	Yes	off	70	None	None	None	None	50000	150000	Map Image 1:100K	N/A	0	0	0	0	5	images\anad100k.tif none
cat24k	None	ImgCat	Yes	off	69	None	None	None	None	5000	50000	Map Image 1:24K	N/A	0	0	0	0	5	images\im_24k\cat24k.dbf none
330b.tif	cat24k	Image	Yes	off	68	None	None	None	None	10000	50000	Map Image 1:24K	N/A	0	0	0	0	5	
river	no	Line	Yes	off	66	Pname	None	simple	None	400000	25000000	River Reaches	N/A	0	28	0	0	5	water\river none
anad_luc	no	Polygon	Yes	off	65	Class	None	classify	Class	150000	2000000	Land Use Land Cover	N/A	5	10	1	0	5	environment\anad_luc none
flood_al	no	Polygon	Yes	off	64	None	None	simple	None	24000	2000000	Statewide Floodplains	N/A	4	7	1	0	5	water\flood_al none
anadc30	no	Line	Yes	off	62	Contour	None	simple	None	100000	2000000	30m Elevation Contours	N/A	0	52	1	0	5	environment\anadc30 none
cedblock	yes	Polygon	Yes	off	59	Blk	None	simple	None	2000	300000	Census Blocks	N/A	0	4	1	0	5	cedblock\anad_tb none
anad_pl	no	Polygon	Yes	off	58	MCD_name	None	simple	None	5000	15000000	Census Designated Places	N/A	4	45	1	0	5	cedblock\anad_pl none
anad_mcd	no	Polygon	Yes	off	57	MCD_name	None	simple	None	12000	15000000	Minor Civil Divisions	N/A	0	5	1	0	5	boundaries\anad_mcd none
anad_pc	yes	Polygon	Yes	off	56	Wedgetype	abpc	classify	Wedgetype	20000	15000000	Accident Based Plan Cat.	N/A	0	3	1	0	5	abpc\anad_pc none
anad_ab	no	Polygon	Yes	off	55	Name	None	classify	Type	20000	15000000	Administrative Boundary	N/A	0	0	1	0	5	boundaries\anad_ab none
anad_ut	no	Line	Yes	off	54	None	None	simple	None	5000	1500000	Utility Lines	N/A	0	52	1	0	5	utilities\anad_ut none
zone	yes	Polygon	Yes	on	53	Zone	Zone	classify	Type	5000	15000000	Emergency Zones	N/A	0	16	2	0	5	zone\anad_ez none
anad_paz	no	Polygon	Yes	off	52	Zone	Zone	classify	Type	5000	15000000	Protective Action Zones	N/A	0	2	2	0	5	zone\anad_paz none
anad_irz	no	Polygon	Yes	off	51	Zone	Zone	classify	Type	5000	15000000	Immediate Response Zones	N/A	0	7	2	0	5	zone\anad_irz none
county	yes	Polygon	Yes	on	50	Objectname	None	simple	None	20000	0	County Boundaries	N/A	5	0	3	0	44	boundaries\anad_sc none
cstc_fd	no	Polygon	Yes	off	49	Name	None	simple	None	20000	15000000	St.Clair Fire Districts	N/A	0	0	1	0	5	fire_dis\cstc_fd none
bg_d_pop	no	Polygon	Yes	off	38	Blkgrp_id	None	simple	None	5000	1500000	Workplace Block Group	N/A	5	4	2	0	5	cedblock\bg_d_pop none
stream	no	Line	Yes	off	33	Fename	None	simple	None	500	1000000	Streams	N/A	0	57	1	0	5	water\stream none
lake	no	Polygon	Yes	off	32	Laname	None	simple	None	500	2500000	Lakes & Rivers	N/A	3	57	1	0	5	water\lake none
anad_rm	no	Line	Yes	off	31	Name	None	simple	None	500	20000000	Major Roads	N/A	2	8	1	0	5	transportation\anad_rm none
anad_rr	no	Line	Yes	off	30	Fename	None	simple	None	500	25000000	Railroads	N/A	0	32	1	0	5	transportation\anad_rr none
ctal_rta	no	Line	Yes	off	29	Route	None	simple	None	500	20000000	Talladega Route Alerts	N/A	0	5	1	0	5	rta_ctal\ctal_rta none
cstc_rta	no	Line	Yes	off	28	Route	None	simple	None	500	20000000	St. Clair Route Alerts	N/A	0	5	1	0	5	rta_cstc\cstc_rta none
anad_hw	no	Line	Yes	on	27	Name	None	simple	None	500	20000000	Interstates	N/A	0	8	2	0	5	transportation\anad_hw none
anad_ex	no	Point	Yes	off	26	Objectname	None	simple	None	500	20000000	Interstate Exits	N/A	159	10	10	0	5	transportation\anad_ex none
anad_pn	no	Point	Yes	off	25	Name	None	simple	None	500	1000000	Place Names	N/A	4	35	6	0	5	landmarks\anad_pn none
igloo_p	yes	point	Yes	on	24	Igloo_Name	igloo	classify	Content	10	2000000	Igloos	N/A	14	8	10	0	5	igloo_p\anad_ip none
zone_dep	no	Polygon	Yes	on	23	Objectname	None	Simple	None	1000	15000000	Chem. Limited Area	N/A	0	10	2	0	5	zone\anad_dep none
mettower	yes	point	Yes	on	22	Namespeed	None	simple	None	1000	2000000	Met Towers	N/A	75	5	12	0	5	mettower\anad_mt none

[DYNAMIC_THEMES]

'Theme 'Name	FEMIS Access	Type	Load Flag	Visible Flag	Display Order	Label Field	Object Lookup Category	Default Legend	Classifi- cation Field	Min Scale	Max Scale	Legend Name	Customize Flag	Color Symbol	Back Color Size	Outline Color Color	Path	Alternate Prefix	
kpoly_anad	yes	Polygon	yes	off	21	ObjectName	None	simple	None	1000	15000000	ANAD Known Polygons	No	8	44	2	0	53	kpoly\kpoly_anad none
FLOOD_anad	yes	Polygon	yes	off	20	ObjectName	None	simple	None	1000	2000000	ANAD Flooded Areas	No	36	28	2	0	34	kpoly\flood_anad none
kpoly_aema	yes	Polygon	yes	off	19	ObjectName	None	simple	None	1000	15000000	AEMA Known Polygons	No	8	44	2	0	53	kpoly\kpoly_aema none
FLOOD_aema	yes	Polygon	yes	off	18	ObjectName	None	simple	None	1000	2000000	AEMA Flooded Areas	No	36	28	2	0	34	kpoly\flood_aema none
kpoly_ccal	yes	Polygon	yes	off	17	ObjectName	None	simple	None	1000	15000000	CCAL Known Polygons	No	8	44	2	0	53	kpoly\kpoly_ccal none
FLOOD_ccal	yes	Polygon	yes	off	16	ObjectName	None	simple	None	1000	2000000	CCAL Flooded Areas	No	36	28	2	0	34	kpoly\flood_ccal none
kpoly_ccla	yes	Polygon	yes	off	15	ObjectName	None	simple	None	1000	15000000	CCLA Known Polygons	No	8	44	2	0	53	kpoly\kpoly_ccla none
FLOOD_ccla	yes	Polygon	yes	off	14	ObjectName	None	simple	None	1000	2000000	CCLA Flooded Areas	No	36	28	2	0	34	kpoly\flood_ccla none
kpoly_ccle	yes	Polygon	yes	off	13	ObjectName	None	simple	None	1000	15000000	CCLE Known Polygons	No	8	44	2	0	53	kpoly\kpoly_ccle none
FLOOD_ccle	yes	Polygon	yes	off	12	ObjectName	None	simple	None	1000	2000000	CCE Flooded Areas	No	36	28	2	0	34	kpoly\flood_ccle none
kpoly_ceto	yes	Polygon	yes	off	11	ObjectName	None	simple	None	1000	15000000	CETO Known Polygons	No	8	44	2	0	53	kpoly\kpoly_ceto none

**Federal Emergency Management
Information Systems (FEMIS)**

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FLOOD_ceto	yes	Polygon	yes	off	10	ObjectName	None	simple	None	1000	2000000	CETO Flooded Areas	No	36	28	2	0	34	kpoly\flood_ceto	none
kpoly_cstc	yes	Polygon	yes	off	9	ObjectName	None	simple	None	1000	15000000	CSTC Known Polygons	No	8	44	2	0	53	kpoly\kpoly_cstc	none
FLOOD_cstc	yes	Polygon	yes	off	8	ObjectName	None	simple	None	1000	2000000	CSTC Flooded Areas	No	36	28	2	0	34	kpoly\flood_cstc	none
kpoly_ctal	yes	Polygon	yes	off	7	ObjectName	None	simple	None	1000	15000000	CTAL Known Polygons	No	8	44	2	0	53	kpoly\kpoly_ctal	none
FLOOD_ctal	yes	Polygon	yes	off	6	ObjectName	None	simple	None	1000	2000000	CTAL Flooded Areas	No	36	28	2	0	34	kpoly\flood_ctal	none
siren	yes	Point	Yes	off	4	Objectname	None	simple	Objecttype	1000	15000000	Sirens	Yes	25	32	10	0	5	siren\siren	none
known_p	yes	Point	Yes	off	3	Objectname	None	simple	Objecttype	1000	2000000	Known Points	Yes	16	44	12	0	5	known_p\known_p	none
tcp	yes	Point	Yes	off	2	Objectname	tcp	simple	Objecttype	1000	15000000	Traffic Control Points	Yes	26	51	10	0	5	tcp\tcp	none
facility	yes	Point	Yes	on	1	Objectname	Facility	classify	Objecttype	1000	0	Facilities	Yes	163	50	4	0	5	facility\facility	none