Rosemary Stenback

Columbus PSC 505 Science Drive Madison, WI 53711 Phone 608/204-0082, ext 202 rsstenba@usgs.gov

Instructions for use of the templates for the Flood Inundation Mapping Initiative (FIMI) map sheets

Note: These map templates are 22 by 17 inches, in either portrait or landscape view. They are designed to be relatively straightforward to use, so that visual information specialists need to update only the critical info, such as the SIM number, colophon, title, map sheet number, disclaimer, lat/long, explanation, etc. The author provides the inundation areas, usually represented as a series of Arc polygons representing different flood stages, superimposed on a base image. After the initial map is done for a report, the remaining maps incorporate the base image and the unique map information for that sheet. The maps are usually boilerplate, so it isn't like doing 30 unique maps.

Map templates are at:

http://water.usgs.gov/osw/flood_inundation/toolbox/librarytools.html

An author should always go to the Web site to download the map and pamphlet (booklet) templates before starting a new FIMI report, as they may have been revised and are the most current. For the same reasons, a visual illustration specialist should always go to the Web site and download the map and pamphlet templates before starting final production and layout of a new FIMI report.

To see some examples of published FIMI reports, go the Publications Warehouse search page (http://pubs.er.usgs.gov/) and type in "flood-inundation," chose Advanced Search, and then select report series (SIM or SIR, depending upon your report). You can fine tune the search as needed.

For example, see SIM 3135 and SIM 3137. The two reports differ somewhat in how the metadata are set up: individual metadata files for SIM 3135, compared to one comprehensive metadata file for SIM 3157. SIM 3135 has raster files with its accompanying metadata, because raster files were requested by the cooperator (EPA). Also, SIM 3135 is in landscape view, and SIM 3157 is in portrait view. The content of the two templates is the same.

Some basic final production and layout steps listed below are common to the FIMI SIM and SIR map sheets.

Outside of the map

- 1. Determine, from the orientation of the base image, whether the map should be in landscape or portrait view.
- 2. Add the correct bar scale. The scale fraction will no longer be used, because it may be misleading as these maps may be viewed or printed at varying scales.

- 3. To position the map image, first try centering it in the template using the template image as a guide. If you have the software add-on MAPublisher, you can import the image (and later the Arc polygons); otherwise just manually place the image. The size of some images may require them to be placed to one side of the sheet rather than centered; for example, see *SIM 3275*.
- 4. Be sure to update latitude and longitude coordinates and tick placement. Some cooperators may want State Plane, UTM, or other coordinate systems on the map, and it is best to find that out before laying out all of the maps. A minimum of two latitude and longitude ticks on each side of the map is required. Esri Arc will generate labels such as 87° 25' 00" W, but traditional USGS style is to include only the numbers, not the direction, and not 00 minutes or seconds if none of the labels carry a value in that position. (For example, if all of the labels have 00" in the seconds position, it is not necessary to have seconds in any of the labels). Delete any extraneous minutes or seconds and the direction.
- 5. The road symbols on the templates are to spec. (See FGDC A–28–1 (section 28) at http://ngmdb.usgs.gov/fgdc_gds/geolsymstd/download.php). In some special cases, however, the road symbols might be difficult to see or be illegible; if so, then change Univers 47 Condensed Light to Univers 67 Condensed Bold, and enlarge the symbols slightly so that the numbers are legible. (The shield symbols could also be enlarged if needed.) Corresponding changes should then be made to the explanation box to match type size and style. Use only Univers fonts for this, and try not to make these changes regularly, because the specification road shields help give the FIMI products a uniform appearance.
- 6. Update the cooperation note to match the content in the accompanying SIM pamphlet or SIR booklet (there may not be cooperators).
- 7. Update the map number, or if is not yet assigned, place "XXXX" as a placeholder (you can use magenta for all placeholders as that color is easy to see). Update the number of sheets in the SIM or SIR.
- 8. Import or place into the file the correct base image and projection information in the lower left, under the image neatline.
- 9. Update the suggested citation with the citation in the SIM pamphlet or SIR booklet, including the number of pages in the pamphlet/booklet and the total number of map sheets in the report.
- 10. Update the colophon contact info and file retrieval info for the report, to the lower right of the map. Add the date of manuscript approval to the colophon.
- 11. Update the title, authorship, etc.
- 12. Add the SIM or SIR report number to each map sheet, in the upper right area underneath the banner and in the suggested citation.

Inside the map

1. Label the main drainage and any important ancillary drains. It is advised that flow arrows be used as well. Some of the personnel who might use the maps will not be from the area and may not be familiar with it (particularly emergency or FEMA folks).

- 2. Label the town or city. Add any state or U.S. highway numbers, particularly those that would be used by emergency personnel or that illustrate main egress to the area. Adding a couple of local streets is a good idea as well, because they help to orient the user.
- 3. Review and update the disclaimer. This disclaimer was approved by the Bureau Approving Officials and the Water Discipline, but each disclaimer will need to have the correct streamgage numbers, the correct reach or confluence, and information specific to the report added to it. Not all disclaimers will need the National Weather Service comment, so update or delete as needed. Please check the Web site for the NWS in the disclaimer to make sure it is the one you want and is current. Paragraph one should end with "...map sheets."
- 4. All features in the map must be defined in the explanation. Conversely, if a feature in the explanation is not on the map, then delete it. Make the streamgage number in the explanation match the one on the map, likewise for highway or route marker numbers in the explanation and on the map. Update the explanation caption (below the word "Explanation," if included).
- 5. Update and define the area location diagram as needed.

Online posting information

The map sheet files that you will receive from the author are generally 30–80 MB, and the map images are sometimes embedded in Adobe Illustrator. When you produce the final PDF map sheets for posting online, use the setting PDF/x-4 to reduce the file size yet maintain acceptable resolution. In addition, save the map sheets in JPEG format for quick viewing.

Separate sheets of 10–15 maps (single-gage libraries) will follow the posting format of *http://pubs.usgs.gov/sim/3231/*. Link the sheets to a separate directory, so that you don't have a long list of sheets and a lot of white space on the Web page.

Use a table for double-gage libraries, and the author should supply the template for the table. For example, see table 4 in SIM 3226 at http://pubs.usgs.gov/sim/3226, although the report may already contain a table that is suitable or very close to the SIM 3226 example.

The download directory style on the sidebar should follow that of SIM 3220 at http://pubs.usgs.gov/sim/3220/.