

FAQs for GIS Inundation Map Initiative

The following Frequently Asked Questions (FAQs) have been compiled based on discussions with various dam owners from across the country.

In the event you would like clarification on any of these items or wish to add information, refer to the contact list in your Regional Office letter outlining the new requirements or speak with your project engineer. To better assist you, all questions/answers have been categorized into [general](#), [scaling](#), [technical](#), [cross-sections](#), and [formatting](#) sections.

General

1. If my EMA(s) does not have GIS capability, then is there anything I need to do?

Aside from sending your Regional Office a letter stating this, a GIS capability discussion should occur during the annual EAP coordination meeting. When or if any EMA(s) acquire GIS capability, then a plan and schedule should be submitted outlining when digitization of the inundation map will take place.

2. If our inundation area requires involvement of multiple EMAs, but only one has GIS capability, do we need to have the entire inundation area digitized?

No, you only need to have the inundation area digitized that can be utilized by the one EMA. However, you might find a cost savings in the long-term with having your entire area done at one time, should the other EMAs become GIS capable.

Scaling

1. Does the line which identifies the cross-section on the map have to be the width of the inundation at that area?

Yes, the line should, at a minimum, span between the left and right extents of the inundation area.

2. In terms of scaling the electronic copy of the map that will be georeferenced, what do you want to see?

The electronic (raster) copy of the map should be at the same scale as the paper copies included in the EAP. The scale required for the paper maps is discussed in Chapter 6 of the Engineering Guidelines. The map should not only include the points which make its georeferencing possible, but also any important features which might be helpful for EMAs.

Technical

1. Can I use other file formats (geodatabase, DWG, etc.) in lieu of shapefiles?

Yes, provided that the file format used can meet all of the technical specifications listed in Chapter 6, and the format can be imported and viewed using ESRI's ArcGIS software. Many design software packages use an imaginary grid to plot drawings on. Keep in mind that this imaginary XY grid may not be translatable into a true coordinate system, such as the required Albers Equal Area Conic projection.

2. Do we need a metadata file for the raster?

Yes, as it is explicitly stated in the General Specifications portion of the letter, each file must have its own metadata file.

3. Do the reference points on the raster maps need to be physical features, such as a road intersection or a surveying landmark?

No, these points are used exclusively for georeferencing and need not be physical features. A simple point in space with an XY coordinate is sufficient. Please note that distinct features of the project should be marked with points (i.e. powerhouse, remote dike, spillway, etc.), and these points should be placed at the approximate center of the structure.

Cross-Sections

1. Do we need cross sectional information for the section identified (i.e. geometry/shape).

No. The intent of this initiative is to simply reproduce the current paper maps in a usable GIS format for EMAs and not to obtain cross-section data that can be input to a flood routing program. Cross section files DO NOT need to include topographic information, i.e. a 3-D shapefile.

Formatting

None at this time.