**AHPS Static Flood Inundation Mapping – Final Deliverable Checklist**

The **<<*partner*>>** will provide the NWS with the following data/info upon completion:

| **Item** | **Complete** | **Description** |
| --- | --- | --- |
| **1** | Correction  Required | **Study Extent & Model Extent**  Format: ESRI shapefile polygon and line (Geographic NAD83).  Items: (1) Polygon file to describe the extent of the study area as it will be viewed on AHPS. (2) Line file defining the extent of the hydraulic model for inundation mapping in the channel.  Notes: (1) The inundation extent lines should cross the center line of the channel and align with the extent of the highest inundation mapping level. (2) The study extent polygon should create a boundary of the area that is to be displayed on AHPS in a rectangular shape oriented with a north\south line. Study extent may be adjusted based upon model corrections. |
| **2** | YES | **Stream Centerline**  Format: ESRI shapefile line (Geographic NAD83).  Items: Stream centerline.  Notes: (1) Stream centerline should be the centerline that was used to create the hydraulic model. (2) Stream centerline should be adjusted to match orthophoto prior to hydraulic model development. |
| **3** | Correction  Required | **FEMA Studies**  Format: ESRI shapefile polygons (Geographic NAD83).  Items: floodway, 100-yr, 500-yr boundaries. Will need to separate the single FEMA Study into 3 individual shapefiles for the floodway, 100-yr and 500-yr boundaries.  Notes: FEMA study information is not required for locations where FEMA studies do not exist or are not planned as part of the inundation mapping project. |
| **4** | Correction  Required | **Inundation Polygons**  Format: ESRI shapefile polygons (Geographic NAD83).  Items: Inundation polygons for the flood stage elevations running from action stage through the record flood (note, elevations based NAVD88).  Notes: (1) Inundation polygons must be created at equal intervals. Intervals may be sized according to site characteristics and may range from 0.1 ft to 1.0 ft. (2) Inundation polygons should use the following naming convention elev\_*feet*\_*tenth*.shp. Example for an inundation layer at 78.3 feet NAVD88 the file would be named elev\_78\_3.shp. (3) Inundation polygons must pass the QC standards provided by the NWS (see *Partner QA Checklist*). (4) The presence of and hydraulic effect of bridges should be reflected in the inundation polygons at each depth interval. If the entire bridge decking is not inundated, then the polygons should be clipped adjacent to the upstream and downstream side of the bridge to show that the bridge decking is dry. If all or part of a bridge decking is inundated, then all or part of the bridge decking should be shown as covered by the inundation polygon. |
| **5** | Correction  Required | **Inundation Water Depth Rasters**  Format: ESRI grid (Geographic NAD83).  Items: Grids created for all inundation mapping elevations that describe the depth of the inundation at each elevation.  Notes: (1) Raster files must be created at equal intervals that correspond with the inundation polygons equal intervals. (2) Raster files should use the following naming convention elev\_*feet*\_*tenth*. Example for a raster layer at 78.3 feet NAVD88 the file would be named elev\_78\_3. The raster file naming convention should be consistent with the naming convention of the inundation polygons. (3) Raster files should be created at a scale equal to the scale of the underlying terrain data. (4) Raster files must pass the QC standards provided by the NWS (see *Partner QA Checklist*). (5) The presence of and hydraulic effect of bridges should be reflected in the inundation depth grids at each depth interval. If the entire bridge decking is not inundated, then the depth grids should be clipped adjacent to the upstream and downstream side of the bridge to show that the bridge decking is dry. If all or part of a bridge decking is inundated, then all or part of the bridge decking should be shown as covered by the depth grids and the depth of water over the bridge should be calculated for the inundated sections of the bridge. |
| **6** | YES | **Orthophotos**  Format: Multi-resolution Seamless Image Database (MrSID) format preferred but JPEG2000 (JP2) is also acceptable (Geographic NAD83).  Item: Orthophotos of the study area. Either color orthophotos or black and white orthophotos are acceptable.  Notes: (1) If a third party owns orthophoto data, then provide a copy of the permission for unrestricted use by the NWS. (2) USGS DOQ data are acceptable. (3) Orthophotos should overlap and extend 2000 ft beyond the boundary of the study area. |
| **7** | Correction Required | **Transportation**  Format: ESRI shapefile line (Geographic NAD83).  Items: Transportation center lines. Separate shapefiles delivered for: interstate highways, major roads, minor roads and rail lines. Roads should include a table with road name attribute information.  Notes: (1) Road should be clipped with a buffer that is 2000 ft outside the study extent polygon area. Note: will need to extend clip area to 5,000 ft outside the study extent polygon. (2) Roads data should have been created at a scale that makes them look reasonable when presented over the background orthophoto. (3) Roads should contain an attribute table that lists the road name in a column named “RoadName” as it should appear on the web graphic. RoadName field needs to be added to one layer (4) The shapefiles will not be edited by the AHPS contractor, so check the capitalization, level of detail etc, and make any edits that would be important for display on the AHPS FIM pages. |
|  | Missing | **Metadata**  Format: ESRI XML metadata file.  Items: FGDC (Federal Geographical Data Committee) compliant metadata records. One metadata record should be created for each of the following groups of data: study area, transportation, inundation area shapefiles, inundation depth grids,  Notes: See NWS example metadata files for minimum requirements. |