UNCERTAINTIES AND LIMITATIONS FOR USE OF FLOOD-INUNDATION MAPS

Although the flood-inundation maps represent the boundaries of inundated areas with a distinct line, some uncertainty is associated with these maps. The flood boundaries shown were calculated based on water stages (water-surface elevation) and streamflows at selected USGS streamgages. Water-surface elevations along the stream centerlines were estimated by steady-state hydraulic modeling, assuming unobstructed flow, and representing floodplain elevations and hydrologic conditions existing on March 1, 2013. Unique meteorological factors (timing and distribution of precipitation) may cause actual flood extents along the modeled reach to vary from those shown on the flood-inundation maps. Floods may or may not have occurred during testing in order to reduce uncertainty in the water-surface elevations and hydrologic conditions existing on March 1, 2013. Unique meteorological factors (timing and distribution of precipitation) may cause actual flood extents along the modeled reach to vary from those assumed during a flood, which may lead to uncertainties in the modeled flood extents. Additional factors that may influence flood extents are: increases in the streambed elevation or roughness, backwater from tributary streams, or other hydrometeorological conditions such as changes in the streambed elevation or roughness, or increases in the snowpack. Flood boundaries were adjusted using a manual process, or backwater from local tributaries to the main stem river. The accuracy of the flood extents shown on these maps will vary with the accuracy of the topographic data used in the flood-inundation model. Additional uncertainties and limitations pertinent to this study are described in the document accompanying the set of flood-inundation map plates.

If this series of flood-inundation maps will be used in conjunction with National Weather Service (NWS) river forecasts, the user should be aware of additional uncertainties that may be inherent in NWS forecast procedures. The NWS uses forecast models to estimate the quantity and timing of water flowing through selected stream reaches in the United States. These forecast models do not include the effects of local ground water by precipitation and snowmelt, or include the movement of backwater along the main stem river, or predict the flow and stage hydrograph for the stream at a given location (AHPS forecast point) throughout the forecast period (every 6 hours and 3 to 5 days out in many locations); for more information concerning this publication, contact: Director, Indiana Water Science Center, U.S. Geological Survey, 5957 Lakeside Blvd., Indianapolis, IN 46278, (317) 290–3333. For more information concerning this publication, contact: Director, Indiana Water Science Center, U.S. Geological Survey, 5957 Lakeside Blvd., Indianapolis, IN 46278, (317) 290–3333. For more information concerning this publication, contact: Director, Indiana Water Science Center, U.S. Geological Survey, 5957 Lakeside Blvd., Indianapolis, IN 46278, (317) 290–3333.

DISCLAIMER

Inundated areas shown should not be used for navigation, regulatory, permitting, or other legal purposes. The USGS provides these maps "as-is" for a quick reference, emergency planning, and for use in legal decisions or settlement of flood liability, with no responsibility for legal liability or responsibility resulting from the use of these data.