UNCERTAINTIES AND LIMITATIONS FOR USE OF FLOOD-INUNDATION MAPS

Although the flood-inundation maps represent the boundaries of inundated area with a distinct line, some uncertainty is associated with these maps. The flood boundaries shown were estimated based on water stages (water-surface elevations) and are at selected USGS streamgages. Water-surface elevations along the streams were estimated by steady-state hydraulic modeling, assuming unobstructed flow, and using streamflow and hydrologic data anticipated at the USGS streamgage(s). The hydraulic model reflects the land cover characteristics and any bridges, dams, levees, or other hydraulic structures existing as of December 2011. Unique environmental factors (e.g., flood damage) may affect the flow and stage along selected USGS streamgages. Additional errors may be associated due to variability in flow conditions and unobstructed flow assumptions. The hydraulic modeling approach used during this study was in accordance with the USGS Scientific Investigation Report 2006–5008. As with all flood-inundation maps, the uncertainty is related to the natural variability of the hydraulic modeling process and the model inputs. The uncertainty may vary between areas due to the unique characteristics of the study area (e.g., urban or rural, different types of topography) and the unique meteorological conditions that occurred during the flood. The uncertainty may also vary between flood events due to the significant change in the water-surface elevation for the same flood event. In this way, flood-inundation maps will not conclusively identify the flood extent maps. These maps provide a general guide to flooded areas for emergency operations. The flood-inundation maps were not intended to be used for navigation, regulatory, permitting, or other legal purposes. The USGS provides these maps “as-is” for a quick reference, emergency planning tool but assumes no legal liability or responsibility resulting from the use of this information.

FLOOD-INUNDATION MAP FOR SPENCER, INDIANA
Corresponding to a Stage of 25 Feet and an Elevation of 550.63 Feet

At U.S. Geological Survey
Streamgage Number 03357000 on the White River
By
Elizabeth A. Nystrom
2013

Preparing Flood-inundation maps for Spencer, Indiana
Corresponding to a Stage of 25 Feet and an Elevation of 550.63 Feet