Flood-Inundation Map for Fort Wayne, Indiana

Corresponding to a Stage of 22.00 Feet and an Elevation of 770.46 Feet (NAVD88)
at the U.S. Geological Survey Streamgage Number 04182000 on the St. Marys River

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Prepared in cooperation with the City of Fort Wayne, Indiana

Scientific Investigations Map 3205
Sheet 11 of 11
Pamphlet accompanies map

EXPLANATION

Flood-inundation area
Flow arrow
River
Limit of study area
USGS Streamgage and number
Interstate route marker
U.S. water-markert

DISCLAIMER FOR FLOOD-INUNDATION MAPS

These flood-inundation maps show the locations of inundated areas as of a single point in time, an event that is associated with these maps. The flood inundation areas were determined based on water stages and streamflows at selected U.S. Geological Survey (USGS) streamgages. Water-surface elevations along the stream reaches were estimated by steady-state hydraulic modeling, assuming unobstructed flow, and using streamflow and stage-discharge relationships at the USGS gage, or after hydrologic analysis and stage-discharge relationships modified during September 2011. Digital topographic data (Digital Elevation Model) was used to calculate the quantity and timing of water flowing through selected channel reaches of the St. Marys River. These flow models (1) estimate the amount of runoff generated by precipitation and snowmelt, (2) simulate the movement of floodwaters as river streams reach their banks, and (3) project the river and stage (and water-surface elevation for the stream at a given location) throughout the forecast period (every 6 hours and 3 to 5 days out in many locations). For more information on AHPS forecasts, please see: http://water.weather.gov/ahps/pcpn_and_river_forecasting.pdf.

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The accuracy of the floodwater extent portrayed on these maps will vary with the accuracy of the digital elevation model used to simulate the flow surface. Additional uncertainties and limitations pertinent to this study may be described elsewhere in this report.

Although the flood-inundation maps represent the boundaries of inundated areas with a distinct line, some uncertainty is expected in the precise location of those areas due to factors such as variations in flood stage, streamflows and water-surface elevations, and error in the accuracy of the digital elevation model used to simulate the flow surface. Flood-inundation maps are intended to provide a general indication of where flooding may occur. These maps are intended for the purposes of emergency planning and public information and should not be used for navigation, regulatory, permitting, or other purposes. The USGS makes these maps “as is” for a quick reference, emergency planning tool, and does not assume any legal liability or responsibility resulting from the use of this information.

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