FLOOD-INUNDATION MAPS

Flood-inundation maps represent the boundaries of inundated areas with a distinct line, some uncertainty is associated with these maps. The flood-inundation areas were identified based on water stages and streamflows at selected U.S. Geological Survey streamgages. Water-surface elevations along the stream reaches were estimated by steady-state hydraulic modeling, assuming unobstructed flow, and using streamflow and stage-discharge rating curves applied at the U.S. Geological Survey. The hydraulic model reflects friction losses, water storage, and topographic features along the river. Additional areas may be flooded due to saturated soils such as marshes or the drowned elevation of floodplain, tributary, and major. The models along a main channel, or backwater from local detention in or near the study area. The assumption of the simulation point and the accuracy of the digital elevation model used to simulate the flood-surface. Additional uncertainties and limitations pertinent to this study may be described elsewhere in this report.

According to the U.S. Geological Survey, the hydrologic model used to simulate the flood-surface includes an overland flow model to simulate the quantity and timing of water flowing through unconfined regions such as rivers and lakes. These flow models simulate the amount of runoff generated by precipitation and snowmelt, and the movement of water over flatland. The flood-surface is modeled to vary from those assumed during a flood, which may lead to deviations in the water-surface elevation and inundation boundaries shown. Additional areas may be flooded due to saturated soils such as marshes or the drowned elevation of floodplain, tributary, and major. The models along a main channel, or backwater from local detention in or near the study area. The assumption of the simulation point and the accuracy of the digital elevation model used to simulate the flood-surface. Additional uncertainties and limitations pertinent to this study may be described elsewhere in this report.

Flood-Inundation Map for Fort Wayne, Indiana

Corresponding to a Stage of 20.00 Feet and an Elevation of 768.46 Feet (NAVD88)

at the U.S. Geological Survey Streamgage Number 04182000 on the St. Marys River

By

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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 flood-surface. Additional uncertainties and limitations pertinent to this study may be described elsewhere in this report.

These forecast models (1) estimate the amount of runoff generated by precipitation and snowmelt, (2) simulate the movement of water-surface elevation and inundation boundaries, (3) estimate the flow and stage (land-water surface elevation) for the stream at great locations (AHPS forecast point) 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.

Projection: Transverse Mercator