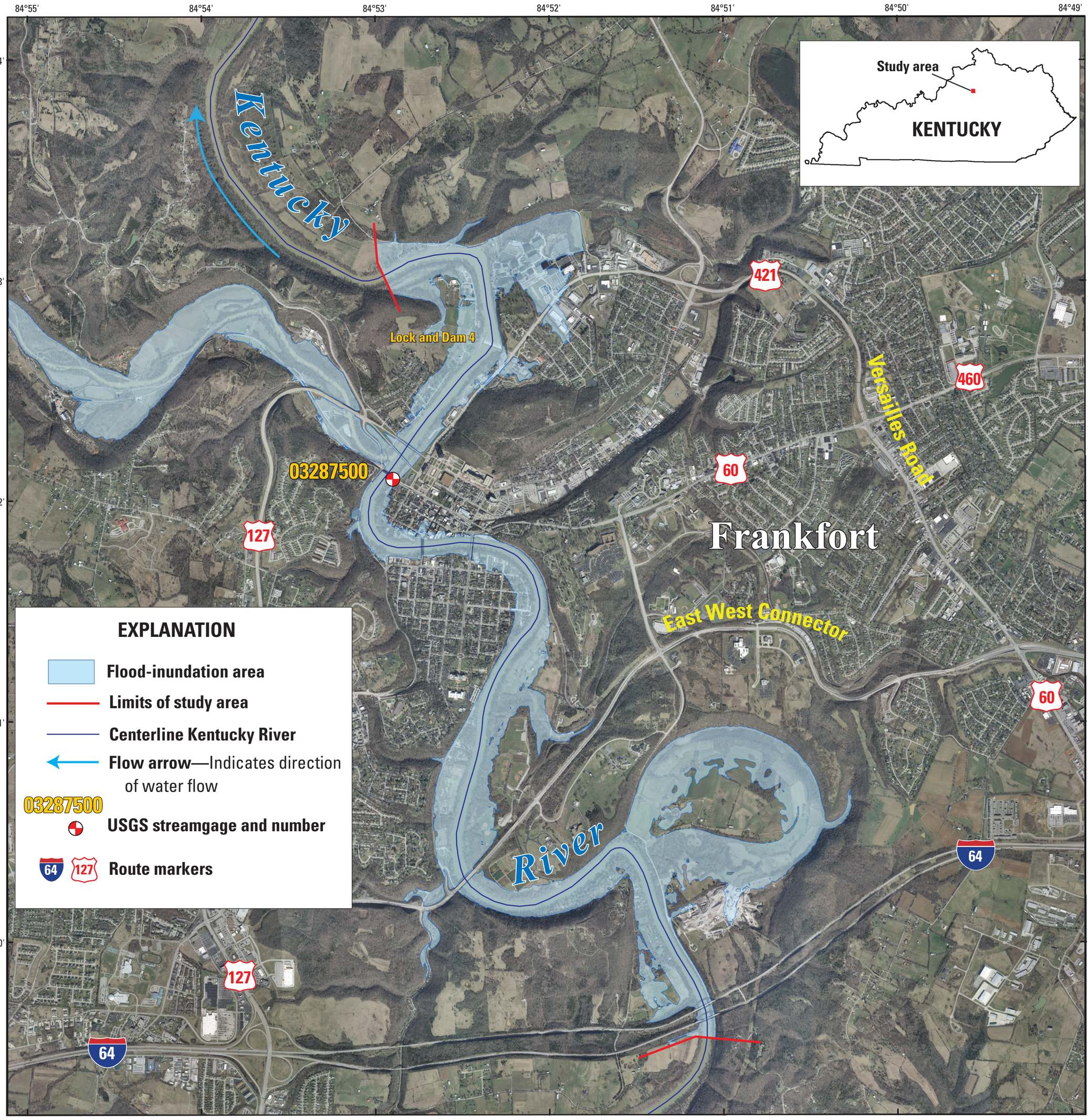
U.S. Department of the Interior
U.S. Geological Survey

Prepared in cooperation with the
City of Frankfort, Kentucky

Scientific Investigations Map 3278
Sheet 21of 26
Pamphlet accompanies map



DISCLAIMER FOR FLOOD-INUNDATION MAPS

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 tool but assumes no legal liability or responsibility resulting from the use of this information.

UNCERTAINTIES AND LIMITATIONS REGARDING USE OF FLOOD-INDUNDATION 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 and streamflows at selected USGS streamgages. Water-surface elevations along the stream reaches were estimated by steady-state hydraulic modeling, assuming unobstructed flow, and using streamflows and hydrologic conditions anticipated at the USGS streamgages(s). The hydraulic model reflects the land-cover characteristics and any bridge, dam, levee, or other hydraulic structures existing as of June 2013. Unique meteorological factors (timing and distribution of precipitation) may cause actual streamflows along the modeled reach to vary from those assumed during a flood, which may lead to deviations in the water-surface elevations and inundated boundaries shown. Additional areas may be flooded due to unanticipated conditions such as: changes in streambed elevation or roughness, backwater into major tributaries along a main stem river, or backwater from localized debris or ice jams. The accuracy of the floodwater extent portrayed on these maps will vary with the accuracy of the digital elevation model used to simulate the land surface. Additional uncertainties and limitations pertinent to this study are described in the document accompanying this set of flood inundation map sheets.

If this series of flood-inundation maps will be used in conjuction with National Weather Service (NWS) river forecasts, the user should be aware of additional uncertainties that may be inherent or factored into 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 (1) estimate the amount of runoff generated by precipiation and snowmelt, (2) simulate the movement of floodwater as it procedes downstream, and (3) predict the flow and stage (and water-surface elevation) 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 on AHPS forecasts, please see: *http://water.weather.gov/ahps/pcpn_and_river_forecasting.pdf.*

Projection: Lambert Conformal Conic
State Plane Coordinate System, Kentucky, FIPS, 1600
North American Datum of 1983 (NAD83)
Orthophotography from Kentucky Aerial Photography and Elevation Data Program, 2012

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1 0.5 0 1 MILE

1 0.5 0 1 KILOMETER

NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88)

Flood-inundation Map for Frankfort, Kentucky, Corresponding to a Stage of 47.00 Feet and an Elevation of 508.58 Feet (NAVD 88) at U.S. Geological Survey Streamgage Number 03287500, Kentucky River at Lock 4

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2013

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