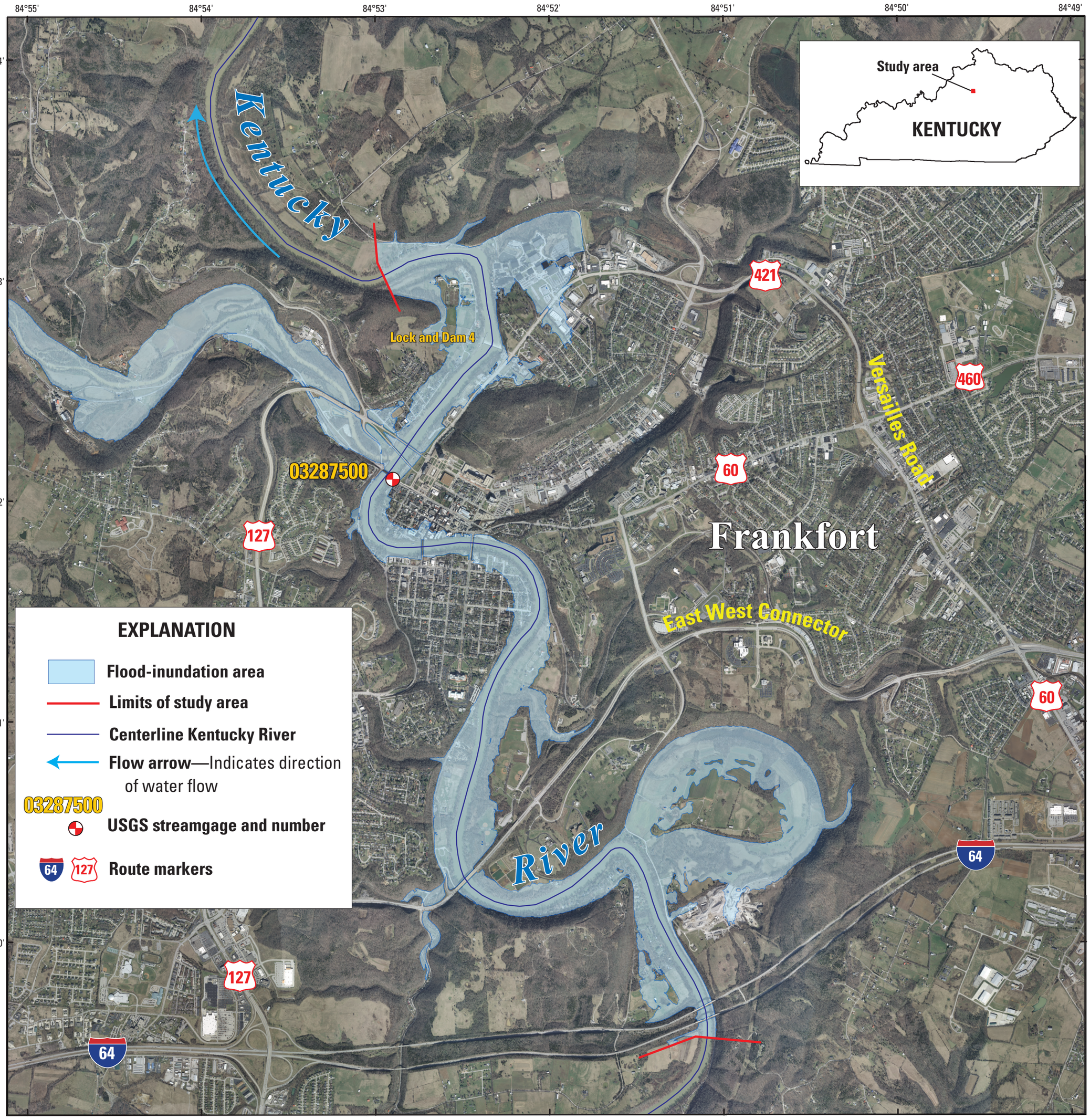
U.S. Department of the Interior
U.S. Geological Survey

Prepared in cooperation with the
City of Frankfort, Kentucky

Scientific Investigations Map 3278
Sheet 22 of 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

Suggested citation:
Lant, J.G., 2013, Flood-inundation maps for a 6.5-mile reach of the Kentucky River at Frankfort, Kentucky: U.S. Geological Survey Scientific Investigations Map 3278, 26 sheets, 10-p. pamphlet, *http://dx.doi.org/10.3133/sim3278.*

ISSN 2329-132X (online)
http://dx.doi.org/10.3133/sim3278

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 48.00 Feet and an Elevation of 509.58 Feet (NAVD 88) at U.S. Geological Survey Streamgage Number 03287500, Kentucky River at Lock 4

By
Jeremiah Lant
2013

Publishing support provided by: Columbus Publishing Service Center
Manuscript approved for publication October 25, 2013

For more information concerning this publication, contact:
Director, Kentucky Water Science Center
U.S. Geological Survey
9818 Bluegrass Parkway
Louisville, KY 40299
(502) 493-1900

Or visit the Kentucky Water Science Center Web site at:
http://ky.water.usgs.gov/

This report is available at: http://dx.doi.org/10.3133/sim3278.

Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government

This and other USGS information products are available at:
http://store.usgs.gov/
U.S. Geological Survey, Box 25286
Denver Federal Center, Denver, CO 80225

To learn about the USGS and its information products visit
http://www.usgs.gov/
1-888-ASK-USGS