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PURPOSE AND USE

By using these maps and associated data the user does so entirely at their own risk and explicitly acknowledges that he/she is aware of and agrees to be bound by this disclaimer and agrees not to present any claim or demand of any nature against the USACE, its officers, agents, employees or servants in any forum. This mapping is provided by the U.S. Army Corps of Engineers Tulsa District to assist communities to plan and prepare for flooding that may be experienced.

Model inundations are prepared for static releases from Keystone and Fort Gibson Dams along with uncontrolled runoff along the Verdigris River. No residual inflow from tributaries or local runoff was included in the modeled reach.

The reach was modeled with a current dam break model appended to include modeling for the Corridor Study and West Tulsa Levees using HEC-RAS version 5.0.5

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KEY SOURCES

Key sources compiled to produce these maps include:

•National Weather Service (NWS) http://www.nws.noaa.gov/oh/ahps/. Current gate readings and gage forecasts are updated daily at this site

•United States Geological Survey (USGS) National Elevation Dataset (NED)

•USACE Modeling, Mapping, and Consequences Production Center (MMC)

•USACE National Levee Safety Program National Levee Database (NLD), Federal and non-Federal levee locations and elevations

ADDITIONAL SOURCES

BACKGROUND DATA is provided via an online GIS Image server made available from ESRI. The data used in the street map series was developed by ESRI using ESRI basemap data, DeLorme basemap layers, Automotive Navigation Data (AND) road data, U.S. Geological Survey (USGS) elevation data, UNEP-WCMC parks and protected areas for the world, Tele Atlas Dynamap® and Multinet® street data for North America and Europe, and First American (CoreLogic) parcel data for the United States.

The World Imagery service used in the aerial photography map series is a compilation of imagery sources from around the world for use at various resolutions. United States imagery is was provided by NASA, icubed, U.S. Geological Survey (USGS), U.S. Department of Agriculture Farm Services Agency (USDA FSA), GeoEye, and Aerials Express.

INUNDATION ELEMENTS were created from the modeling effort for this event. Inundation boundaries were computed using one dimensional HEC-RAS software from the USACE Hydrologic Engineering Center.

The source of most BASEMAP ELEMENTS is USACE CorpsMap data, which is a compilation of prominent nationwide datasets. Below are the nationwide datasets used for the source of base map data and the layers extracted from each:

-Homeland Security Infrastructure Program (HSIP): Airports, Heliports, Bridges, Bulk Petroleum Storage, Communication Facilities, Chemical Use Sites, Electric SubStations, Electric Generating Plants, EMS, Fire Stations, Health Care Facilities, Intermodal Shipping Facility, Police Stations, Schools, Railways, Waste Water Treatment and Municipality Boundaries.

-Environmental Systems Research Institute (ESRI): County, State, and International boundaries.

-FEMA Hazus data 2009 release: Emergency operations centers and potable water facilities.

-USACE AGC National Inventory of Dams (NID): USACE Dams, and Non-USACE Dams

-National Geospatial-Intelligence Agency (NGA): MGRS/USNG Grid SHEET INDEX map sheets are derived from the USGS 7.5' Quadrangle Index.

MAPPING NOTES

The coordinate system used in the preparation of this map is Universal Transverse Mercator (UTM), horizontal datum is NAD 83, GRS80 spheroid. Differences in datum, spheroid or projection used in the production of map sheets for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of these maps. Accuracy of the map scales for varying paper sizes is valid only if printed according to specification guidelines.

READING USNG LOCATIONS

The primary coordinate system displayed in these maps is the U.S. National Grid (USNG). A USNG location is composed of the world Grid Zone Designation (GZD), the two letter 100,000m grid ID, and the grid coordinate. To read USNG locations from these maps, locate the GZD and grid ID values at the bottom of each sheet. Then use the two-digit UTM principal digits displayed on the map. Ignore the small UTM superscript numbers that are provided for reference purposes. USNG coordinate strings can be 4, 6, 8, or 10 digits long; having coordinate precision of 1,000m, 100m, 10m or 1m. The left half of the coordinate string is the easting value and the right half is the northing value. The first two easting and northing digits should be the principal UTM digits as displayed on the map. Additional digits refine the accuracy of the coordinate pair. Additional resources pertaining to the USNG can be found at

http://www.fgdc.gov/usng/index.html



INUNDATION ELEMENTS

*See Disclaimer

Flow Scenario - Static releases of 250,000 cfs from Keystone Dam, 180,000 cfs from Fort Gibson Dam, and 120,000 cfs uncontrolled runoff along the Verdigris River.

NATIONAL LEVEE DATABASE ELEMENTS

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Levee Centerlines - surveyed centerline of earthen levee

BASE MAP ELEMENTS

TRANSPORTATION BOUNDARIES 100,000 Meter Minor Roads USNG Grid State Highway Municipality or Major Road Boundary **County Boundary** Interstate or **US Highway** State Boundary Railway Lines International Boundary

INFRASTRUCTURE

USACE Dams

Non-USACE Dams

Schools

Colleges and Universities

Broadcast Communications

Airports

Heliports

Law Enforcement

Correctional Facilities

Fire Stations - Fire Only

Fire Stations - Fire/EMS

Emergency Medical Services

Hospitals - General

WTP Wastewater Treatment Plants

W Potable Water Treatment

Natural Gas Storage

Petroleum Bulk Stations and Terminals

Chemical Industries

Nuclear Fuel Manufacturing

Electric Substations

Fossil Fuel Electric Power Generation and Other Power Generation

Nuclear Electric Power Generation

Hydroelectric Power Generation

Intermodal Shipping Facilities

USGS River Gages

—— Pipelines



















































































































































































