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Texas Study area

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

Flood Tracking Chart for the Upper San Jacinto River Basin near Houston, Texas



The "Flood Tracking Chart for the Upper San Jacinto River Basin near Houston, Texas" can be used to track river stage and to assess flood-crest information during substantial storms. Water-surface elevation during a flood will provide emergency-response personnel, residents, and the traveling general public essential information to make informed decisions concerning conditions that threaten life and property in Montgomery County and parts of Harris, Liberty, and

Current stream information is especially important during floods. The USGS provides current gage heights and discharge data to the public through the NWS, news releases, and the Internet. The NWS has direct access to streamflow data collected by the USGS for use in its stream forecasting models and routinely broadcasts the forecast information to the news media and on shortwave radio. The radio frequency in the upper San Jacinto River Basin is 162.40 MHz at Third: Add the conversion number from key station graph to gage height to estimate the water-surface elevation of the flood. Comparison of the approximate elevation of the property or low-water crossing to the estimated water-surface elevation can indicate the actual threat of flooding. Adding the conversion number to the historical peak gage heights will determine highest water-surface elevations of historical flooding. Comparison of highest water-surface elevations of his-

San Jacinto Counties.

This flood tracking chart displays a map of the upper San Jacinto River above Lake Houston, bar graphs of the highest known historical peak gage heights of 10 streamflow-gaging stations (9 active and 1 inactive), and locations of 8 additional gaging stations that are on the USGS Texas Internet Web site. Bar graphs present historical peak gage heights and their years of occurrence from U.S. Geological Survey (USGS) data records and list information about station number and name, conversion of gage height to mean sea level, beginning year of historical flood data, and National Weather Service (NWS) flood stage (where determined). Station gage heights plus the conversion numbers equal water-surface elevation above mean sea level at the station. NWS flood stage is defined as the gage height when water in a stream exceeds its natural banks at the nearest point to the gage (David Schwartz, National Weather Service, oral commun., 2000).

KGG-68 in Houston. The USGS Texas Web address is http://tx.usgs.gov/. Access to real-time streamflow data is provided through the Real-Time Water Data link at this site.

The flood tracking chart can be used to estimate the threat to a particular property or low-water crossing as follows:

First: Determine the approximate elevation of the threatened property or low-water crossing and record that elevation.

Second: Determine the key streamflow-gaging station on the same stream and closest to the threatened property or low-water crossing. Example: The gaging station closest to Conroe is 08068000. Using the news media, shortwave radio, or Internet, obtain and record the latest gage height information in your area with particular attention to the closest gaging station to the threatened property or low-water crossing. torical flooding to estimated water-surface elevation also can indicate the threat of flooding.

Note: The surface of flowing water has a slope in the downstream direction. The estimated water-surface elevation at a point distant from a station will be different from that at the station. The difference in elevation of the stream channel between the site of interest and the station can be used as an estimated adjustment to the water-surface elevation between the two points.

The network of streamflow-gaging stations in the upper San Jacinto River Basin is funded and operated by the USGS Texas District in cooperation with the Texas Water Development Board, San Jacinto River Authority, Harris County, City of Houston, and U.S. Army Corps of Engineers-Galveston. For more information about USGS programs in Texas, contact the USGS Representative at the address and telephone number listed below.

For more information please contact

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—D.L. Barbie