



Upper Trinity River Central City Fort Worth, Texas

Final Supplement No. 1
to the Final
Environmental Impact
Statement

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U.S. Army Corps of Engineers
Fort Worth District



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conservation, and flood control in a manner that protects public safety and property. One community goal clearly communicated through the public involvement process was a desire to "connect" to the water of the Trinity River, to which the current levee system is a barrier. The resolution conceived during urban planning workshops was a bypass channel and flood isolation gates that could eventually allow removal of portions of the existing levee system.

In May 2004, the USACE and Tarrant Regional Water District (TRWD) modified the Project Management Plan for the West Fork/Clear Fork Interim Feasibility Study to focus exclusively on problems and opportunities in the Central City river reach.

Existing Conditions

Flood Protection

The existing floodway was designed and constructed to provide a level of protection equivalent to the Standard Project Flood (SPF) with four feet of freeboard on the levees. Analyses from the Clear Fork/West Fork feasibility study indicate that 86 percent of the linear extent of the levee system is currently less than the current design level of protection. A minimum levee freeboard of four feet was considered necessary in order to allow for possible deviation from the adopted design discharge as a result of the rapid rise in flood discharge for this type of watershed, as well as, for allowing for wave action, outer bend ride-up, unclear vegetation, levee settlement, floating debris buildup, duration of high water against the levees, upper river improvements, and future urbanization. The original SPF Fort Worth Floodway design discharges are 95,000 cfs on the West Fork below the confluence with the Clear Fork, 50,000 cfs on the West Fork above the Clear Fork, and 75,000 cfs on the Clear Fork. Hydrologic analysis of the river system for this study indicates that the SPF design discharge on the West Fork below the confluence with the West Fork is 118,900 cfs, 59,800 cfs on the West Fork above the Clear Fork, and 78,300 cfs on the Clear Fork. The SPF discharges on the West Fork below the Clear Fork increase to 127,300 at the end of the Fort Worth Floodway at Riverside Drive. These discharges are "future conditions" discharges and were used as the basis for design of this project. This is consistent with the CDC process use of future conditions discharges as design discharges. Expected annual flood damages for existing conditions are approximately \$334.3 thousand (July 2003 prices).

The Fort Worth Floodway interior drainage system consists of sump areas, served by 30 drainage structures, which collect and store local runoff behind the levees to discharge via gravity flow into the West Fork and the Clear Fork once the river levels recede. The original design capacity of the sump areas is the 50-year flood. Recent studies have indicated that this level of protection has diminished for several sumps. Total flood damages from the 50-year event for sumps 26 and 14/15W were estimated to be \$5,122,300, and \$13,916,300 for the 100-year flood event.

Ecosystem

The natural resources within the study area have been modified by urban development and past flood damage reduction activities. The entire study reach has been channelized and levees have been constructed along the area to protect large areas of former floodplain. The terrestrial habitat between the levees is maintained in a modified state which allows only grasses, predominantly