



DALLAS FLOODWAY PROJECT

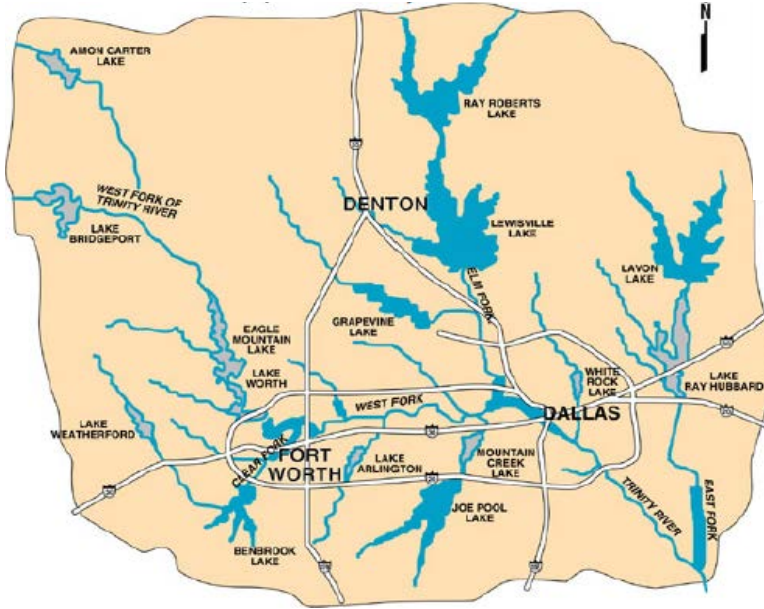
U.S. ARMY CORPS OF ENGINEERS

Nov. 21, 2013

BUILDING STRONG®

Levees are one part of a complex system of flood risk reduction

The Dallas Floodway is a federally authorized levee system with the city of Dallas as local sponsor. It is one part of a complex interlocking system of elements that, when combined, work to lower flood risk. The other elements include:



Upstream reservoirs: They include a dozen lakes in the Upper Trinity River Basin that hold back storm waters. These include five major Corps of Engineers flood-control reservoirs: Benbrook Lake, Joe Pool, Lake Grapevine Lake, Lewisville Lake and Ray Roberts Lake. Dam operators work together to monitor flows during storm events.

Corridor Development Certificate: Participating cities and counties in the Trinity River Corridor adopted development standards to ensure that floodplain development does not exacerbate flooding over time. Collaborating with the Corps and the North Central Texas Council of Governments, they aligned their floodplain ordinances and require the CDC so construction doesn't cause additional watershed runoff that would compromise public safety.

Pump stations: Operated by the city of Dallas, pumps on both the East and West Levees drain storm water out of neighborhoods and into the Trinity River.

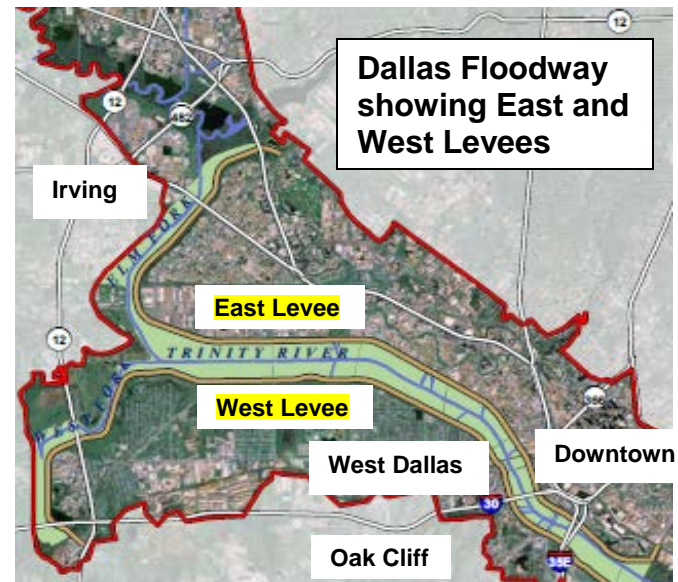
Maintenance: Regular operations and maintenance of levees by the cities of Dallas, Irving and Fort Worth.

Inspections: The Corps' Fort Worth District inspects the Dallas, Irving and Fort Worth levee systems annually. Every five years, the district conducts an intensive periodic inspection.

Emergency Action Plans: Each city has a plan of action, reviewed by the Corps, which outlines and prepares for major flood events. These include emergency notification procedures, detailed flood plain maps, evacuation planning, street closure plans, and procedures and stocking of materials for making emergency levee repairs.

Background of the Dallas Floodway Project

The Dallas Floodway Project, now in the planning phase, covers the 22 miles of levees that comprise the original East and West Levee system built by the U.S. Army Corps of Engineers in the 1950s. The project area begins along the West and Elm Forks and ends where the abandoned AT&SF Railroad Bridge spans the Trinity River just downstream of the Corinth Bridge in Dallas. Major urban development and land-use changes have occurred in the area since the levee system was last modified in the late 1950s. Through Section 5141 of the Water Resources Development Act (WRDA) of 2007, the Corps can participate in investigations and analyses regarding remediation of the Dallas Floodway System. This includes examination of changed conditions, and possible engineering or construction deficiencies that increase risk to public safety from a catastrophic flood event. Public safety is the Corps' No. 1 priority. Modifications to the



existing Dallas Floodway Project were authorized in the WRDA of 2007 at a total project cost of \$459 million, with an estimated federal share of \$298 million and an estimated non-federal share of \$161 million.

In light of multiple ongoing activities planned within the Dallas Floodway, a comprehensive assessment of all these actions is appropriate to ensure they will work together and do not impair the levee system. This comprehensive analysis will account for such planned activities as an Interior Drainage Plan with new pump stations, the Balanced Vision Plan, the I-30/I-35 "Horseshoe" interchange, the proposed Trinity Parkway and other local features. An environmental impact statement (EIS) will be integrated with the feasibility report for this project. It will evaluate the technical soundness and environmental acceptability resulting from the implementation of these planned actions.

Flood Risk Management Plan

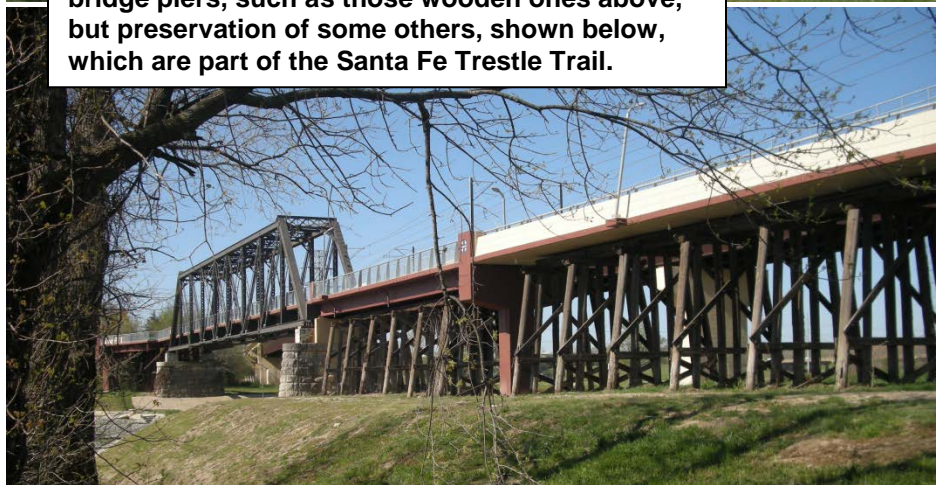
The city and Corps have tentatively adopted a plan to lower flood risk for Dallas. It contains two primary actions:

- **Raising low points** along 9.3 miles of the East and West Levees. It will be raised up to three feet in places.



Tentative plans call for removal of most of the bridge piers, such as those wooden ones above, but preservation of some others, shown below, which are part of the Santa Fe Trestle Trail.

- **Modification of the abandoned AT&SF Bridge** on the Trinity River, shown above during a 1989 flood. The bridge collects storm debris in its piers which, like a stopper, cause floodwaters to back up into the system. The modification includes removal of earthen embankments and most of the piers. The historic Santa Fe Trestle, the new Santa Fe Trestle Trail and some of the historic wooden piers protected by the trail will be preserved.



These two actions will cost about \$9.7 million but have an economic benefit of \$1.2 million per year. They will increase the ability of the Dallas Floodway to convey floodwaters, raising the capacity of the system to a design grade of 277,000 cubic feet per second. This is the flow anticipated from a storm that has a one-in-2,500 chance of happening in any given year.

Timeline of future milestones

- Prepare draft feasibility report and environmental impact statement; update City Council in spring 2014.
- Host a public meeting in spring 2014 after the draft report/EIS becomes available for review.
- Complete the feasibility study and sign a record of decision, anticipated in fall 2014.