

TRINITY RIVER CORRIDOR

MODIFIED DALLAS FLOODWAY PROJECT UPDATE

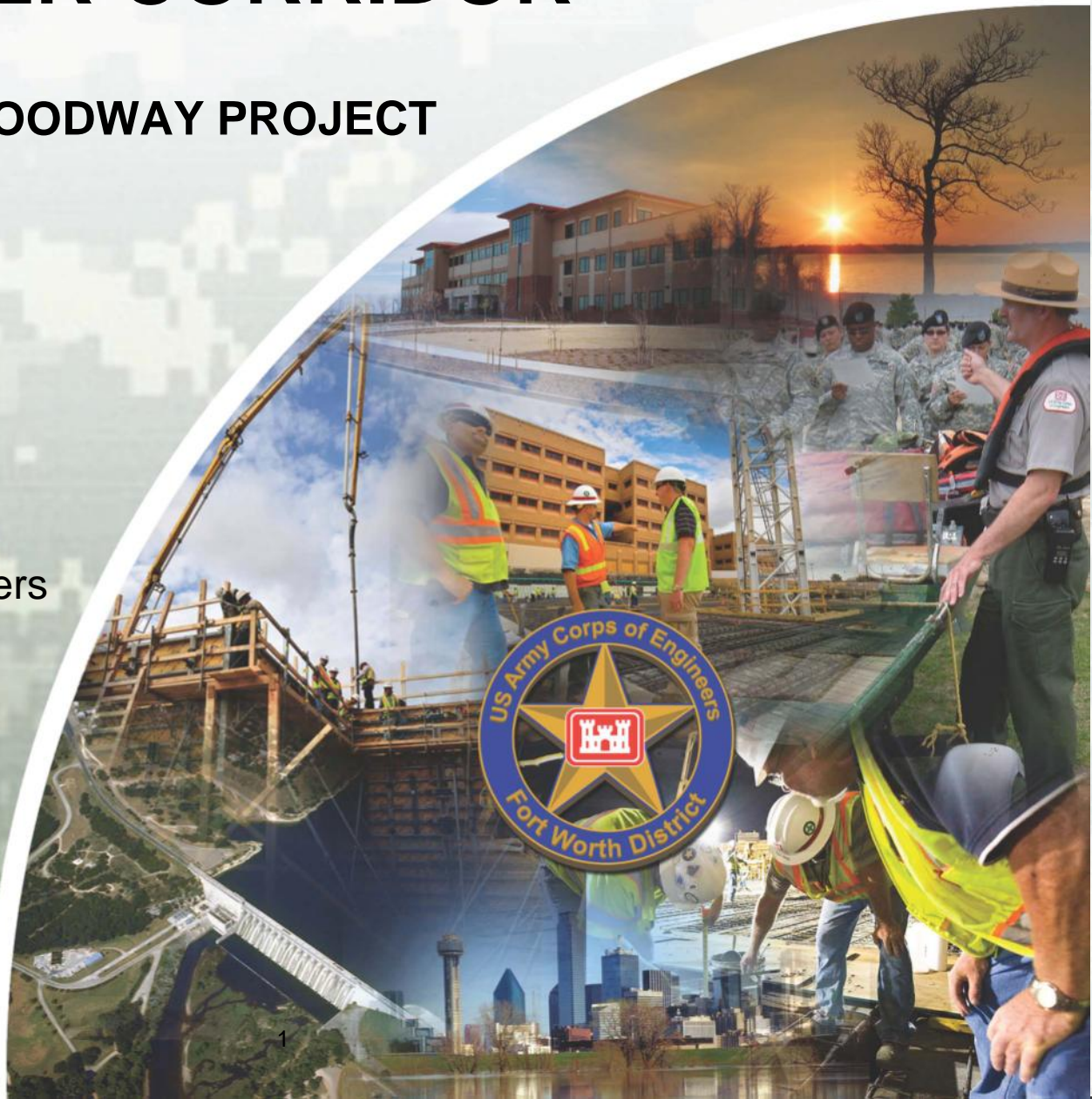
May 12, 2015

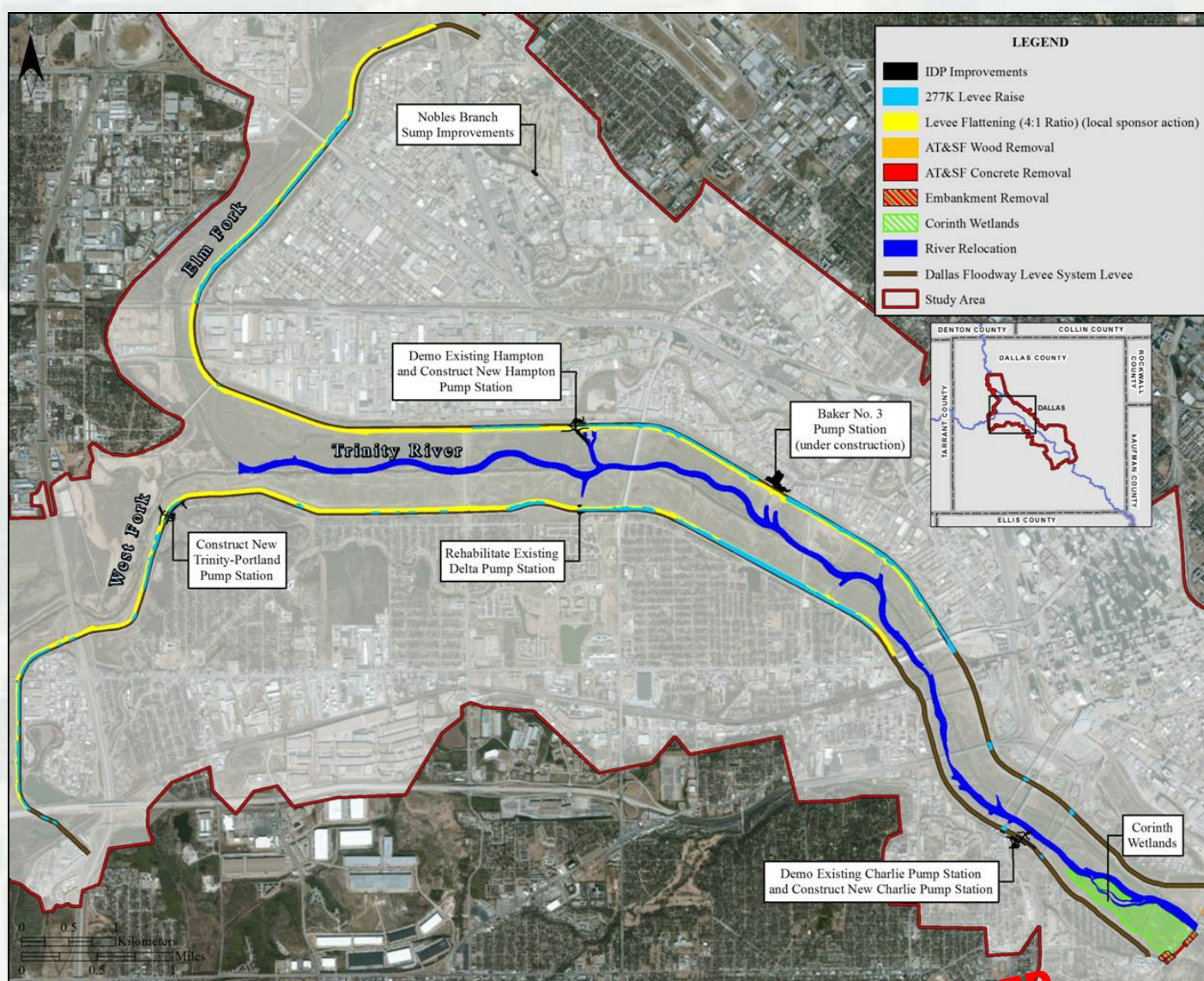
Jon Loxley

Project Manager
Dallas Floodway Project
Fort Worth District
U.S. Army Corps of Engineers



US Army Corps of Engineers
BUILDING STRONG®





Flood Risk Management

- 277,000 cfs levee raise with AT&SF Bridge Modifications
- Emergency Action Plan improvements
- Levee side slope flattening to 4H:1V (Betterment @ 100% local cost)

- Interior Drainage Plan Phase I - Baker and Hampton Pump Stations; Nobles Branch Sump Improvements
- Interior Drainage Plan Phase II - Charlie, Delta, New Trinity Portland Pump Stations

Ecosystem Restoration

- River Relocation (add meanders to approx. 8 miles of the Trinity River in the Floodway)
- Approx. 80 acre wetland in Floodway



MODIFIED DALLAS FLOODWAY PROJECT - REFERENCE MAP AND RECOMMENDED PLAN

APPROVED



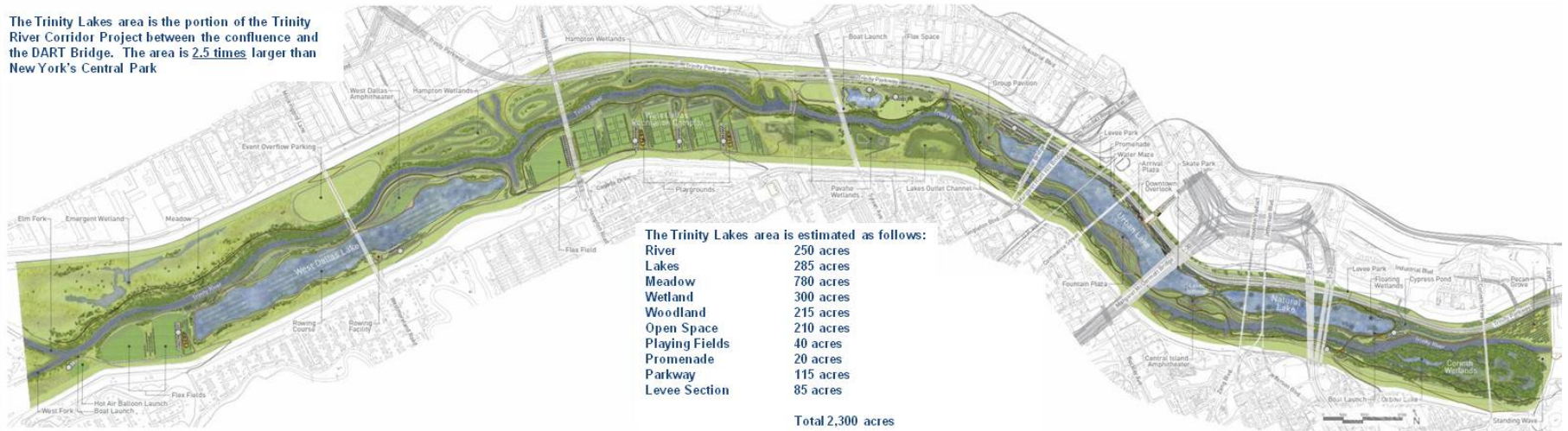


With its 2,300 acres, the Trinity Lakes area of the Balanced Vision Plan will augment, by more than 10 percent, the city's overall green space assets, more than doubling the miles of trails and outdoor venues. No other city green space will match the variety of activities or the richness in landscape—both urban and natural—of the Trinity Lakes area.

Although the existing Trinity River floodplain is already an altered landscape and will be further altered through the construction of the project, the design intent is to create or re-create, self-sustaining, viable and high ecologically functioning landscapes that reflect the native landscapes of the region.



The Trinity Lakes area is the portion of the Trinity River Corridor Project between the confluence and the DART Bridge. The area is 2.5 times larger than New York's Central Park



CITY OF DALLAS BALANCED VISION PLAN RENDERINGS – THE TRINITY RIVER CORRIDOR DESIGN GUIDELINES (2009)



Dallas Floodway Project

Milestone: April 21, 2015

Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), signs the Record of Decision

Two documents approved

- Final Environmental Impact Statement
- Final Feasibility Report

Conclusion

Dallas Floodway Project could proceed



Tonight's Trinity Talk

- Trinity River in Dallas through the years
- Approved Modified Dallas Floodway Project
- USACE Next Steps for the Modified Dallas Floodway Project



Dallas Floodway, Dallas, Texas



Government Partners

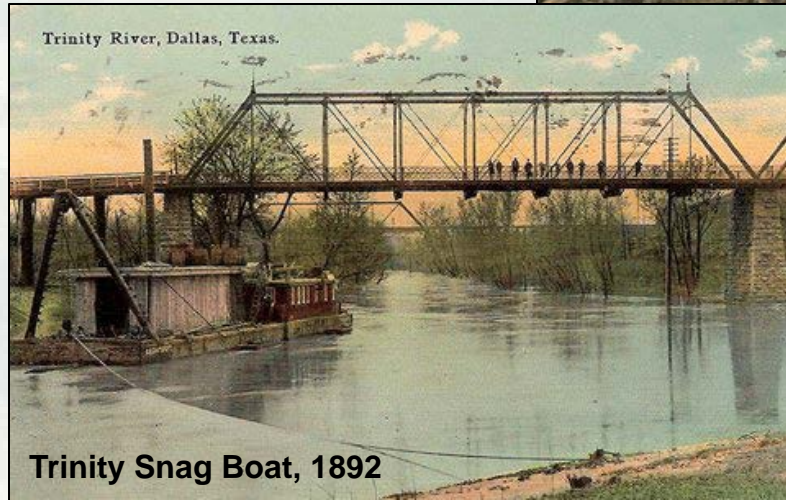
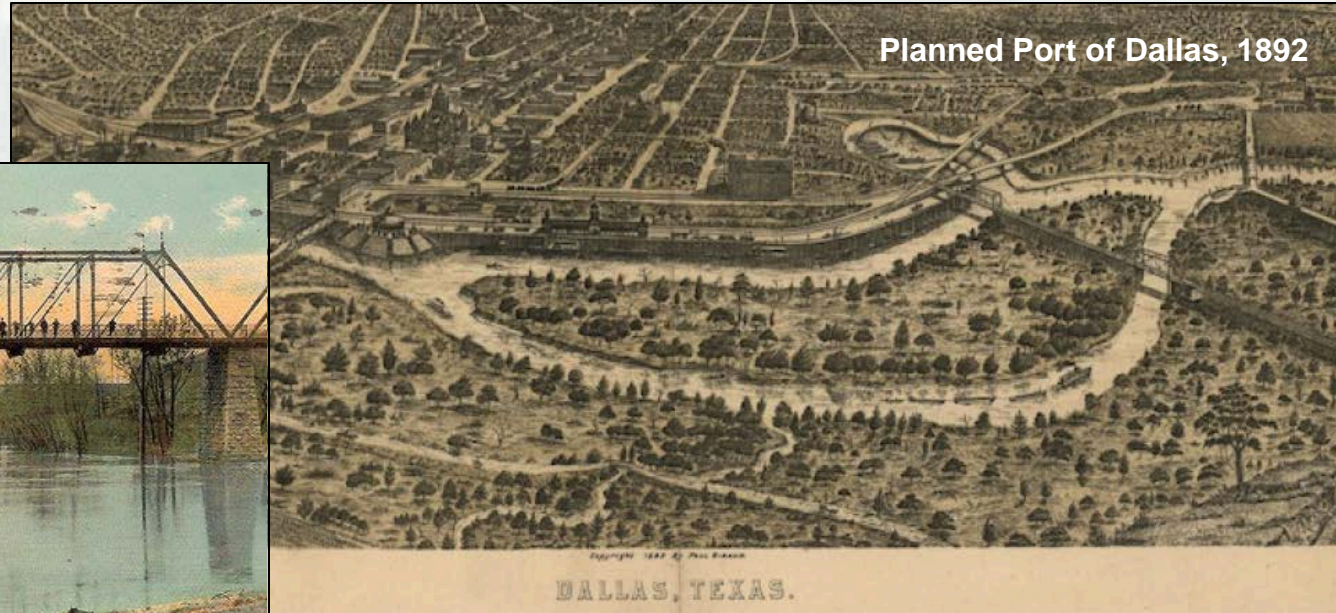
Complex project with many participants,
many responsibilities and one shared goal -
LIFE SAFETY IS PRIORITY NO. 1.

- Corps of Engineers
- **City of Dallas / NF Sponsor**
- Dallas County
- North Texas Tollway Authority
- Texas Dept. of Transportation
- Fed. Highway Administration
- EPA
- FEMA
- Texas Commission on Environmental Quality
- North Central Texas Council of Governments

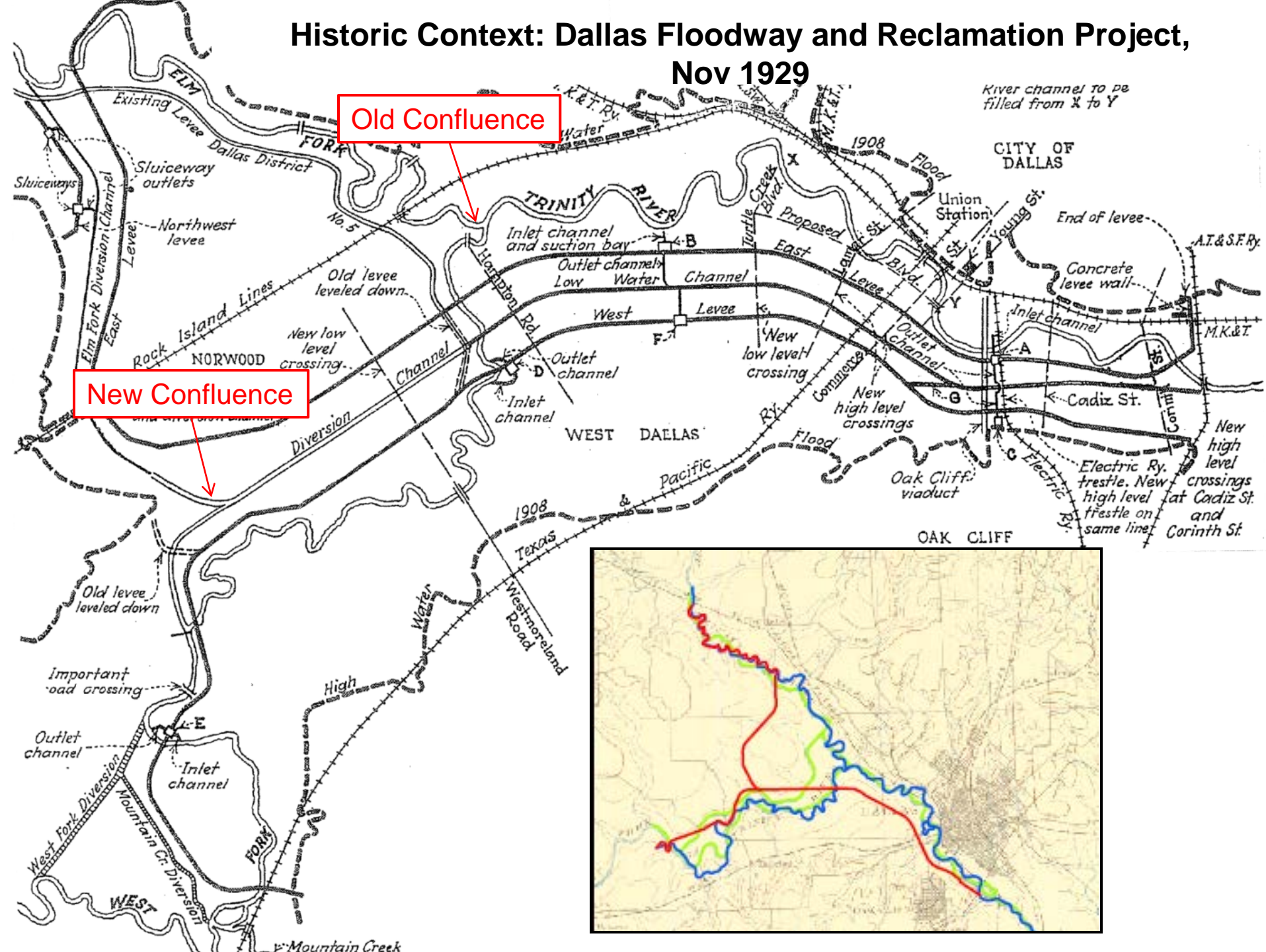




Historic Context: Trinity River, Dallas, Texas



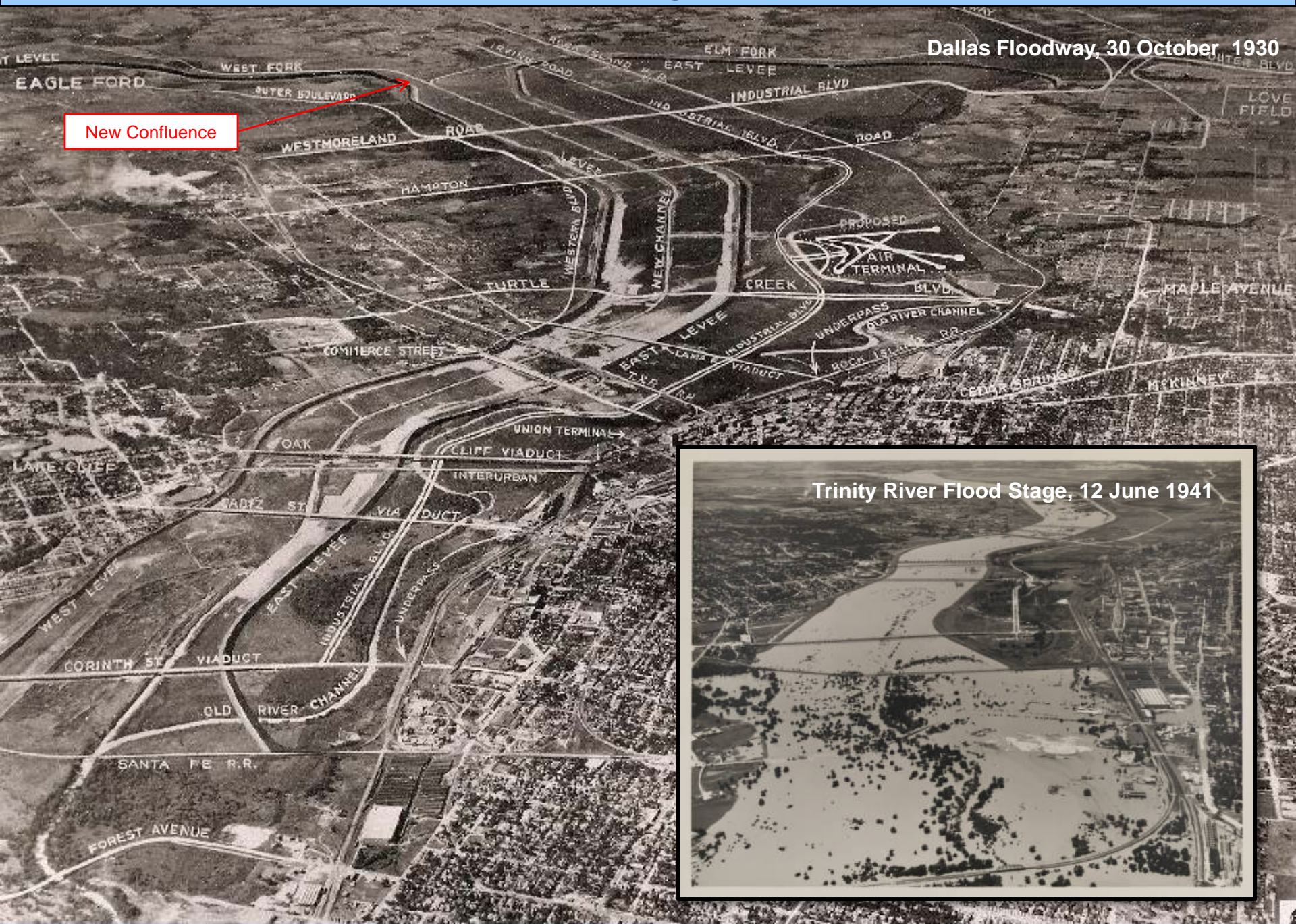
Nov 1929



Historic Context: Original Construction

Dallas Floodway, 30 October 1930

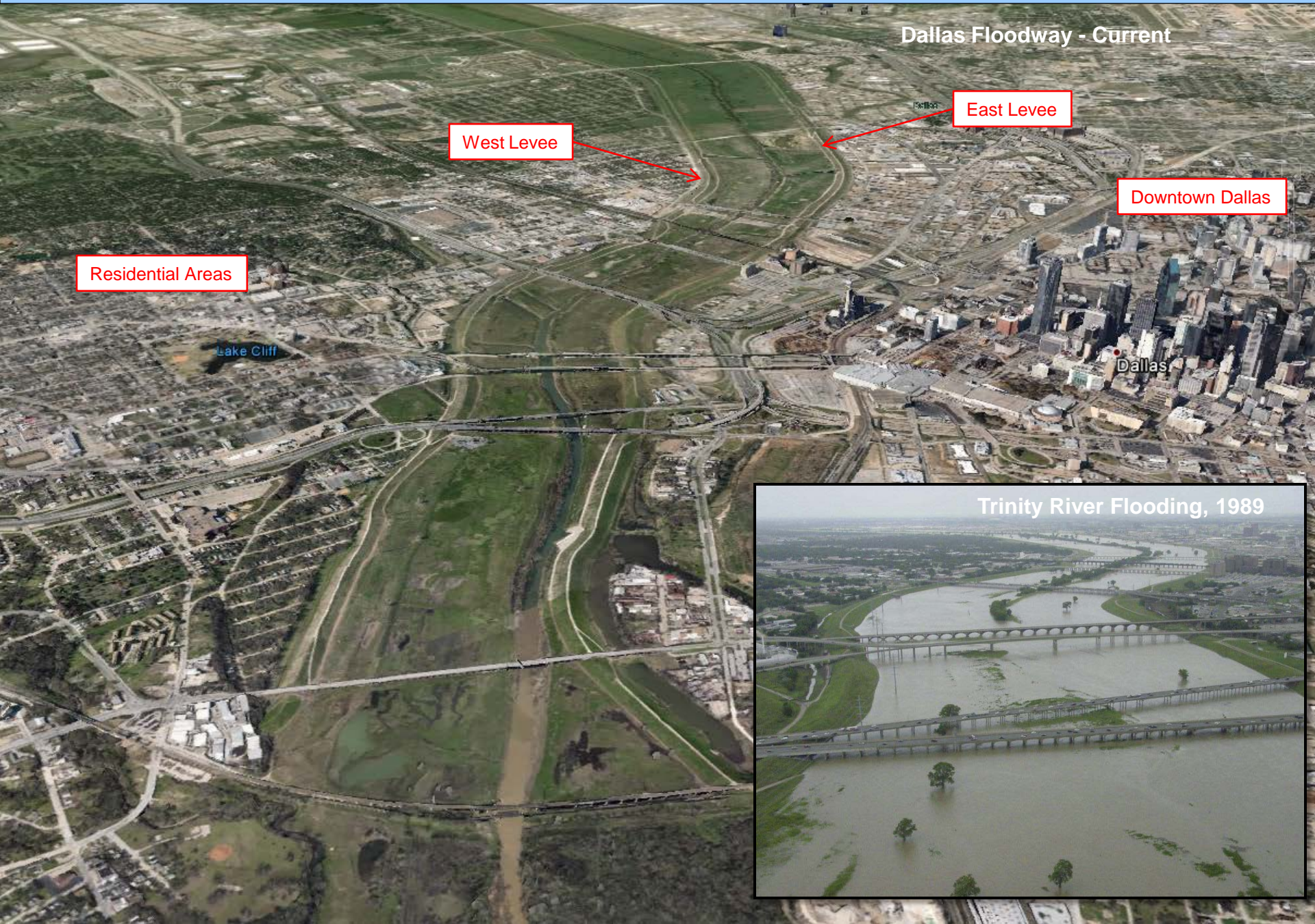
New Confluence



Trinity River Flood Stage, 12 June 1941

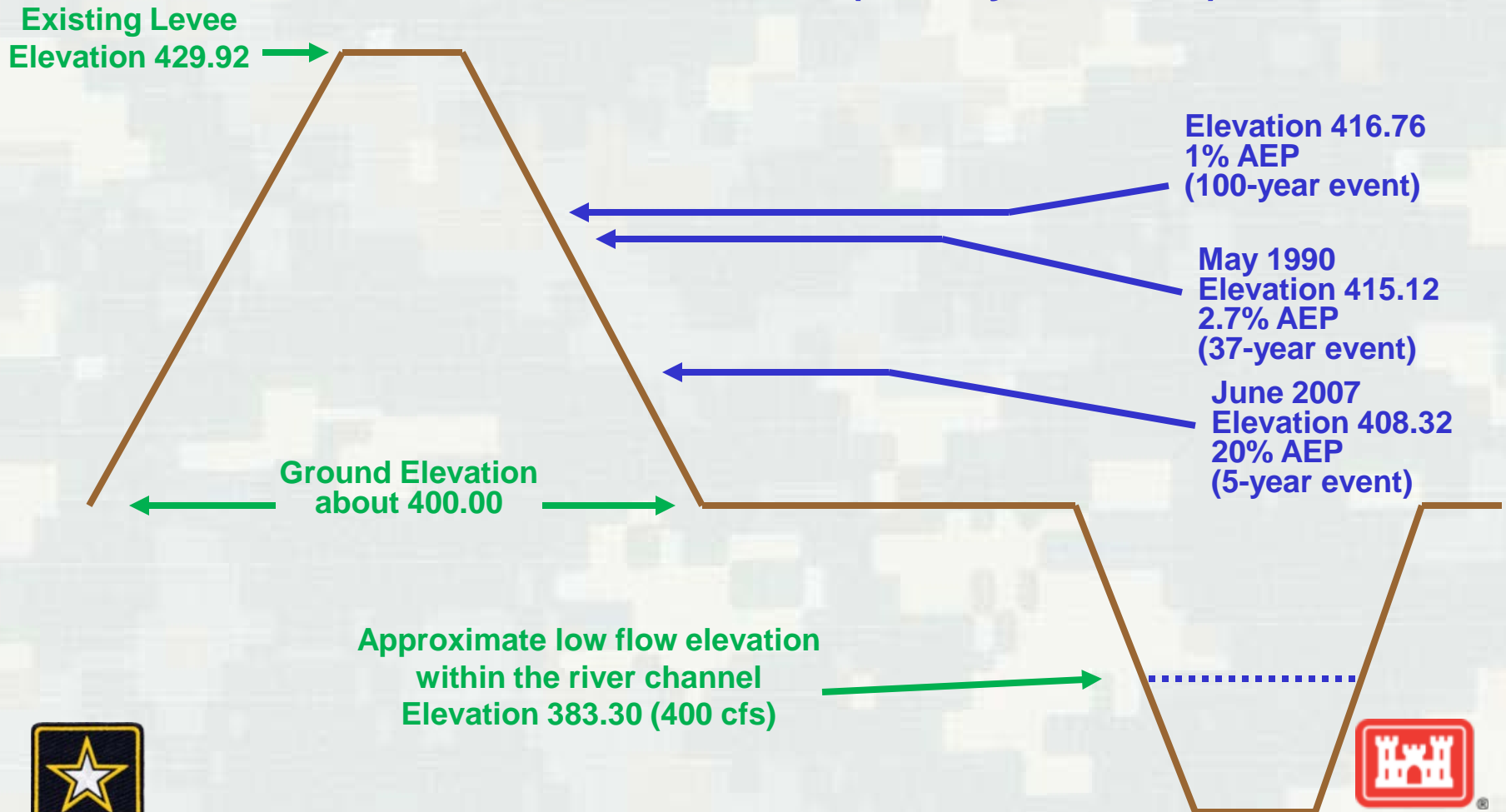


Historic Context: USACE Strengthening in 1950s - Today

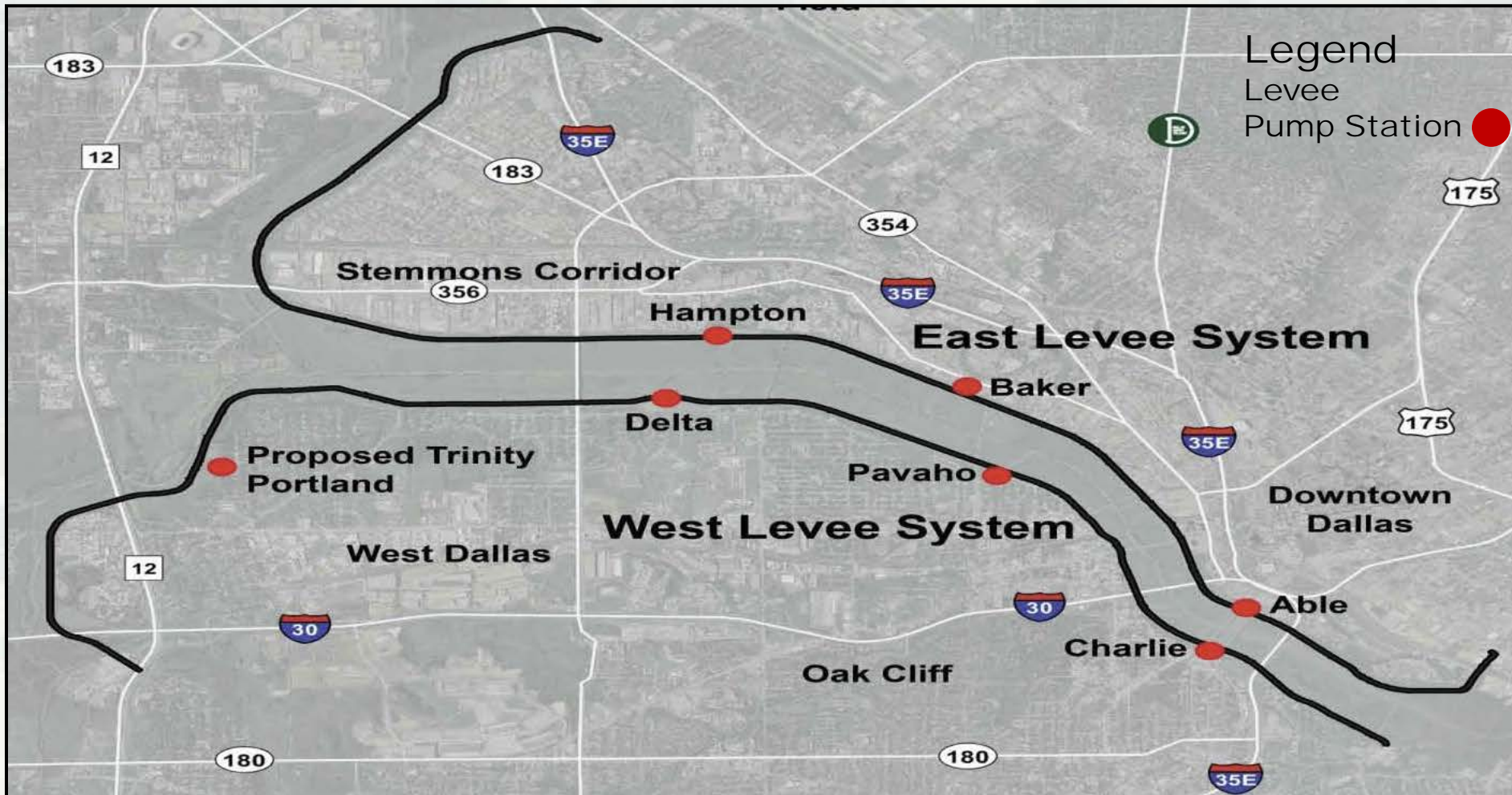


Trinity River Flooding History

The existing Dallas Floodway can safely convey 0.067% AEP flood event (1,500-year event)



Current Dallas Floodway Project



City of Dallas - Balanced Vision Plan

The future of the Trinity River Corridor will be a major factor in shaping the future of Dallas itself. For that reason, it is one of only six Strategic Initiatives in the city's long-range plan - *The Dallas Plan* - adopted in 1994. In the years since that plan was adopted, extensive community discussion has occurred through the Trinity River Corridor Citizens Committee and various studies have been completed that address the issues it identified - **flood protection, environmental management, recreation, transportation, and community/economic development**. These studies have clarified the challenges associated with the Trinity River Corridor; in proposing solutions, they have also generated debate among community members who value the various components differently.



Source: 2003 Balanced Vision Plan



Dallas Floodway Project

What did the Corps of Engineers do?

- Performed extensive study of existing levee system and natural environment.
- Examined the impact of all projects anticipated between the levees in Dallas – including those not part of the Modified Dallas Floodway Project.
- Developed solutions that reduce flooding risks and improve the quality of aquatic habitat



Modified Dallas Floodway Project

Flood Risk and Ecosystem Restoration Problems



FRM

- ▶ 200,000 people at Risk, residential areas on the West side, commercial areas on the East
- ▶ \$13.7 Billion investment behind the levees

ER

- ▶ River habitats been degraded over time due to relocation of the river channel within the Dallas Floodway



Modified Dallas Floodway Project

Flood Risk and Ecosystem Restoration Project Objectives



FRM

- ▶ Ensure future reliability and integrity of the floodway system reduce residual flood risk;
- ▶ Review of the City of Dallas' Interior Drainage Plan

ER

- ▶ Restore to the extent possible the aquatic and riparian ecosystem of the Trinity River within the boundaries of the Dallas Floodway Project.



Modified Dallas Floodway Project

Flood Risk and Ecosystem Restoration Project Criteria



FRM

- ▶ Formulate levee improvements to have the maximum net economic benefits;
- ▶ Reduction of overall life safety risk;
- ▶ Reduction of damage structures within 100-year floodplain;
- ▶ Inclusion of select IDP features not already built;

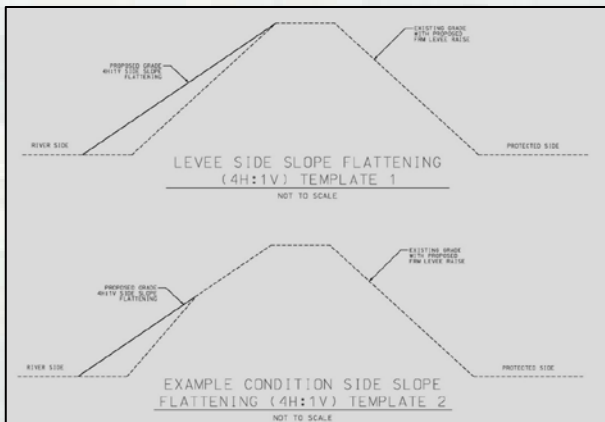
ER

- ▶ Provide uplift of habitat function following project completion.



Modified Dallas Floodway Project

Approved Plan



Flood Risk Management

- 277,000 cfs levee raise with AT&SF Bridge Modifications
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- Interior Drainage Plan Phase I features (Baker and Hampton Pump Stations)
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Ecosystem Restoration

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Modified Dallas Floodway Project - Approved Plan

Nobles Branch
Sump Improvements

Demo Existing Hampton
and Construct New Hampton
Pump Station

Baker No. 3
Pump Station
(under construction)

Construct New
Trinity-Portland
Pump Station

Rehabilitate Existing
Delta Pump Station

Total Cost - \$571,592,000
• FRM - \$241,657,000
• ER - \$329,935,000

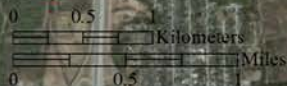
FED - \$371,535,000
NON-FED - \$ 200,057,000

Demo Existing Charlie Pump Station
and Construct New Charlie Pump Station

Corinth
Wetlands

LEGEND

- IDP Improvements
- 277K Levee Raise
- Levee Flattening (4:1 Ratio) (local sponsor action)
- AT&SF Wood Removal
- AT&SF Concrete Removal
- Embankment Removal
- Corinth Wetlands
- River Relocation
- Dallas Floodway Levee System Levee
- Study Area



Benefits of the Modified Dallas Floodway Project

- ▶ Reduces the risk of river flooding.
- ▶ Reduces flooding risks related to interior drainage
- ▶ Improves environmental sustainability
- ▶ Functions as a comprehensive system



Next Steps

Corps seeks federal funding -

Congressional appropriation for first phase: levee raises, bridge modification.

Permits -

Major construction projects by others require Corps-issued Section 408 (Rivers and Harbors Act) and Section 404 (Clean Water Act) permits.

Construction-level design review -

The Corps has ongoing oversight responsibility for all projects in the floodway including review of design documents and monitoring construction.

Trinity Lakes -

The city has told the Corps this is a top priority.



Q&A



*"The Trinity is the future of Dallas, and we need to build irreversible momentum, to see this project through."
- Major General Merdith W.B. (Bo) Temple, U. S. Army Corps of Engineers, May 4, 2009*



