

FORT WORTH DISTRICT DALLAS FLOODWAY LEVEE SYSTEM SUPPLEMENTAL PROGRAM UPDATE

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Presentation for:
City of Dallas
Transportation and Infrastructure Committee
Date: June 9, 2025



US Army Corps
of Engineers®



City of Dallas



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PURPOSE & AGENDA

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Purpose: Inform the City of Dallas Transportation and Infrastructure Committee the current status of the Dallas Floodway and Dallas Floodway Extension projects to foster the partnership and support informed decision making to deliver critical infrastructure for the purpose of flood risk management.

Agenda:

1. Benefit to Nation
2. Project & System Overview
3. O&M Responsibilities
4. Supplemental Considerations
5. Project & Program Statuses
6. Future Schedule & Milestones
7. Closing & Questions



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BENEFITS TO NATION

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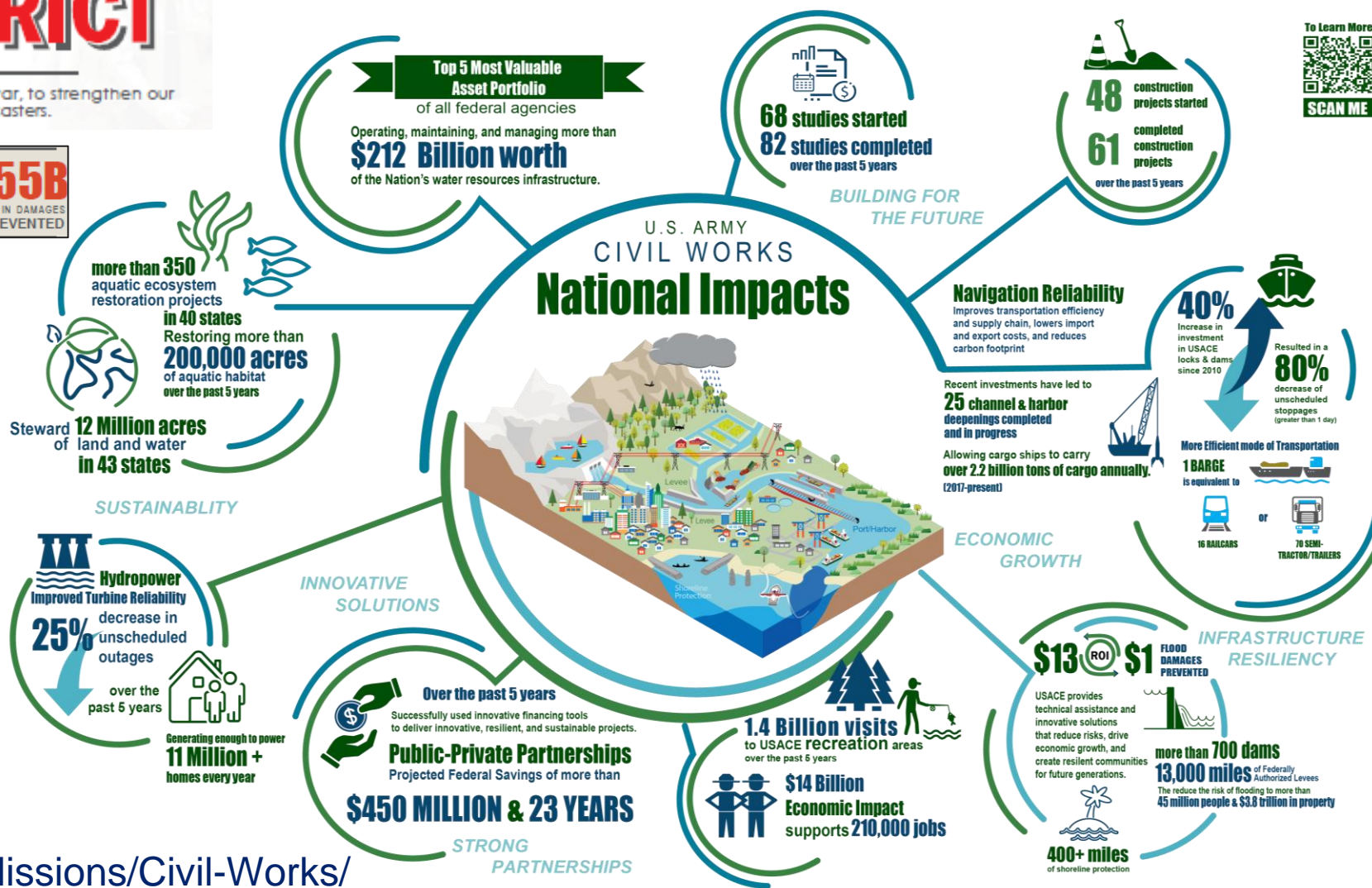
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OUR MISSION

The Fort Worth District provides vital public engineering services, in peace and war, to strengthen our Nation's security, energize the economy, and reduce risks from disasters.



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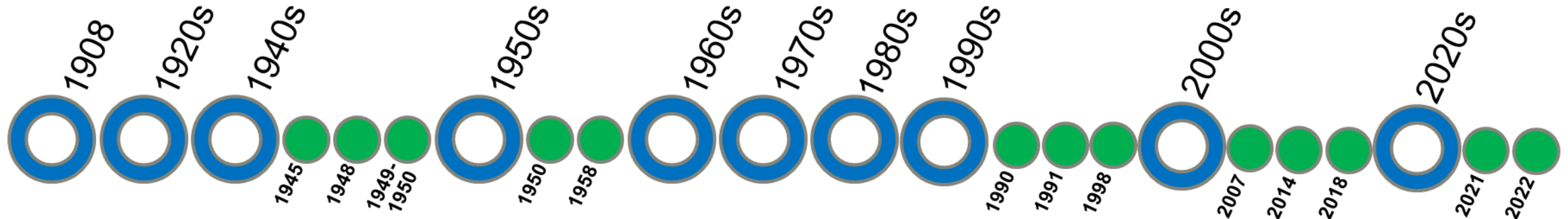


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DALLAS FLOODWAY SYSTEM HISTORIC TIMELINE

Trinity River thru Dallas over the years
First Dallas Floodway levee system built: 1930s
USACE began strengthening the levees in 1950s to present



*Large circles denote major flooding



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SYSTEM OVERVIEW

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TRINITY RIVER BASIN

WATER SUPPLY AND RESERVOIR WATER TRANSFER PIPELINES





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OPERATIONS & MAINTENANCE

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- ☐ City of Dallas (CoD) maintains eligibility in Public Law 84-99 through compliance with operations and maintenance (O&M)
 - PL 84-99 provides emergency flood fighting assistance and rebuild efforts in the event of a publicly declared disaster
- ☐ CoD's responsibility is to adhere to O&M manuals for each project implemented
 - Design, Construction and O&M is reviewed and approved by USACE
- ☐ USACE inspects the levees, sumps, river and pump stations
 - Site visits – every year
 - Periodic Inspections – 5-year cycle
 - Special Inspections as needed – NFIP Levee Accreditation
- ☐ USACE maintains authority to render decisions under Section 408 for alterations to USACE Civil Works projects



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SUPPLEMENTAL OVERVIEW



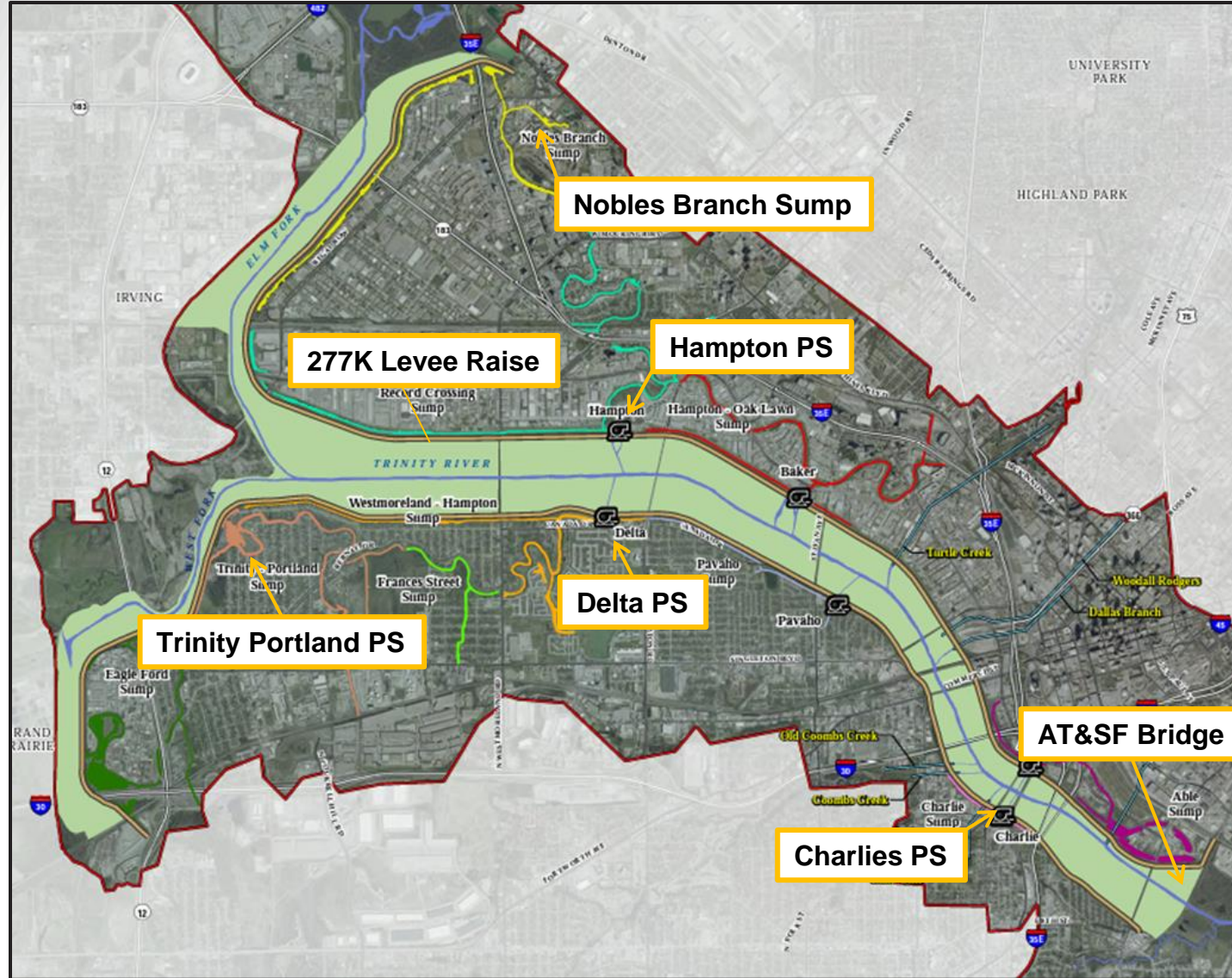
- ❑ Following a series of disaster declarations, Congress recognized the importance of fully funding flood risk management projects that could be implemented on an expedited schedule
- ❑ Dallas Floodway and Dallas Floodway Extension met criteria set and received:
 - \$457.7M in federal and local funding for the Dallas Floodway
 - \$135M in federal funding for Dallas Floodway Extension
- ❑ The City of Dallas is required to perform, and cost participate in certain items:
 - Cost share for Dallas Floodway (65% federal and 35% local)
 - Cost share for Dallas Floodway Extension (100% federal)
 - USACE performs routine cost analysis to account for current market conditions
 - Obtain fee simple land acquisition, subject to potential reimbursement for DFE only, easements and utility relocations, and all land must be “clean” prior to construction by USACE
- ❑ City of Dallas and USACE partner to review all design and construction activities; Regular and routine review of delivery by project management teams



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DALLAS FLOODWAY PROJECT FEATURES

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Authorization for Dallas Floodway by WRDA 2007, PL 110-114, Section 5141

Flood Risk Management Portion

- AT&SF Bridge Modification
- 277K cfs Levee Raise & Slope Flattening
- Charlie Pump Station
- Delta Pump Station
- Nobles Branch Sump Improvements
- Hampton 3 Pump Station
- Trinity Portland Pump Station
- New Hampton Renovation
- Old Hampton Demolition

Ecosystem Restoration

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



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277K LEVEE RAISE & SLOPE FLATTENING

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☐ Status

- Construction completed April 2025 ahead of schedule
- Total Construction Placement Cost: \$71,189,117

- ☐ Raised & Flattened the East and West Levees back to base design elevations in order to service a 277K Cubic Feet per Second (CFS) water surface elevation
- ☐ Performed riverbank stabilization on East Levee near Bellevue Sump between I-35 and Corinth Street bridge



East Levee Riverbank Stabilization near Bellevue Station Outfall in February 2025



Left: Earth hauling for levee raise; Right; final inspection of west levee prior to O&M turnover



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CHARLIE 2 PUMP STATION

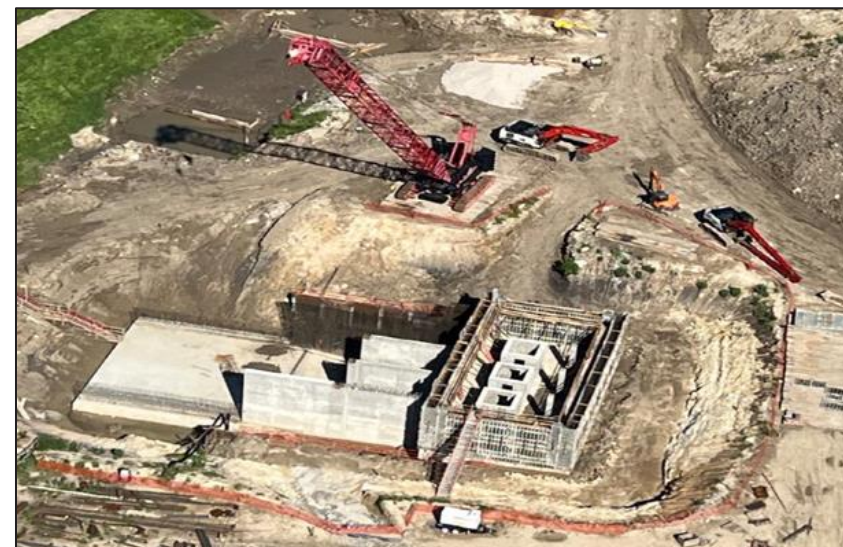
☐ Status

- Construction contract awarded 15 March 2022
- Projected Construction Placement Cost: \$64,070,928
- Projected completion mid 2026; schedule impaired

☐ Construct a new pump station capable of 225K Gallons Per Minute (GPM) increasing pumping capacity in surrounding area by over 100K GPMs

☐ Old Charlie Demolition

- Templated after new pump station brought online



Above: Aerial view of project site May 2025;
Below: Discharge channel on levee riverside

Dallas breaks ground on the new
Charlie Pump Station serving parts
of the southern sector

WFAA



"When you invest so much time and effort into seeing a neighborhood transformed and grow and redevelop, then this is a big piece of it," said Vincent Parker.



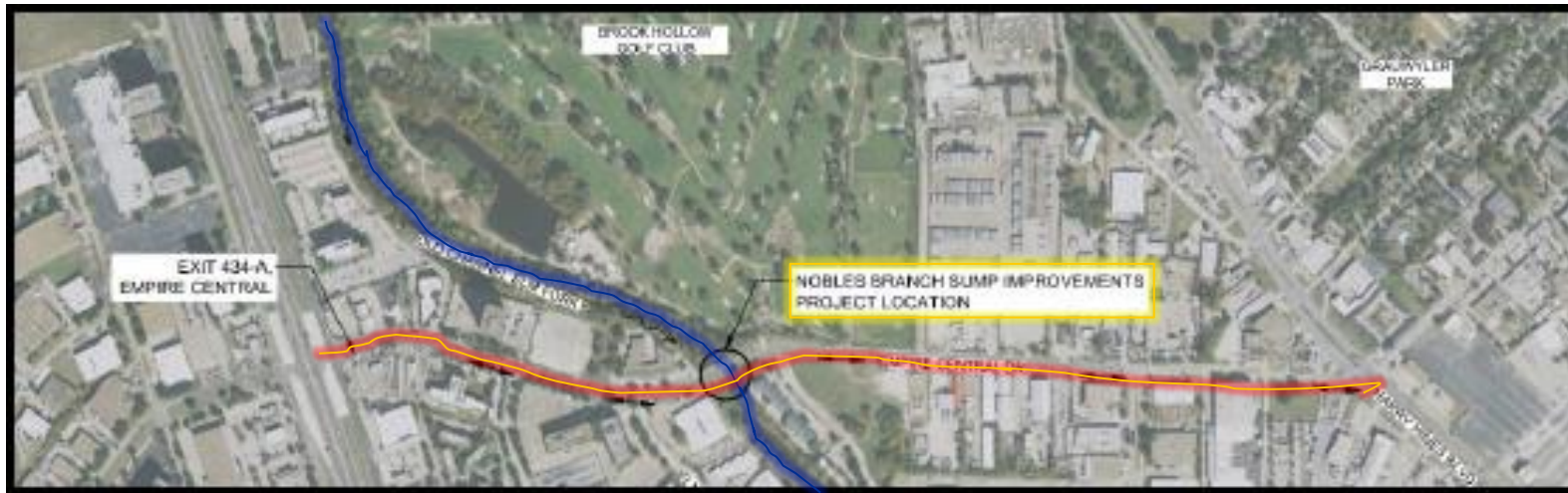


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NOBLES BRANCH SUMP IMPROVEMENTS

- ☐ Status
 - Construction contract awarded 12 February 2025
 - Projected Construction Placement Cost: \$13,543,885
 - Projected completion late 2026
- ☐ Install four new 60-inch reinforced concrete pipe culverts with slide gates under Empire Central Drive while maintaining trafficability
- ☐ Project will maintain integrity of existing water conveyance during construction and deliver greater conveyance of water from west Dallas along the Elm Fork towards Hampton Pump Stations when complete



Above: Existing Headwall & Slide Gate structure to be replace with four new 60-inch culverts and gates

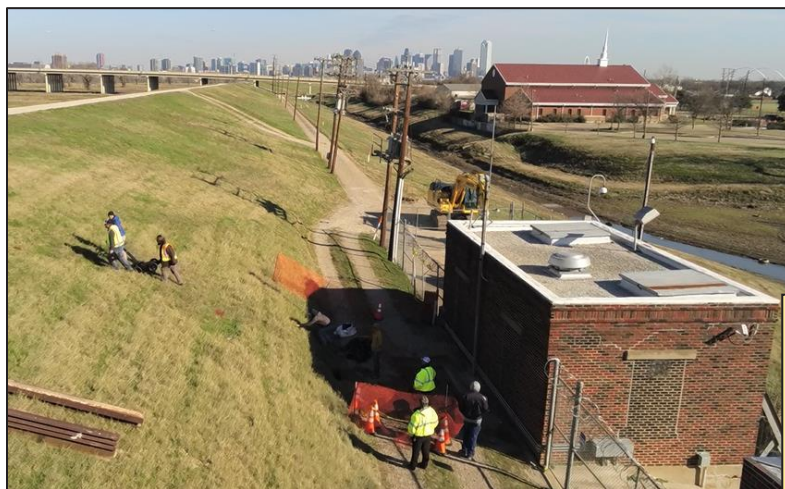
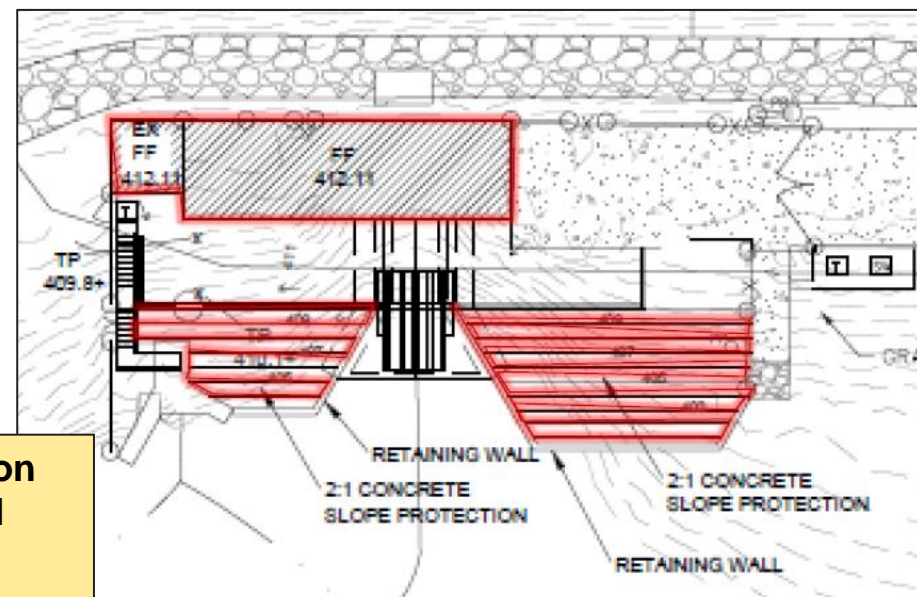


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DELTA PUMP STATION REPLACEMENT

- ☐ Status
 - Construction contract awarded 4 April 2025
 - Projected Construction Placement Cost: \$26,318,300
 - Projected completion late 2027
- ☐ Replacement of existing pump house building with upgraded electrical and installation of two 700HP pumps capable of 40K Gallons Per Minute (GPM) operation with higher efficiency than existing system
- ☐ Additional features will be new trash rack with expanded gallery deck for debris removal by front loader creating safer and more efficient operation



Above: Existing Delta Pump Station from landside; Below: Conceptual design of facility improvements; Left: preliminary site survey



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HAMPTON PUMP STATION PROJECTS

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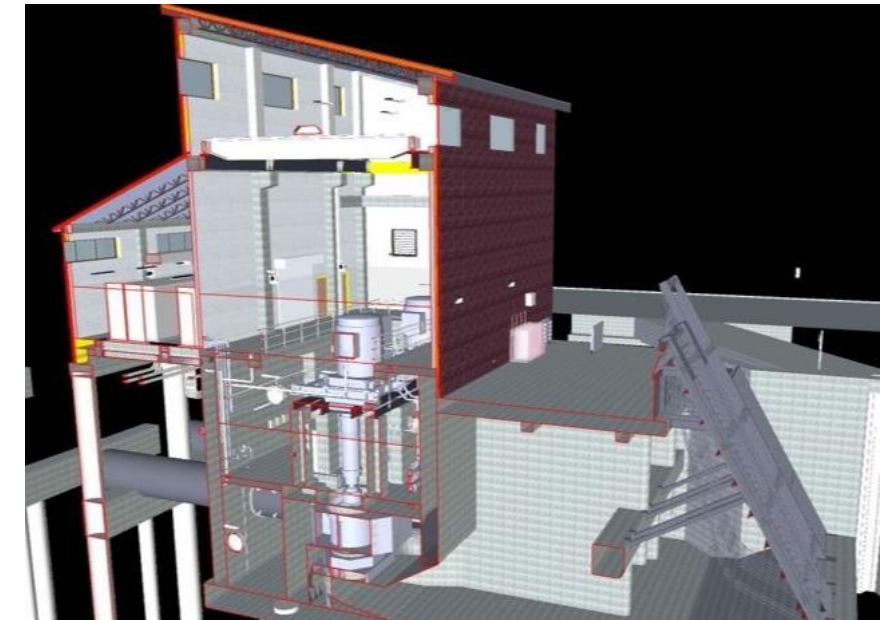
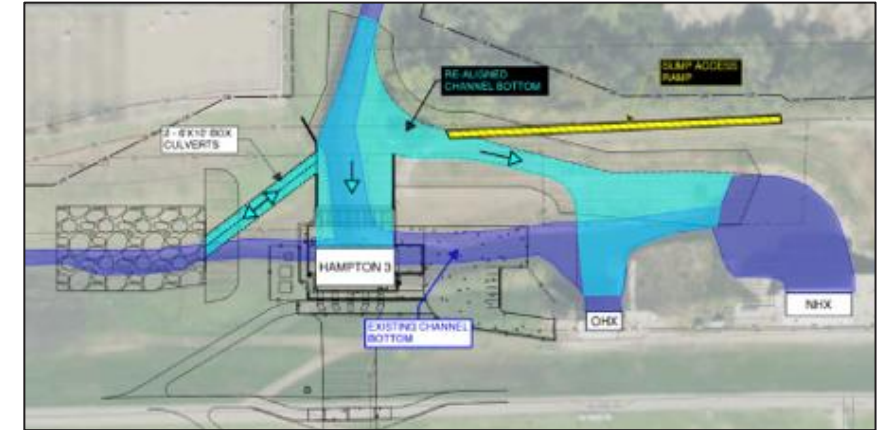
☐ Status

- Projected Contract First Award: Late 2026
- Projected Construction Placement Cost: \$100M-\$150M
- Projected Completion 2031-2033

☐ Hampton 3: Construct a new pump station capable of 700 Gallons Per Minute (GPM) operation along East Levee near Inwood Road

☐ New Hampton Renovation: Replacement of electrical equipment, supervisory control and data acquisition system, and incidental related work. To be completed after Hampton 3 brought online

☐ Old Hampton Demolition: To be completed after Hampton 3 brought online



**Above: Planview of Hampton project site;
Below: Isometric of Hampton 3 Pump Station**



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TRINITY PORTLAND PUMP STATION

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- ☐ Status
 - Construction contract terminated November 2023
 - Projected re-procurement in Fiscal Year 2027
 - Projected Construction Placement Cost: \$60M
- ☐ Construct a new pump station capable of 225K Gallons Per Minute adding interior drainage capability where none previously existed
- ☐ The Corps continues to partner with City of Dallas to ensure all real estate and environmental actions are completed by end of 2025



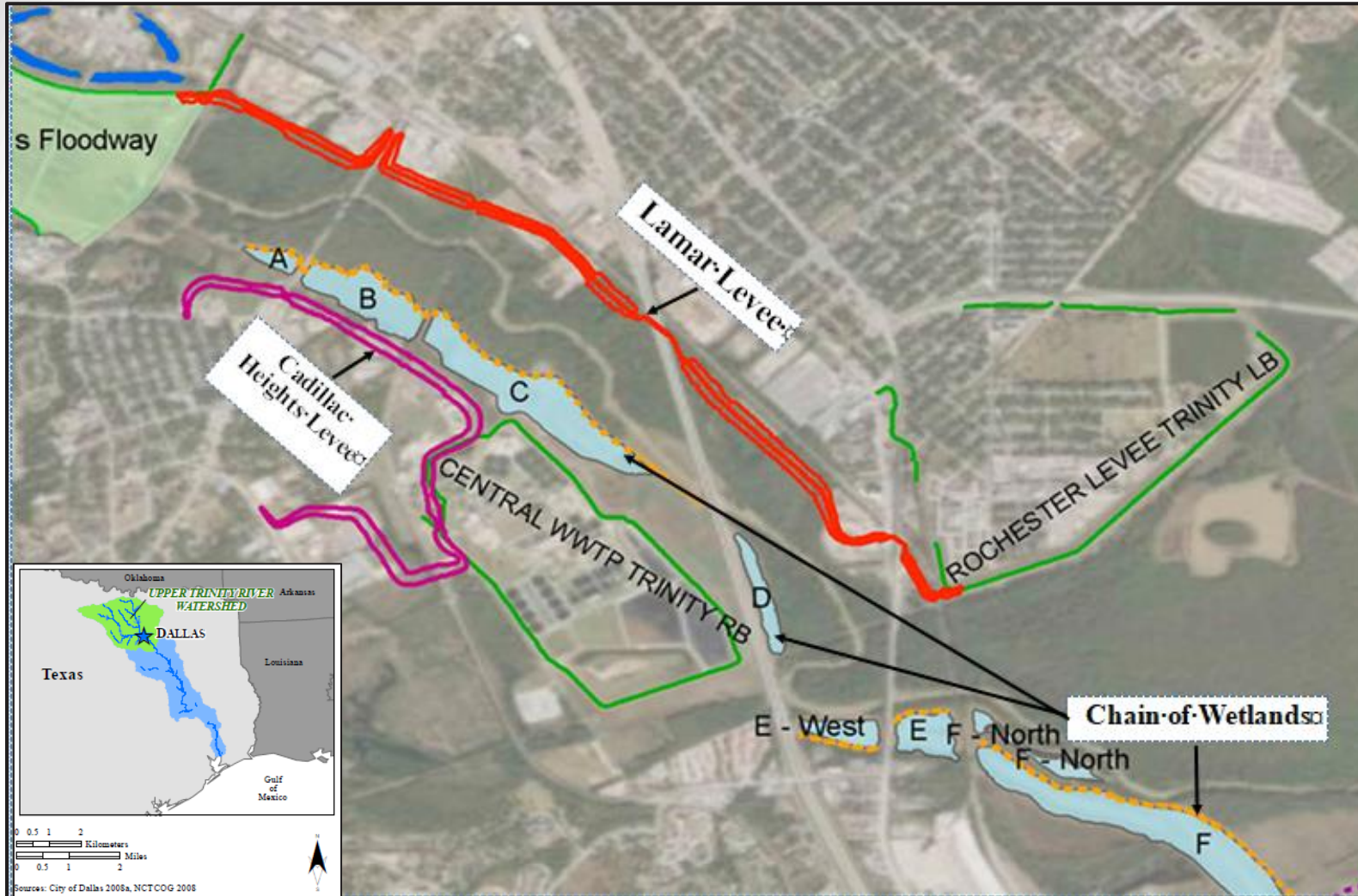
**Above: Project site of future Trinity Portland Pump Station;
Below: Rendering of Pump Station**



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DALLAS FLOODWAY EXTENSION FEATURES

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Authorization of Dallas Floodway Extension by Section 301, River and Harbor Act of 1965, modified by Section 351 WRDA 1996 and Section 256 of WRDA 1999

Flood Risk Management Portion

- Flood control wetlands (Upper & Lower Chain of Wetlands)
- Cadillac Heights Levee
- Lamar Levee

Other portions include

- Ecosystem restoration
- Transportation
- Recreation



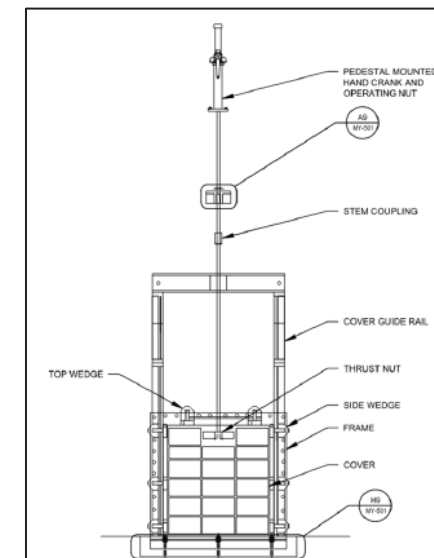
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LAMAR LEVEE

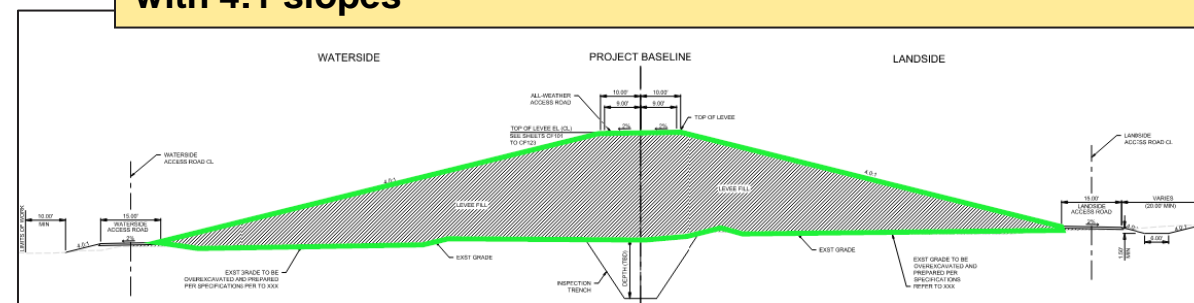
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- ❑ Status
 - Design contract awarded: 29 September 2021
 - Projected construction contract award: Fiscal Year 2028
- ❑ Construct approximately 3 miles of new levee and floodwalls tying into existing Dallas Floodway East Levee near and continuing southeast to Rochester Park Levee
- ❑ Project updated design scope in 2024 to encompass utility relocation design. Design efforts continue in parallel with real estate acquisition by the City of Dallas with aim to achieve clean and clear lands by end of 2026
- ❑ Design includes option as a betterment for floodwall features to accommodate future Dallas to Houston High Speed Rail
- ❑ Design incorporates three critical roadway (SH 310) and railroad (BNSF & UPRR) closure structures



Above: Typical sluice gate detail to accommodate drainage sump operations; Below: Typical levee section planned with 4:1 slopes



- Maximum Height 25 feet
- 4H:1V Slopes, vegetated
- Access roads at crest and toe of slopes



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CADILLAC HEIGHTS LEVEE

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☐ Status

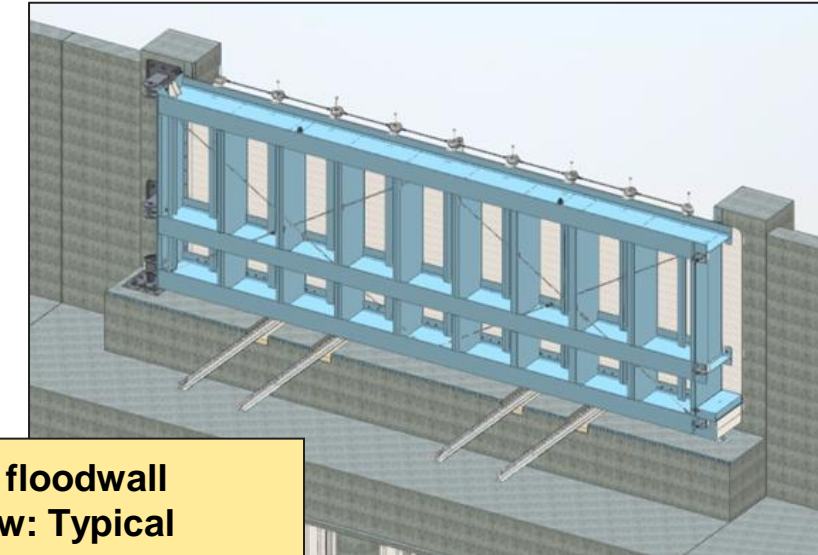
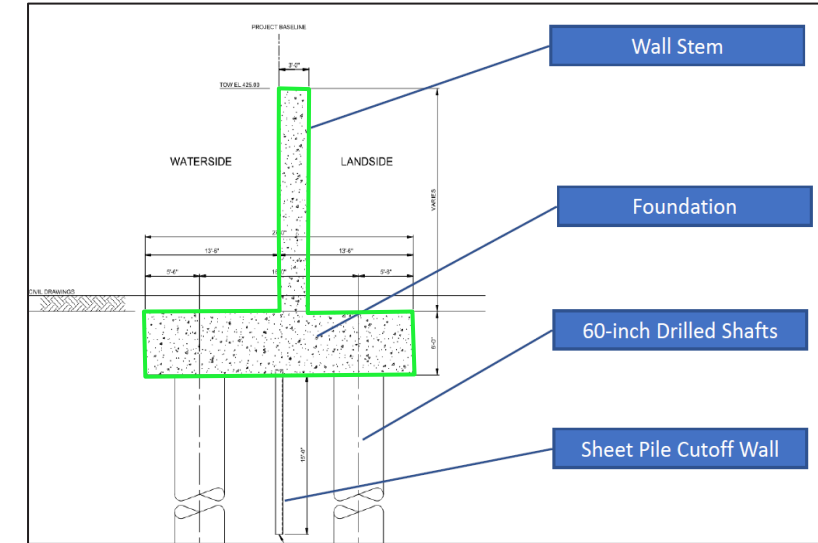
- Design contract awarded: 3 December 2021
- Projected construction contract award: Fiscal Year 2028

☐ Construct approximately 2.25 miles of new levee and floodwalls in vicinity of the Cadillac Heights Neighborhood tying into high ground at start and finish

☐ Project updated design scope in 2024 to encompass utility relocation design. Design efforts continue in parallel with real estate acquisition by the City of Dallas with aim to achieve clean and clear lands by end of 2026

☐ Design incorporates four critical roadway (Cedar Crest, Sergeant Road) and railroad (BNSF, CWWTP Spur) closure structures

☐ Cadillac Levee ties into CWWTP Levee on the West Side and design plans for uninterrupted operations of the plant during construction



Above: Typical floodwall structure; Below: Typical railroad closure structure



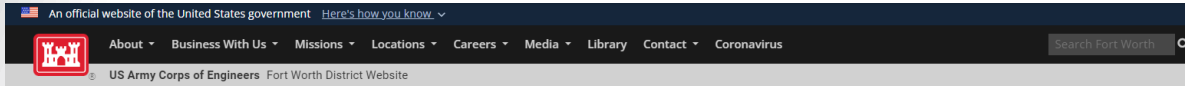
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QUESTIONS?

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Dallas Floodway Project

Project Overview

The U.S. Army Corps of Engineers (USACE), Fort Worth District's (SWF) Dallas Floodway Project is located in Dallas, Texas. It is a complex project in cooperation or partnership with multiple units of local, state and federal government. It addresses a number of regional concerns, although flood protection for the citizens of Dallas remains the cornerstone of this multi-faceted effort.

Modifications to the existing Dallas Floodway Project were authorized in the Water Resources Development Act (WRDA) of 2007, Public Law 110-114, Section 5141, 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. The Final Feasibility Report provides a comprehensive assessment of alternatives to improve the Dallas Floodway System.

The USACE has oversight responsibility for all activities within the federally authorized Dallas Floodway System. The USACE-SWF is a lead actor in some of the projects, such as the existing Dallas Floodway, which was strengthened and improved by USACE in the 1950s to reduce the risk of flooding. It was designed to handle a Standard Project Flood event. In other projects within the confines of the Dallas Floodway listed below, the USACE plays a smaller supporting role or only an oversight function.

The Dallas Floodway Project is located along the Trinity River upstream from the abandoned Atchison, Topeka and Santa Fe (AT&SF) trestle to the confluence of the West and Elm Forks, then upstream along the West Fork for approximately 2.2 miles, and upstream about 4 miles along the Elm Fork.

Public safety is the No. 1 priority in the U.S. Army Corps of Engineers Levee Safety Program. The Dallas Floodway system consists of the Dallas Floodway and the Dallas Floodway Extension Projects. The Dallas Floodway Project, in addition to the adjacent Dallas Floodway Extension Project, focuses on three of five inter-related components within the Dallas Floodway System: flood protection, ecosystem restoration and recreation in partnership with the local sponsor, the City of Dallas. The Dallas Floodway Project was designed to reduce flood risk for the citizens of Dallas. Both the USACE and the City of Dallas share the responsibility for public safety, and both are committed to ensuring the integrity of the system. Each project has its own web section accessible from this Fort Worth District home page. The USACE also provides public access to a National Levee Database which contains additional information on the Dallas Floodway levees. The USACE is also involved in two other major components of the project - transportation and community/economic development.

Project Menu

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[Helpful Links](#)

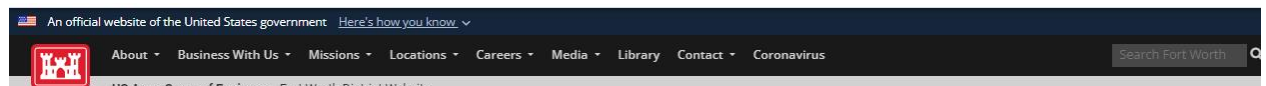
Fact Sheets

[2015 Modified Dallas Floodway Project Update](#)
[2013 Dallas Floodway Project](#)
[Who certifies levees in Dallas?](#)

History

[Dallas Floodway Timeline \(1908 - 2013\)](#)
[History to 2003](#)
[Dallas Reclaims 10,000 Acres in the Heart of the City \(1929\)](#)
[Engineering Inventory and Analysis of the Dallas Floodway \(2010\)](#) ...

<https://www.swf.usace.army.mil/Missions/Civil-Works/Dallas-Floodway-Extension/>



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Dallas Floodway Extension Project



Project Overview

The Dallas Floodway Extension (DFE) Project is located in Dallas, Texas, along the Trinity River beginning where the Dallas Floodway ends (at the abandoned Atchison, Topeka and Santa Fe trestle) and extending downstream to the area where IH-20 and Dowdy Ferry Road intersect. It is a complex project in cooperation and partnership with multiple units of local, state and federal government. It addresses a number of regional concerns, although reducing flood risk for the citizens of Dallas remains the cornerstone of this multi-faceted effort.

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[Project Overview](#)
[Dallas Floodway Timeline \(1908 - 2013\)](#)
[Lower Chain of Wetlands Fact Sheet](#)
[Upper Chain of Wetlands Fact Sheet](#)
[Trinity River Corridor Project Update \(11/13/2013\)](#)
[Dallas City Council briefing \(8-21-2013\)](#)
[Corps-built ecosystem in urban Dallas attracts wildlife \(2013\)](#)
[Mitigation plantings in harsh North Texas climate challenge U.S. Army Corps of Engineers team \(2013\)](#)
[Trinity Bird Count birding report, Lower Chain of Wetlands slide show \(2013\)](#)
[Bird list, Trinity Bird Count, Lower Chain of Wetlands \(2013\)](#)
[Building for birders while reducing flood risk](#)
[Lower Chain of Wetlands Status Report \(March 2015\)](#)
[Girl Scouts, Master Naturalists support Floodway ecosystem restoration project](#)
[Corps Restores Wetlands along DFE](#)
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References



Dallas Floodway



Dallas Floodway Extension