

Dallas Floodway and Dallas Floodway Extension:

Dallas Meeting

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30 Oct 2020



US Army Corps of Engineers
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Meeting Agenda

- Introductions
- Background
- Water Management
- Operations and Maintenance
- Supplemental Program
- Questions



Introductions

- U.S. Army Corps of Engineers, Fort Worth District
- City of Dallas
- Trinity River Corridor Local Government Corporation
- Trinity Park Conservancy



Opening Remarks

- Overview of partnership with the U.S. Army Corps of Engineers (Corps) and City
- Status of current operations, planning and construction activities underway in the Dallas Floodway System



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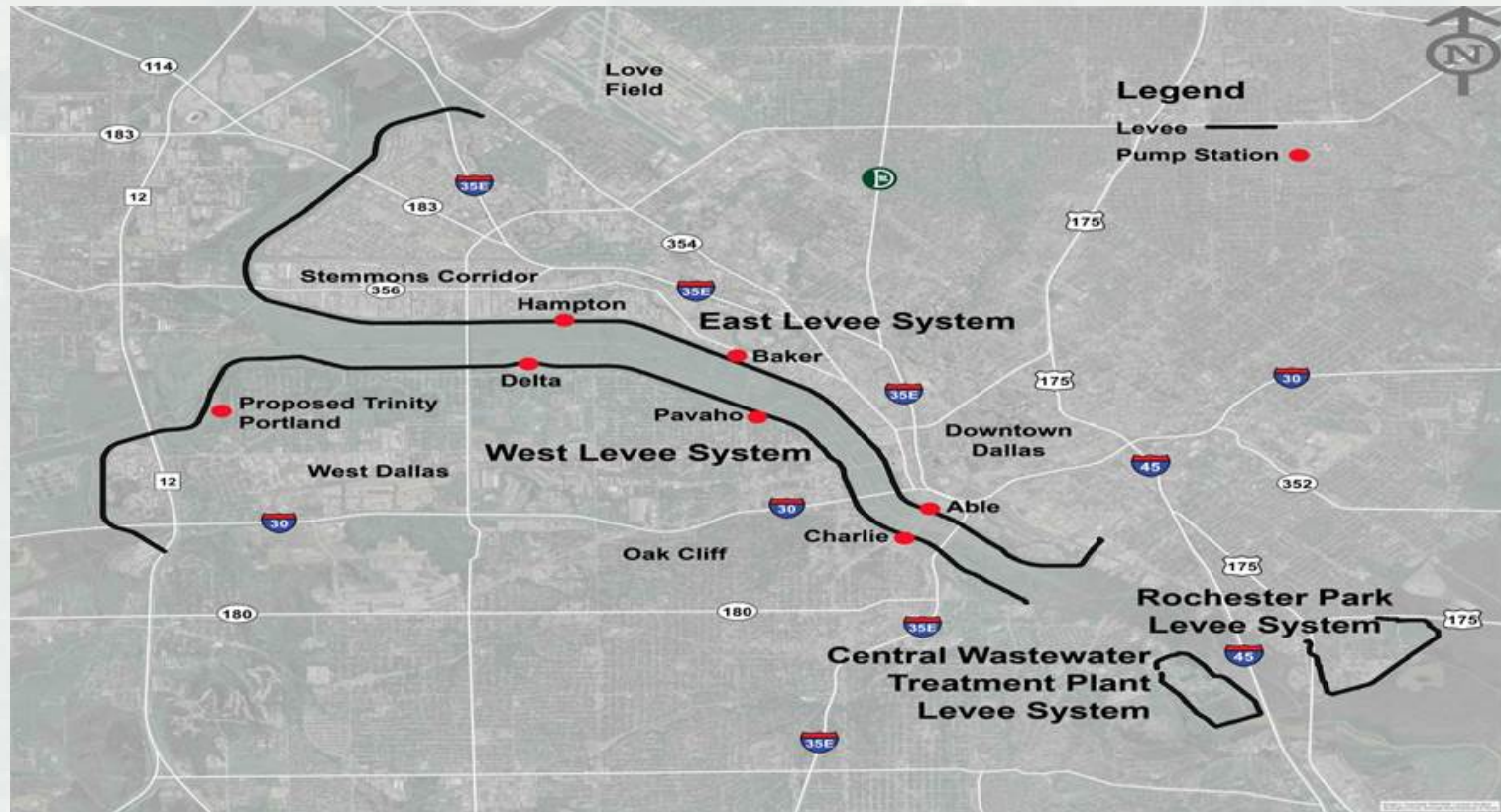
Background

- City owns the land associated with the Dallas Floodway System including Dallas Floodway and Dallas Floodway Extension
- Corps regulates these lands to ensure the primary purpose of flood risk management is upheld
 - ▶ City is responsible for maintaining flood risk management features and certain ecological features in accordance with Corps' regulations
 - ▶ City is responsible for minor and major improvements to flood risk management features and certain ecological features



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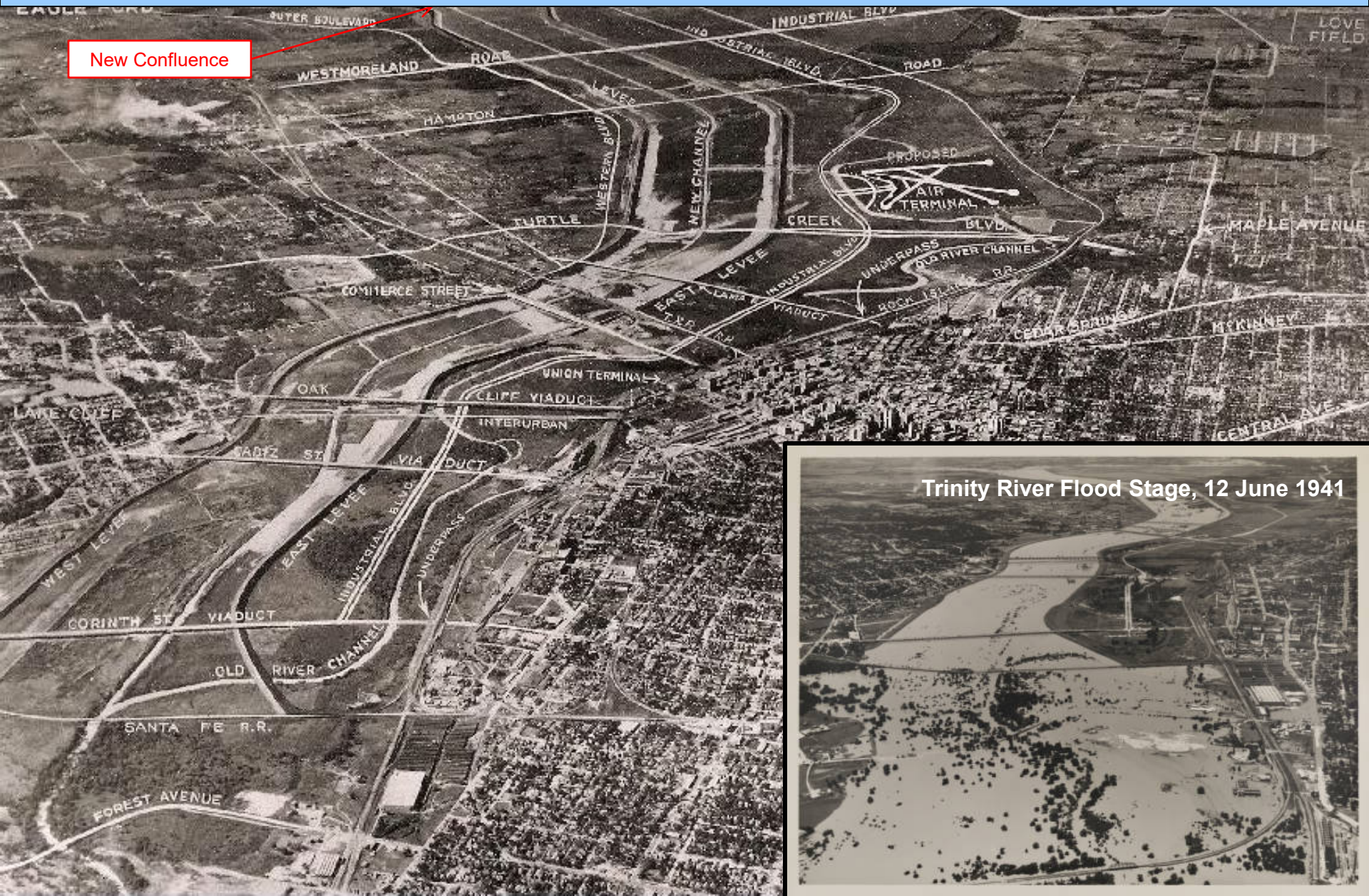
Dallas Floodway System



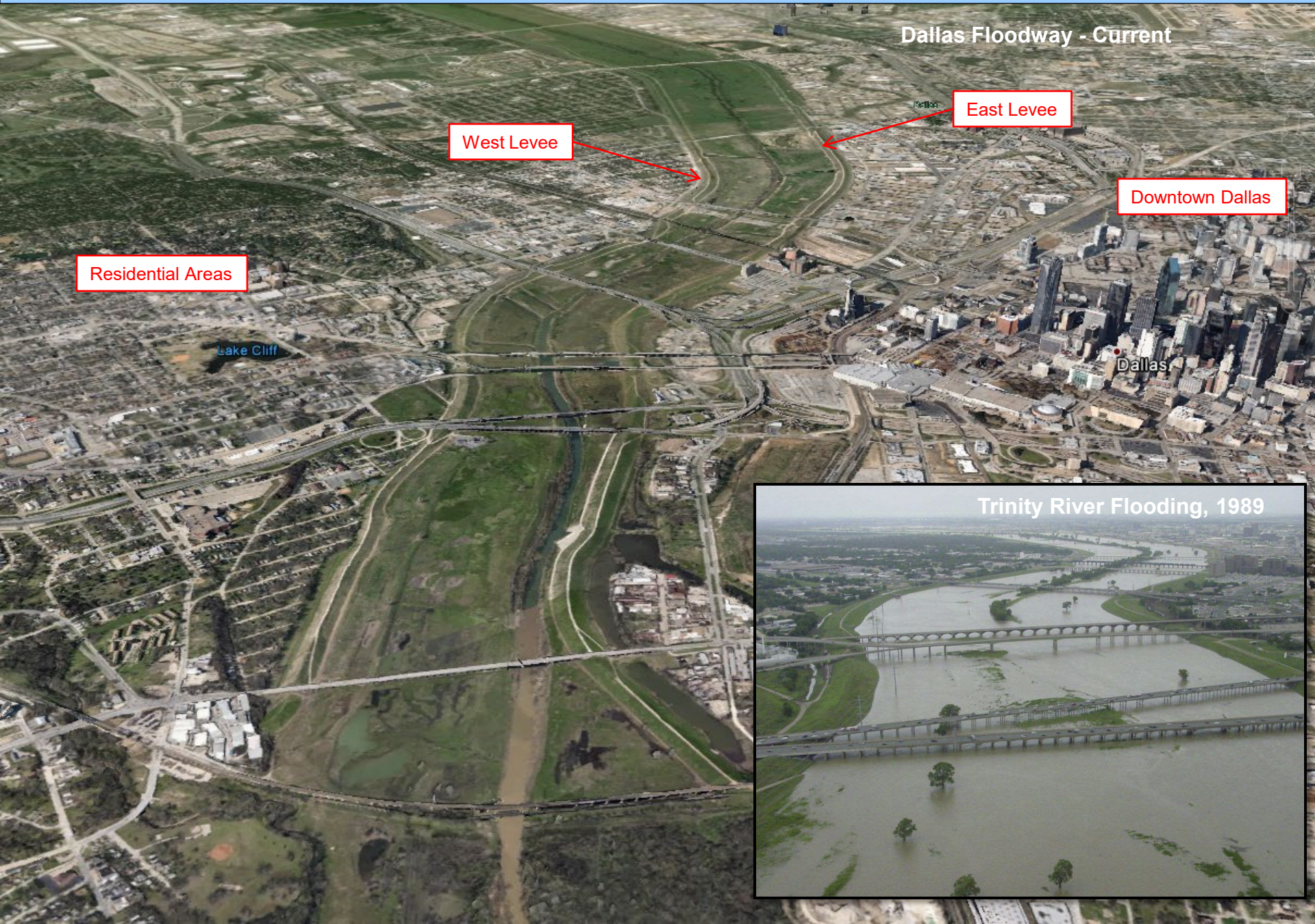
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Trinity River in Dallas through the years

First Dallas Floodway levee system as built: 1930



Historic Context: USACE Strengthening in 1950s - Today



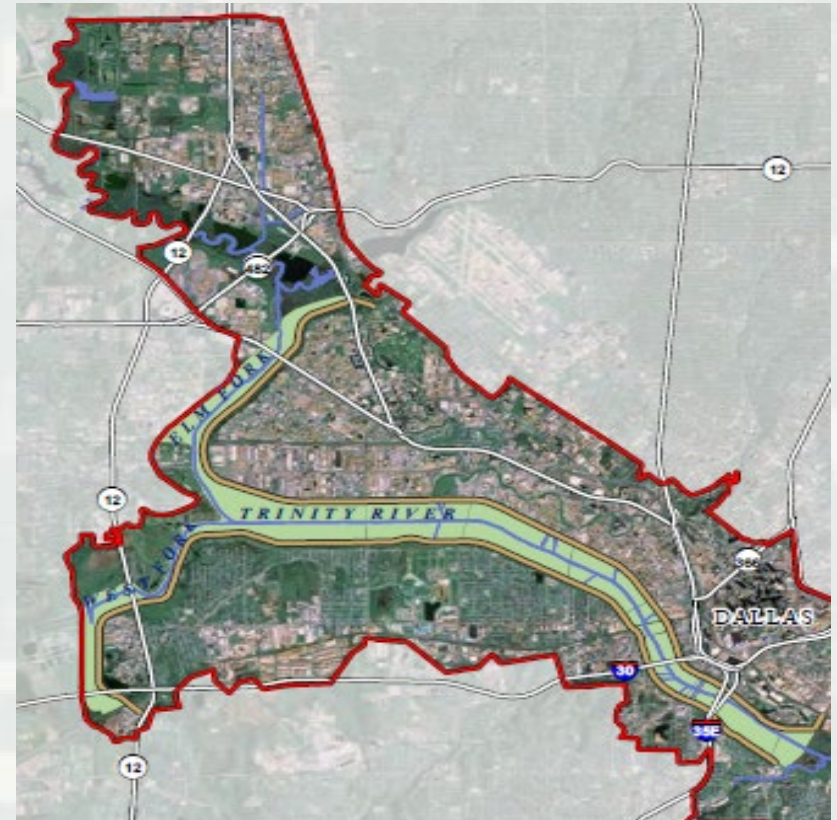
1990 Flood Event



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Dallas Floodway

- Dallas Floodway geographic boundary:
 - ▶ West and Elm Forks through the confluence of the Trinity River to the ATSF bridge near the DART line at 8th Street/Riverfront



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Background

- Dallas Floodway levees established in 1920s
- Partnership with Corps began in 1945 with improvements to the system and official entry to federal program
- Transfer from Dallas County Flood Control District to the City occurred in 1968
- Dallas maintained the Dallas Floodway and began work on upgrades to the levees with the Corps in 1996



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Background

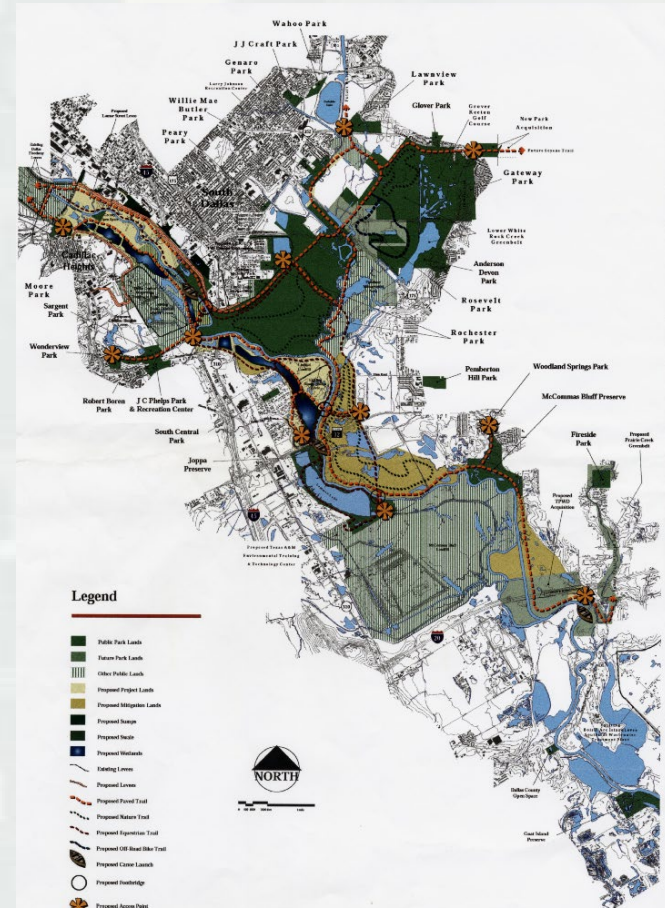
- Water Resources Development Act of 2007 established the current project known as the Dallas Floodway Project
- Final approvals and a record of decision (ROD) was issued in 2015 which allows for design and construction to begin
- 2015 decision outlines:
 - ▶ Federal cost share project (\$673M – 65% federal and 35% local)
 - ▶ Non-federal cost share project
 - ▶ Project implementation order
 - ▶ Project funded through workplan, no federal funding to date
- 2018 Bi-Partisan Budget Bill Appropriated all flood risk management projects to be complete on an expedited schedule



Dallas Floodway Extension

- Dallas Floodway Extension geographic boundary:

- ▶ ATSF bridge near the DART line at 8th to IH20/Dowdy Ferry



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Dallas Floodway Extension

- Dallas Floodway Extension was authorized in 1965 as part of the partnership with the Corps
- Dallas maintained a floodway condition and began working with the Corps on the Dallas Floodway Extension study to provide additional flood protection in the early 1990s
- Major flooding in the late 1980s/early 1990s resulted in the City building the Rochester Levee and making major improvements to the Central Wastewater Treatment Levee ahead of the Corps' study completion
 - ▶ Water Resources Development Act of 1996 added these levees to the federal levee system and provides for credit/reimbursement to the City



Dallas Floodway Extension

- Dallas Floodway Extension ROD, issued in 1999, defines:
 - ▶ Federal cost share project (\$159M – 75% federal and 25% local)
 - ▶ Project is under construction
 - ▶ Costs have escalated to approximately \$459M in 2017 dollars
 - ▶ Project funded through City and Federal appropriations, approximately \$150M to date
- 2018 Bi-Partisan Budget Bill Appropriated all flood risk management projects to be complete on an expedited schedule



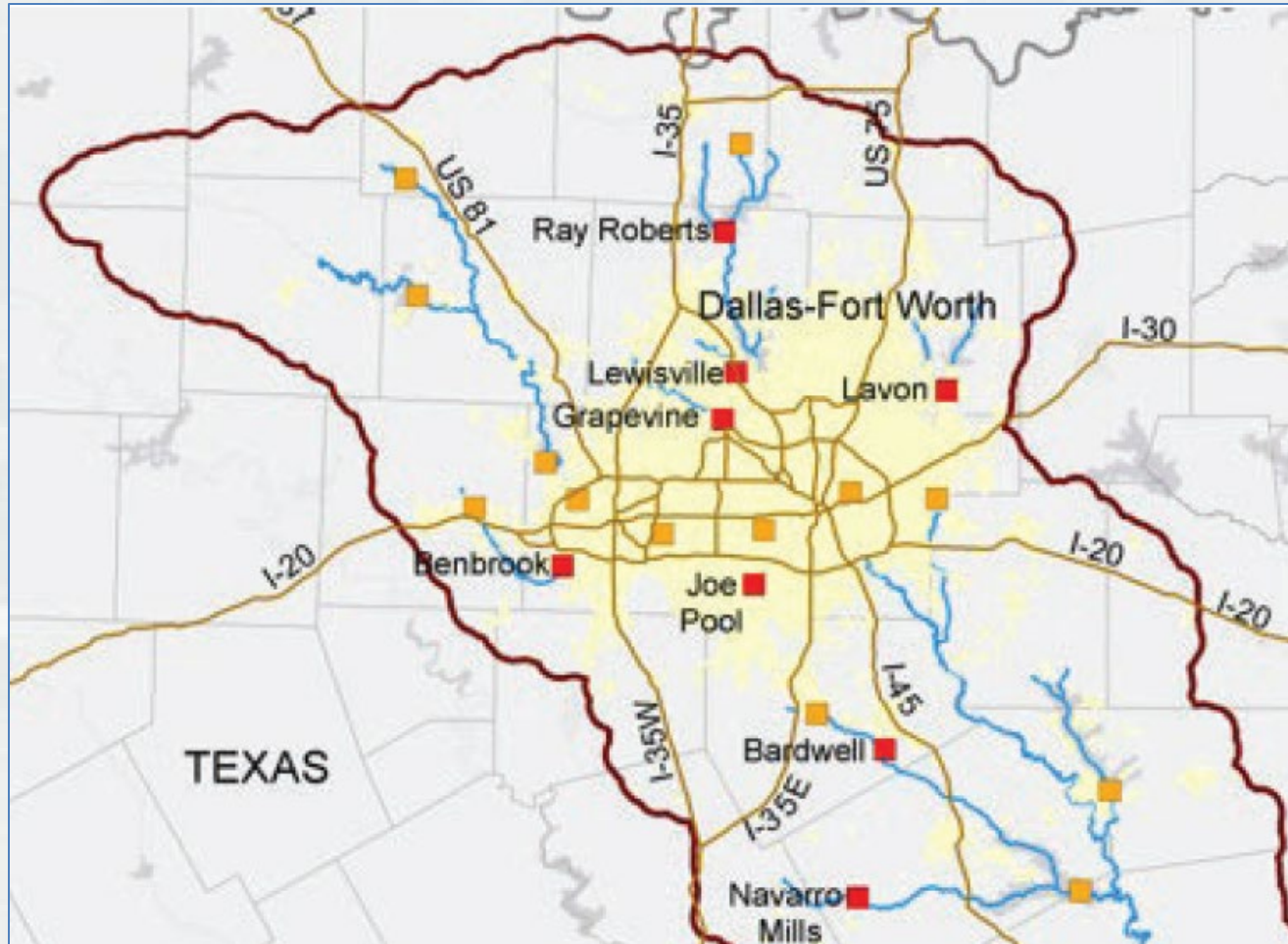
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Regional Water Management



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Water Management



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Operations and Management



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Operations and Maintenance

- City 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
- O&M requirements must be met to not negatively impact USACE and FEMA related regulations



Operations and Maintenance

- City responsibility 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
 - ▶ Annually and periodically



Operations and Maintenance

- In order to move forward with any construction that touches the levee template, requires additional permitting by the USACE commonly referred to as a 408
 - ▶ Template is any land within 150' from the toe and the levee
 - ▶ City is responsible for ensuring compliance for any action permitted through the life of the improvement
- Projects that touch the waters of the US may require a 404 permit



408 - EC 1165-2-220

- Commanders at HQ, SWD, SWF responsible for 408 compliance, and EC implementation
- Required IAW with EC
- SWF 408 Review Team role
- <https://www.swf.usace.army.mil/Missions/Section-408/>



Regulatory/408 Synchronization

- Director's Policy Memorandum 2018
- Regulatory Division Coordination Standard Operating Procedure (SOP) for Activities Involving 408 Review and/or Permits, approved April 10, 2019



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Bi-Partisan Budget Act of 2018 Supplemental Projects



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Supplemental Background

- 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:
 - ▶ \$223M in federal and local funding for the Dallas Floodway
 - ▶ \$135M in federal funding for Dallas Floodway Extension

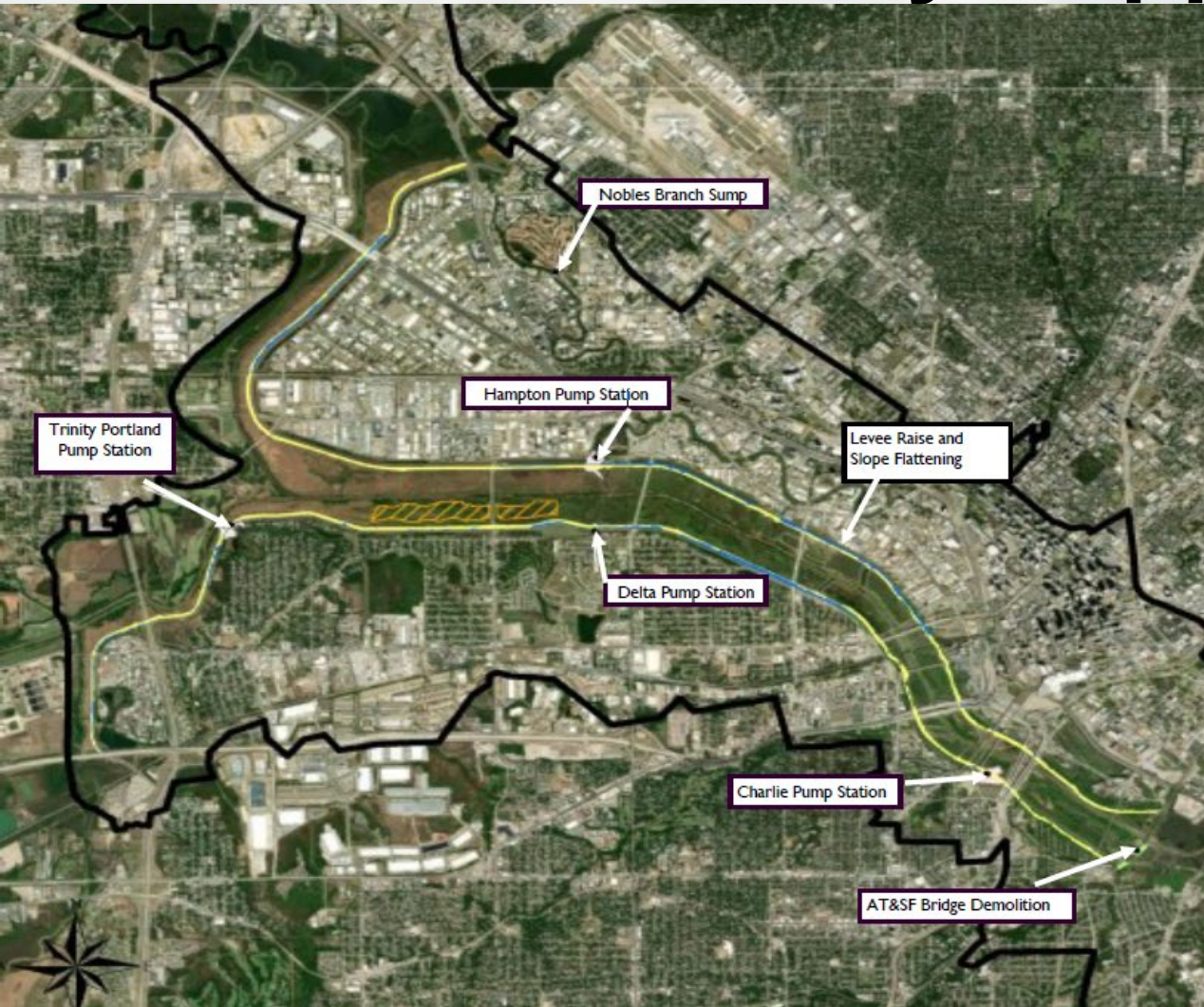


Supplemental Background

- City 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):
 - ▶ City required to obtain fee simple land acquisitions, subject to potential reimbursement, easements and utility relocations, and all land must be “clean” upon transfer to USACE for construction
- City and USACE are partnering to review all design and construction activities



Dallas Floodway Supplemental



AUTHORIZATION WRDA 2007, PL 110-114, SECTION 5141

PROJECT FEATURES

277K CFS LEVEE RAISE AND SIDE SLOPE FLATTENING

- Raise the East and West Levees and flatten riverside slopes to 4:1

TRINITY PORTLAND PUMP STATION

- Build new pump station
- 2 – 125,000 gpm concrete volute pumps
- 1 – 6,000 gpm low flow sump pump

DELTA PUMP STATION

- 2 replacement pumps—700HP
- Replace HVAC
- Build new electric building as well as new trash rack and access

CHARLIE PUMP STATIONS

- Build new pump station and demolish the existing pump station
- 3 – 750,000 gpm concrete volute pumps
- 1 – 6,000 gpm low flow sump pump

HAMPTON PUMP STATIONS

- Build new pump station, renovate existing station to include electrical upgrades and demolish the old pump station
- New station: 5 – 140,000 gpm concrete volute pumps

NOBLES BRANCH SUMP

- Add 3 – 60 inch pipe culverts with sluice gates
- Extend existing 60 inch gated culvert under Empire Central Drive
- Replace existing sluice gate and headwall
- Realign existing 48 inch RCP to parallel the new 60 inch culverts

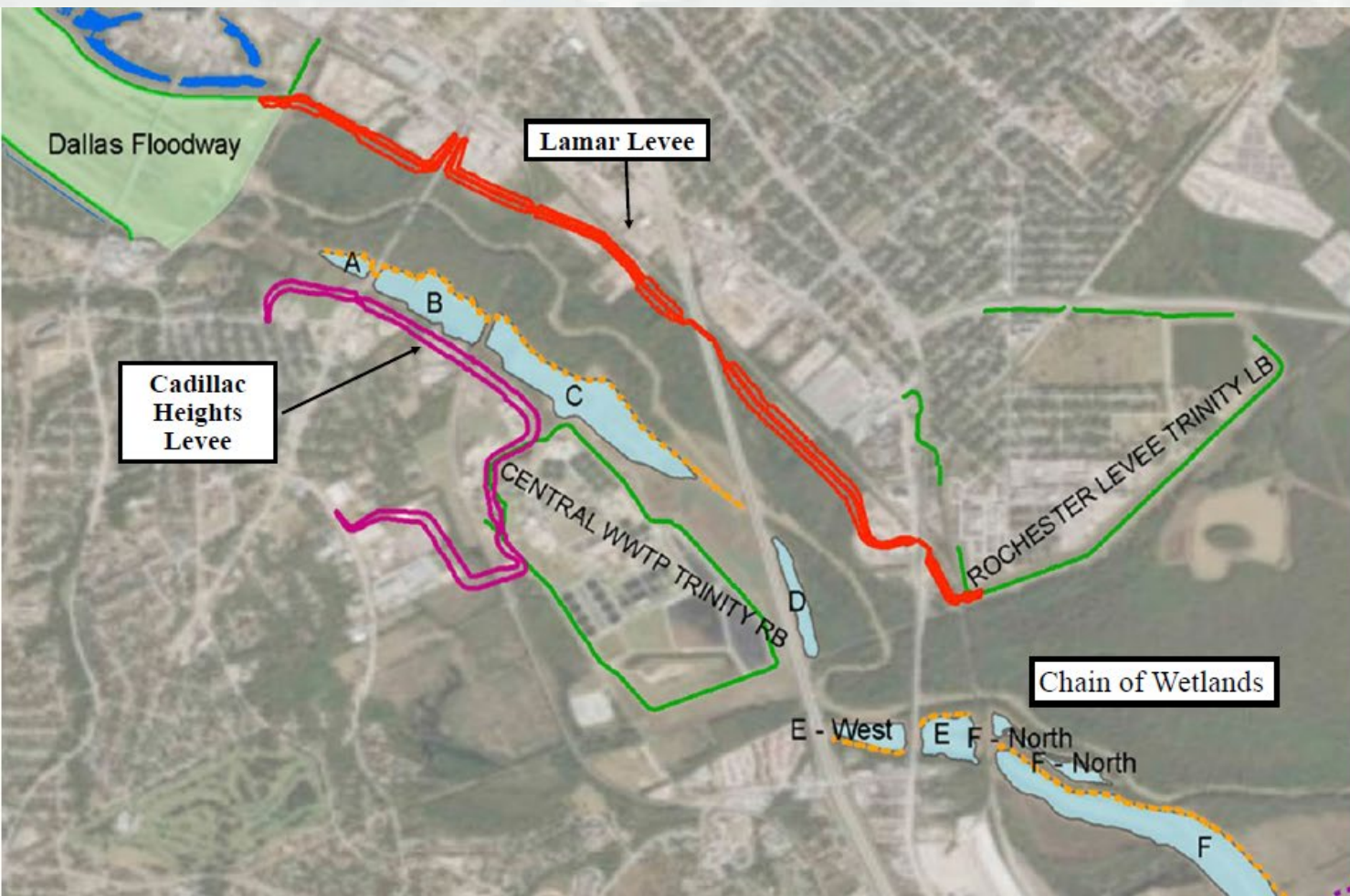
AT&SF BRIDGE DEMOLITION

- Awarded for \$1.7M
- Demo the existing trestle and concrete bridges



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Dallas Floodway Extension Supplemental



- Section 301, River and Harbor Act of 1965 (flood control)
- modified by Section 351 WRDA 1996 (inclusion of non-Federal constructed work), and Section 356 of WRDA 1999 (addition of ecosystem and recreation features)

PROJECT FEATURES

LAMAR LEVEE

- 16,037 feet (approximately 3 miles)
- Earthen levee with floodwalls and flood gates
- Five drainage sumps
- Four levee crossings

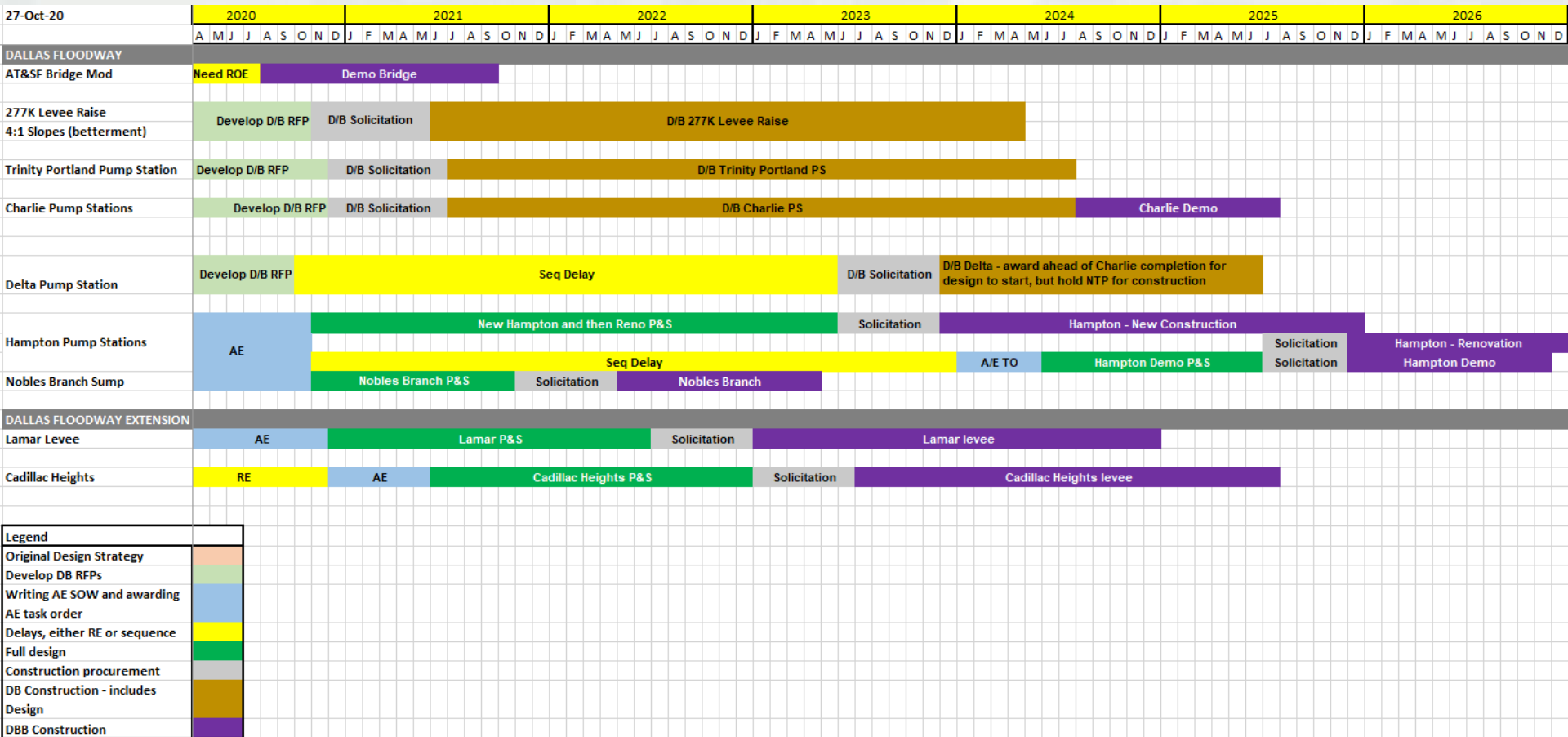
CADILLAC HEIGHTS LEVEE

- 11,891 feet (approximately 2.25 miles)
- Earthen levee with floodwalls and flood gates
- At least three railroad crossings and five major street crossings



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Schedule



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Questions?

