

Memorandum



CITY OF DALLAS

DATE September 9, 2011

TO Trinity River Corridor Project Committee Members: Vonciel Jones Hill (Chair)
Linda Koop (Vice-Chair), Monica Alonzo, Scott Griggs, Angela Hunt, Delia Jasso

SUBJECT **Trinity River Corridor Project Overview of Flood Control Components**

At the next Trinity River Corridor Project Committee meeting on Monday, September 12, 2011, the attached briefing will be presented by Rebecca Rasor, P.E., Managing Director of the Trinity River Corridor Project. This briefing will provide an overview of the flood control components of the project and includes updates for recent progress on specific components.

Please contact me if you have questions.



Jill A. Jordan, P.E.
Assistant City Manager

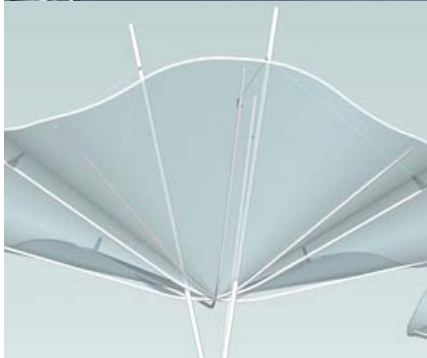
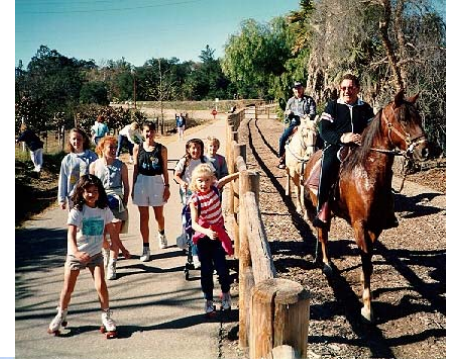


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Attachment

cc: Honorable Mayor and Members of the City Council
Mary K. Suhm, City Manager
A. C. Gonzalez, First Assistant City Manager
Ryan S. Evans, Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
Forest E. Turner, Assistant City Manager
Joey Zapata, Interim Assistant City Manager

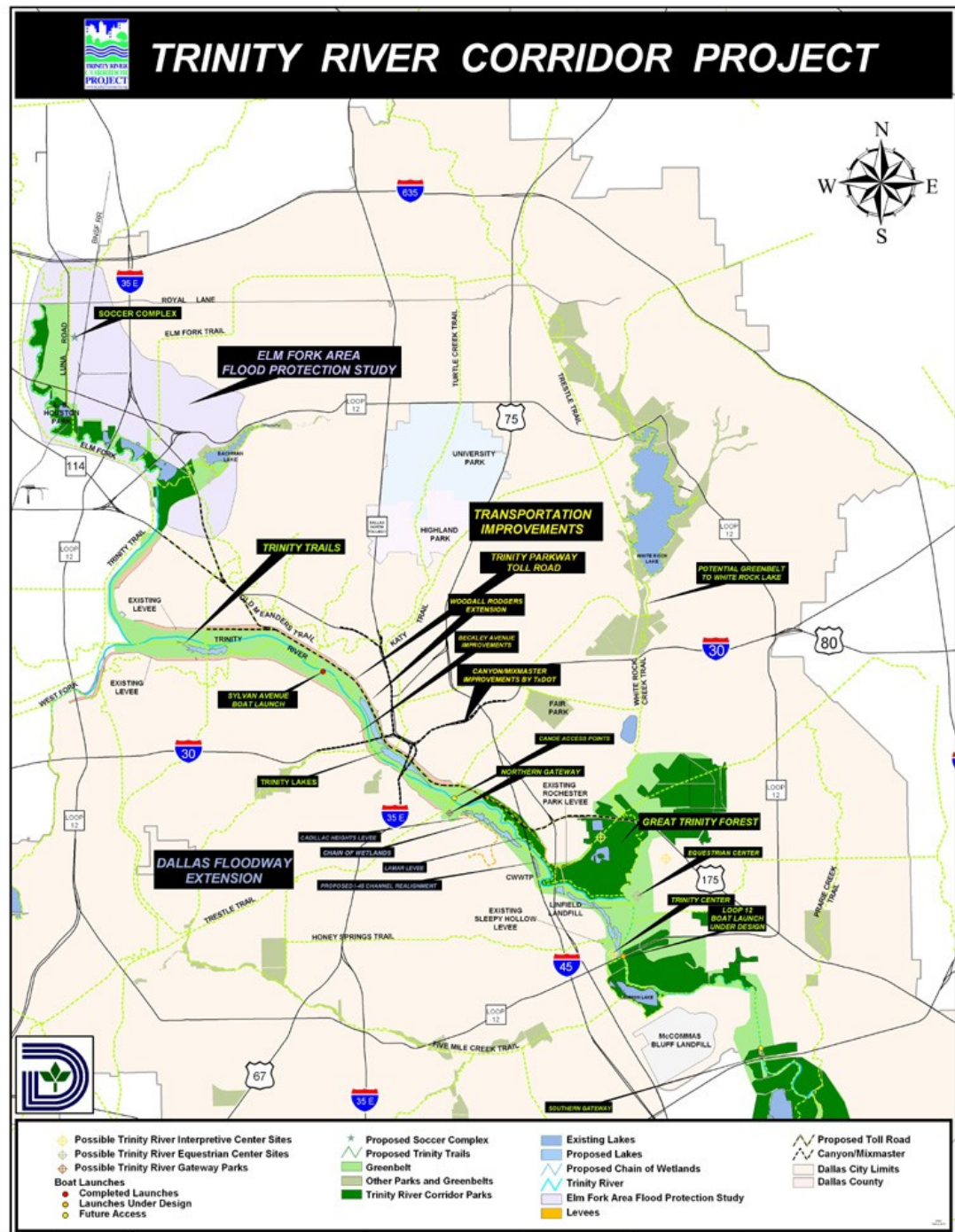
Kelly High, Director, Trinity Watershed Management
Rebecca Rasor, P.E., Managing Director, Trinity River Corridor Project
Paul D. Dyer, Director, Park and Recreation
Theresa O'Donnell, Director, Sustainable Development & Construction
Helena Stevens-Thompson, Assistant to the City Manager - Council
Rosa A. Rios, Interim City Secretary



Trinity River Corridor Project Overview of Flood Control Components

Trinity River Corridor Project Committee
September 12, 2011

The project covers 20 miles of the Trinity River, approx. 10,000 acres

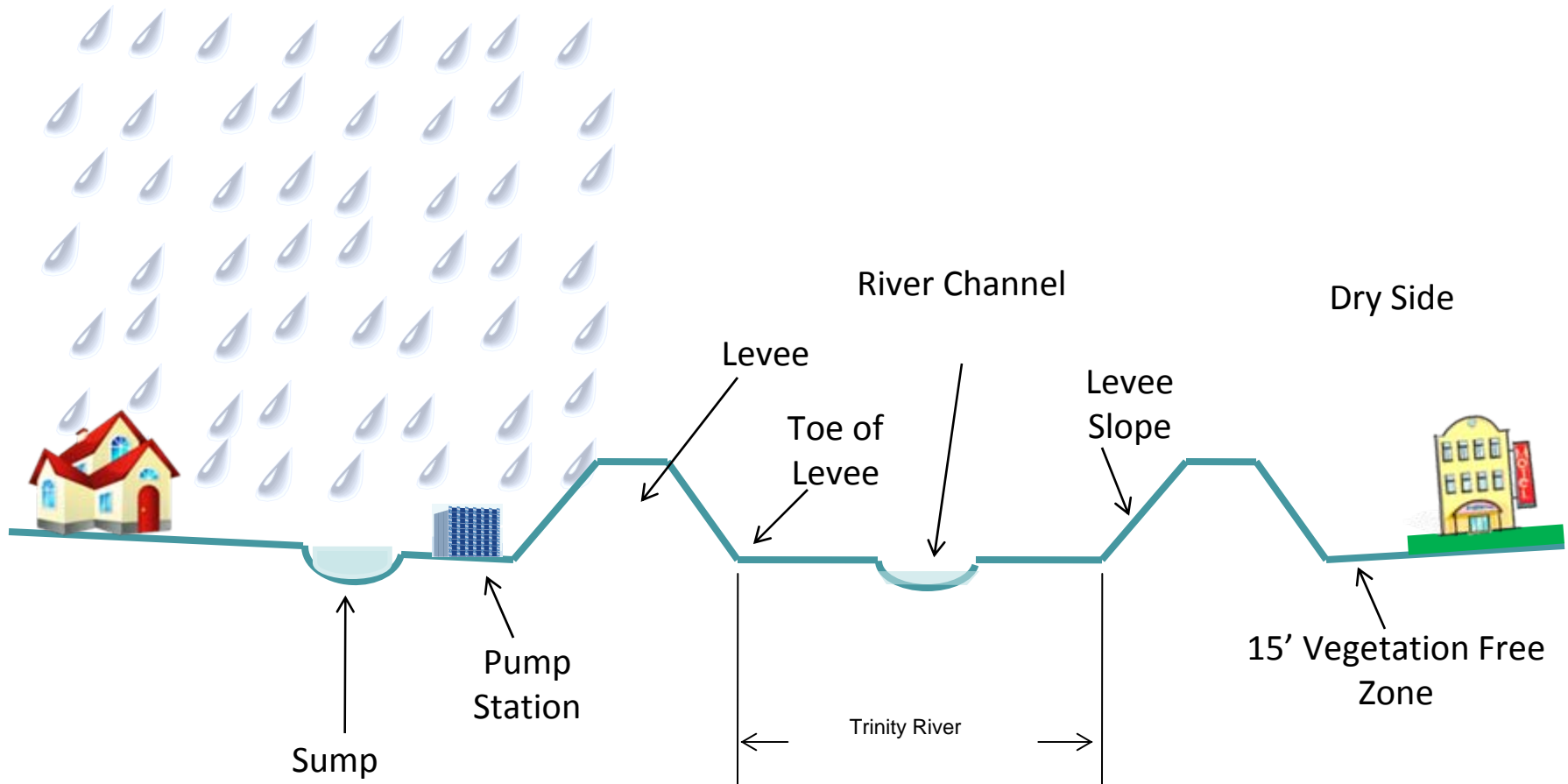


This project addresses a number of regional concerns, though **flood protection** remains the **essential cornerstone** of this multi-faceted effort. The inter-related components of the project are:

- Flood Protection – TODAY, Sept. 12, 2011
- Recreation – Oct. 24, 2011
- Transportation – Oct. 24, 2011
- Environmental Restoration - TBD
- Community/economic development - TBD



Definitions

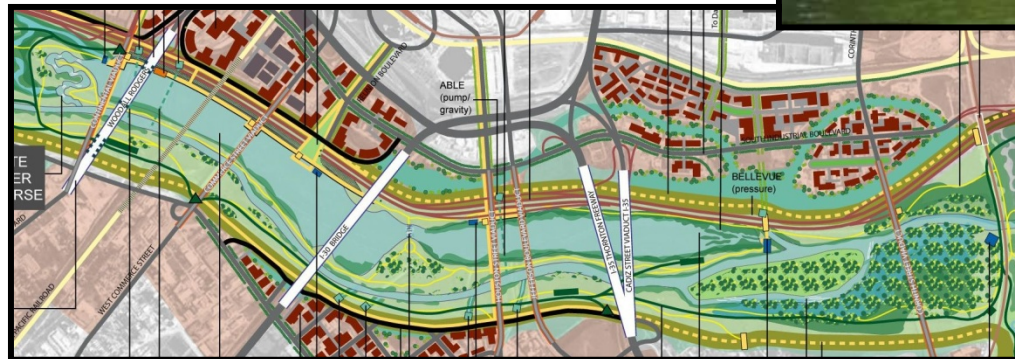


Interior Drainage

refers to the system of sump & pump stations – note that both dry sides of levees have interior drainage and vegetation free zones

Flood Protection Components

Dallas Floodway Extension (DFE) levees and wetlands for flood conveyance



Elm Fork Flood Improvements; berms and wetlands for flood conveyance

 **Dallas Floodway levee raise and flood conveyance (lakes)**

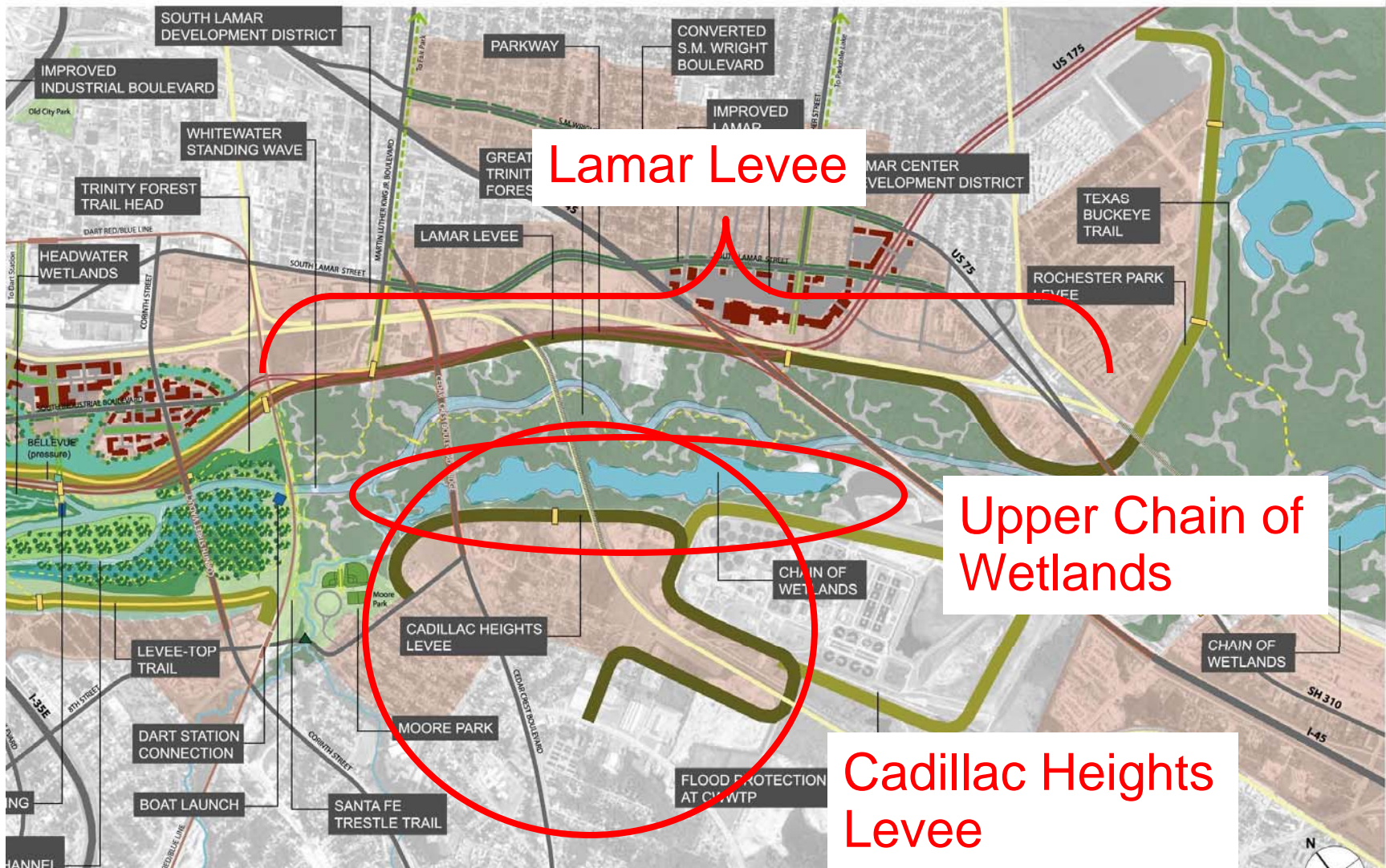
Lower Chain of Wetlands



Cells D, E, F & G are complete, and doing their job!



Future Work: DFE Levees & Wetlands



- Upper Chain of Wetlands and Lamar Levee under design
- Work could start on the Upper Chain in 2012



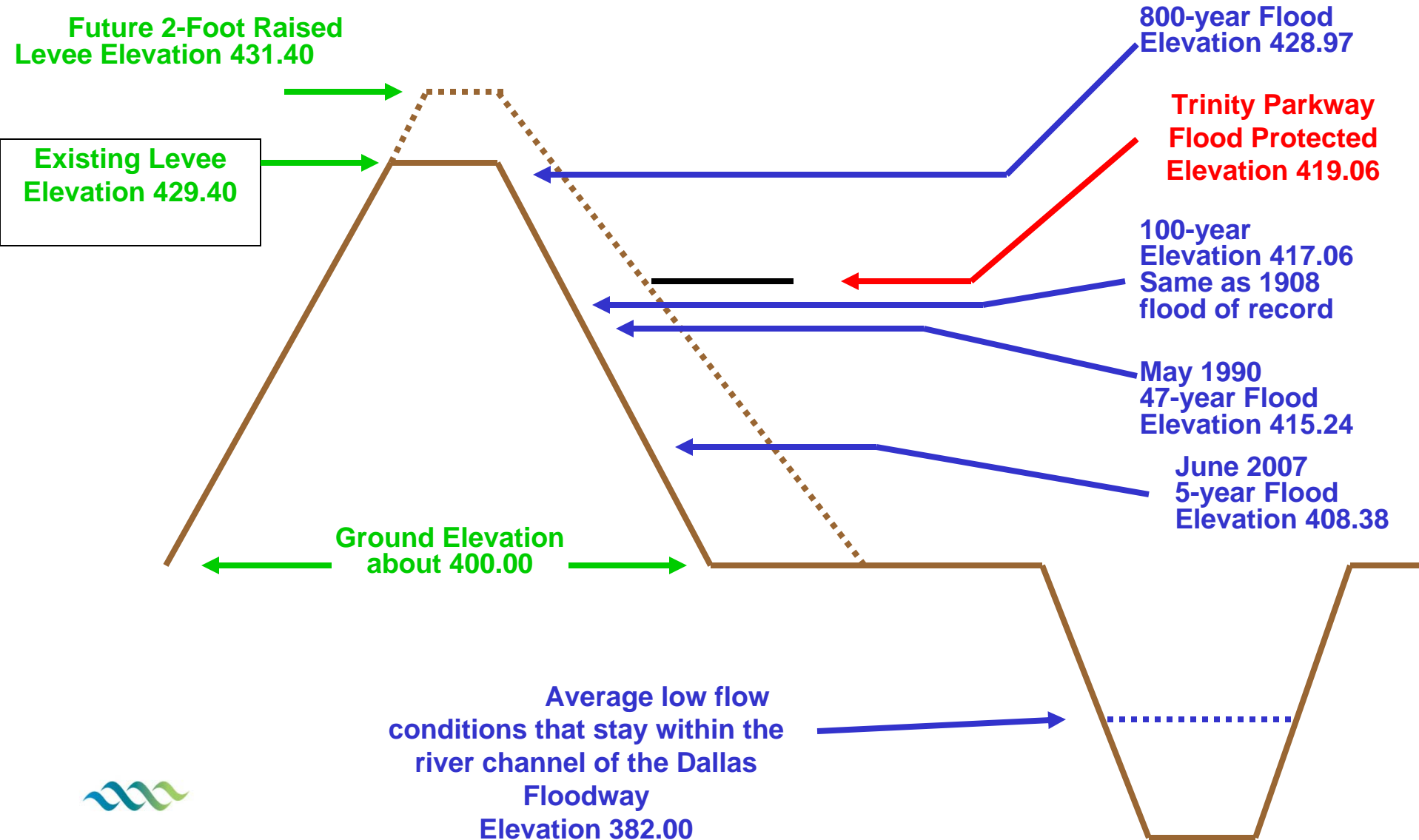
Flood Protection: Dallas Floodway



- Existing levees could be raised and fattened to provide additional stability
- Will provide up to 800 year flood protection from Trinity River flooding
- Corps is currently working on Environmental Impact Statement
- After Record of Decision and final design, Construction could begin in 2015



Levee Section at Commerce Water Surface Elevations



USACE Periodic Inspection Report #9

- Periodic Inspections are done every 5 years by USACE (in addition to annual inspections)
- Visual inspection only; no subsurface investigation
- Previous inspections rated our levee system as Excellent to Very Good
- After Hurricane Katrina, new rating system established by USACE in June 2007
- Rating in Periodic Inspection Report #9 for our levee system was “unacceptable”



Levee Issues from Periodic Inspection #9

- Encroachments
 - Dallas County Jail
 - Oncor Transmission Towers
- Penetrations
 - Bridge Piers
 - Pipes
- Desiccation Cracking
- Erosion
- Vegetation
 - Trees on/near the levees
 - Johnson grass
- Levees not high enough to contain the Standard Project Flood (800 year flood event) or pass the 100 year flood event
 - Corps rescinded 2007 letter of support to FEMA, which certified our levees for the 100 year flood event
 - This triggered FEMA's current remapping of the floodplain



Resolution of Levee Issues – Next Steps

- More frequent mowing cycles
- Rip rap/drainage relocation for erosion
- Worked with other agencies (DART, TxDOT) to fix problems with erosion & encroachment
- 193 of the 198 O&M related items repaired
- City is working on 100 year levee fixes
 - FEMA is revising methodology for remapping flood areas
 - If City does not resolve 100 year levee issues before FEMA floodplain maps become effective (Fall 2014), those with federally backed mortgages that are mapped in the floodplain will be required to carry flood insurance; Could also impact property values



FEMA Remapping Schedule

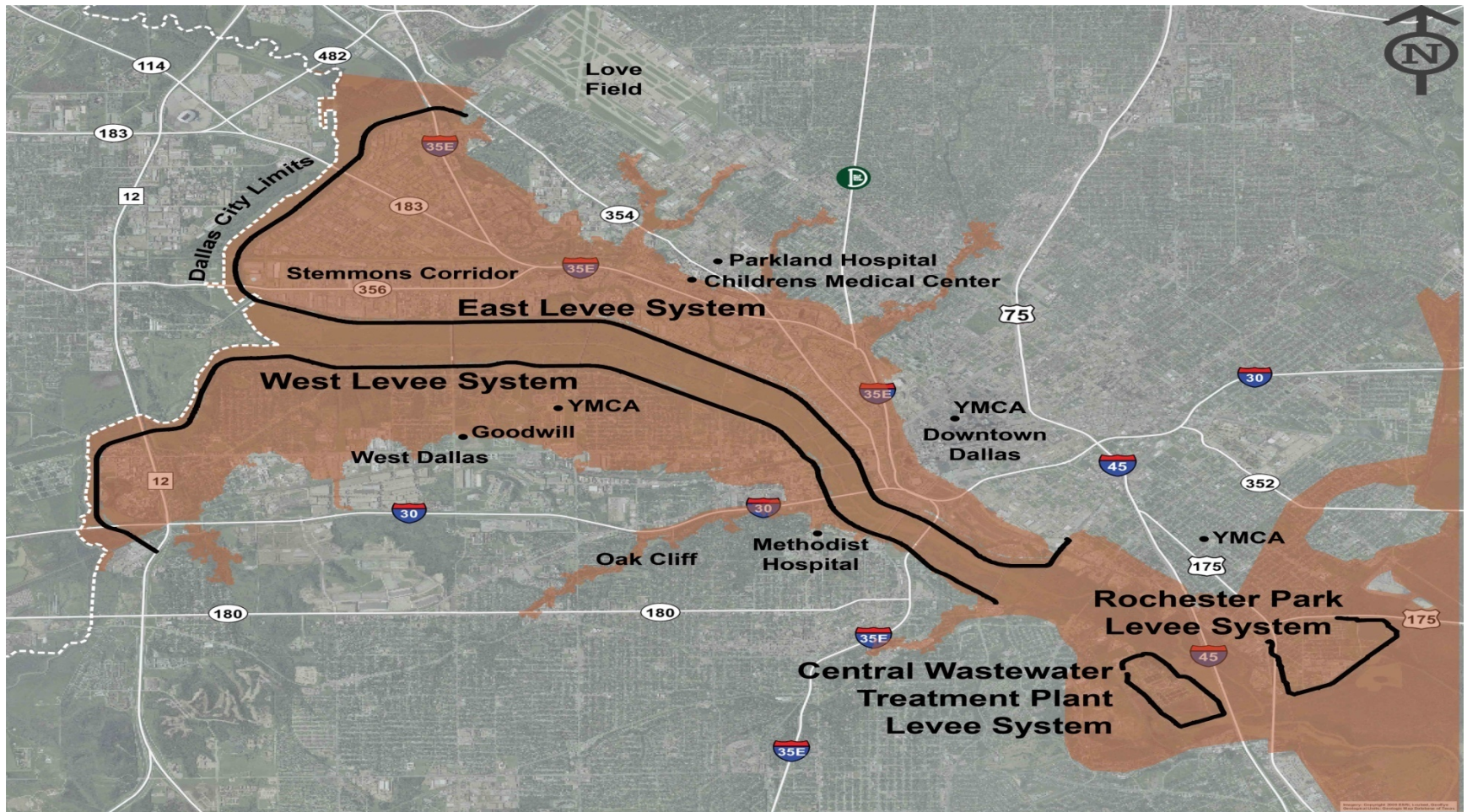
- Spring 2013 – Preliminary maps released for public comment
 - This is when property owners are notified and can appeal their floodplain designation
- Spring 2014 – Final maps released
 - Maps would not yet be effective
 - City must have 100 year levee fixes in place to avoid areas being remapped as floodplain
- Fall 2014 – Final maps become effective

NOTE: This schedule is dependent on development of the National policy on floodplain remapping behind levees being completed by the end of 2011/early 2012



FEMA Remapping Process

Worst Case Scenario - assuming no levee protection
Estimated area that FEMA may include in revised maps



Flood Protection: Interior Drainage

- Flooding in March 2006 from Interior Drainage

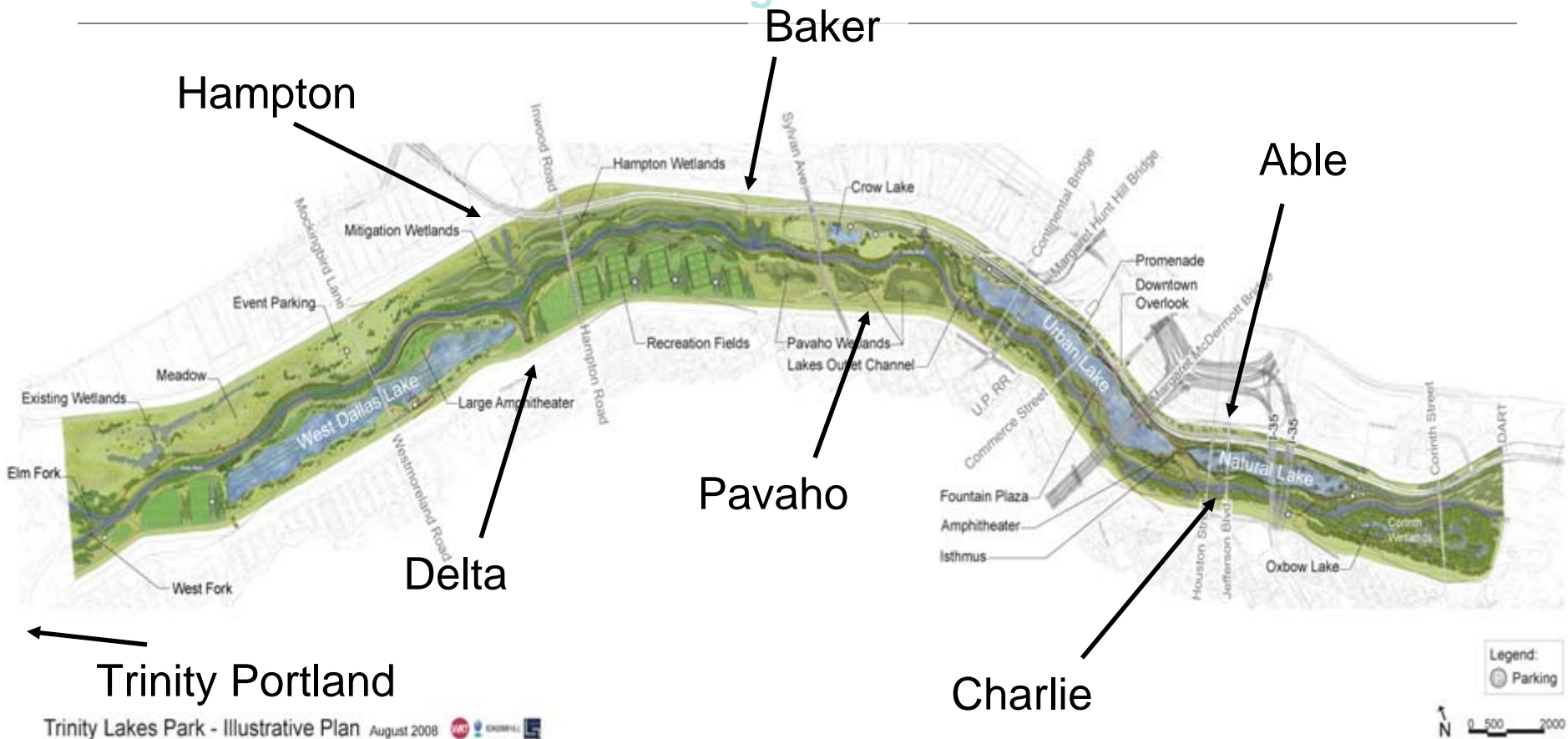


Near Pavaho Sump area at Sylvan Ave.



North of Bernal St. in West Dallas

Flood Protection: Interior Drainage



- Pavaho Sumps and Pump Station construction contract awarded in Summer 2010; to be complete in 2012
- Baker Sumps and Pump Station construction contract awaiting approval from the Corps
- Design contracts for Able, Charlie, Delta, Trinity Portland, and Hampton pump stations are ongoing



Trinity River Project Office

(214) 671-9500

www.trinityrivercorridor.org



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