



TRINITY RIVER CORRIDOR PROJECT

Comparison of Master Implementation Plan and Urban Design Study

Appendix to Council Briefing on Designing
Improvements to the Dallas Floodway



CDM

Purpose of Briefing

- Summarize components of the 1999 Master Implementation Plan
- Summarize components of the current Urban Design Study
- Compare plans



Master Implementation Plan

- November 18, 1998: Award of contract with Halff Associates, Inc for development of the Master Implementation Plan for lake design and recreational amenities (\$1.481M)
- August 25, 1999: Adoption of the Master Implementation Plan for lake design and recreational amenities contingent upon review and approval of the final report
- December 1999: Final report prepared by Halff Associates



Expanded Floodway Lake

- 235-acre off-channel lake
- Centered in floodway
- River channel split around lake
- Elevation – 402 ft



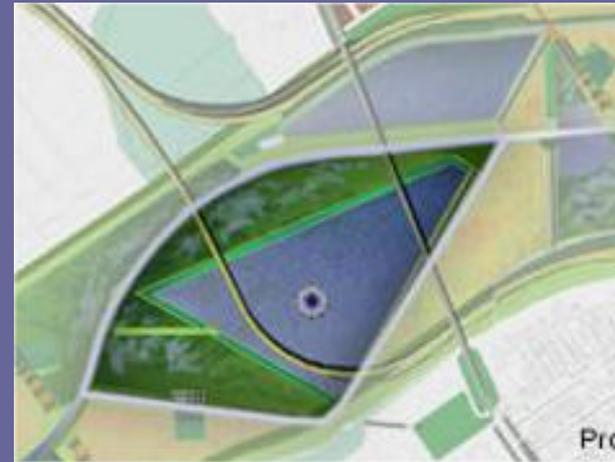
Expanded Lake Water Source

- Amount of water based on “make-up” needs (evaporation, etc.) – 3 million gallons per day
- Source of make-up water – Central WWTP via Upper Chain of Wetlands and groundwater
- Pumping of water required to:
 - Move water from upper chain of wetlands to 280-acre treatment wetland system
 - Move and recirculate water from treatment wetland system to lakes



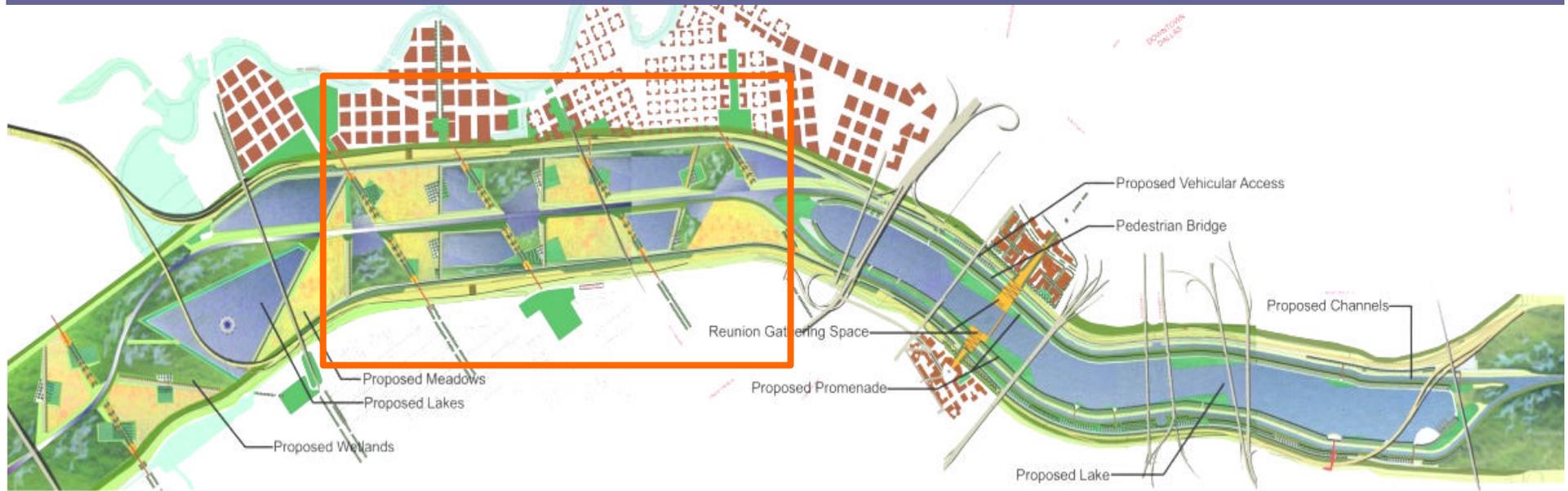
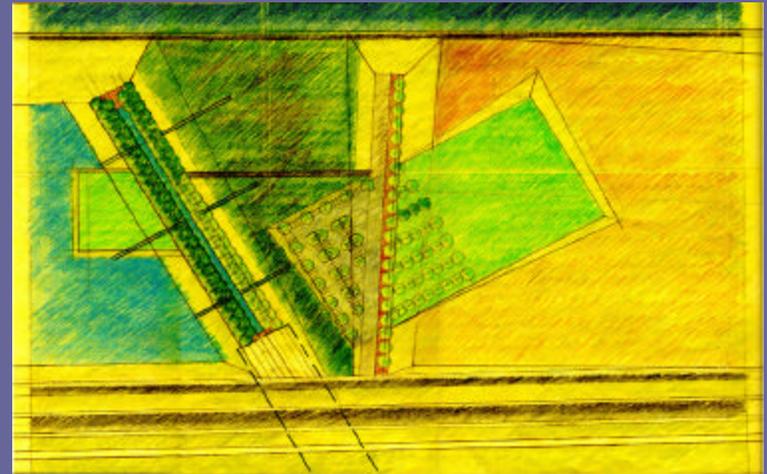
West Dallas Lake

- 120-acre off-channel lake
- Future phase - unfunded
- Groundwater likely source of make-up water



Community Lakes & Wetlands

- 7 off-channel community lakes (11 to 50 acres in size)
- Future phase - unfunded
- Some integrated with wetlands



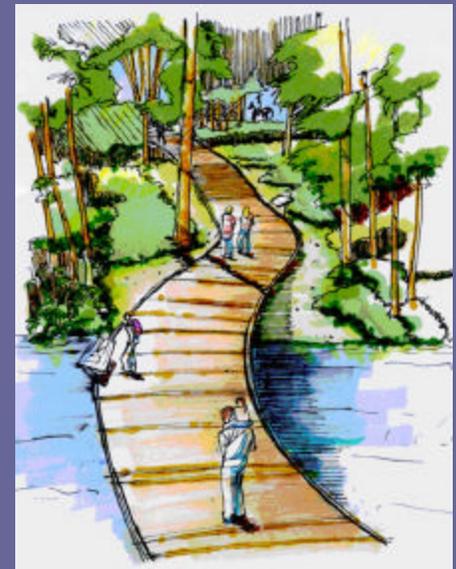
Trails for the Dallas Floodway

■ Phase 1

- 4 miles of hard surface trails that would extend from Moore Park to Hampton Road
- Funding
 - 1995 City bond funds
 - ISTEA grant

■ Future Phase

- 2 miles of hard surface trails that would extend from Hampton Road to Carrollton vicinity along the Elm Fork
- Unfunded



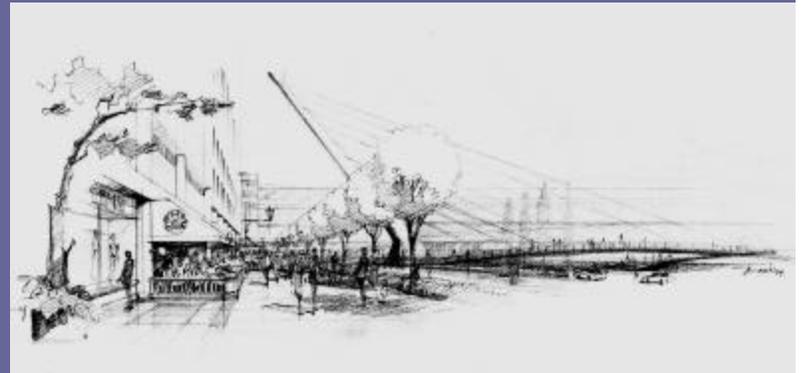
Amenities for Phase 1

- 6000 linear feet of promenade
(20 to 30-foot wide concrete walkway with seating and lighting)
- 750 large trees
- Water fountains, pavilions
- 4 vehicle access ramps
- Parking 240 vehicles
- 4 pedestrian bridges to cross split channels
- Woodall Rodgers Extension Signature Bridge (includes conversion of Continental into pedestrian bridge)
- Funding - 1998 City bond funds



Amenities for Future Phase

- 7500 linear feet of promenade
(20 to 30-foot wide concrete walkway with seating and lighting)
- 2500 large trees
- Parking for 300 vehicles
- 4 vehicle access ramps
- 6 pedestrian access bridges
- Lake frontage trail (10,000 linear feet)
- 2 marinas, 2 overlooks, 10 art nodes
- Houston Street Gathering Place
- Other Signature Bridges
- Unfunded



Other Elements (Great Trinity Forest)

- Phase 1 (Funded)

- 36 Miles of Trails
- 6 Gateway Parks

Moore Gateway Park

MLK, Jr. Gateway Park

Rochester Gateway Park

IH-20 Gateway Park

Loop 12 Gateway Park

Cadillac Heights Gateway Park

- Trinity Interpretive Center
- Equestrian Center
- 8 Miles of Equestrian Trails



Other Elements (Great Trinity Forest)

- Future Phase (Unfunded)

- Approximately 40 additional miles of Trails
- 6 additional miles of Equestrian Trails
- 5 additional Gateway Parks

West Dallas Continental Gateway Park

West Dallas Bernal Gateway Park

Stemmons Gateway Park

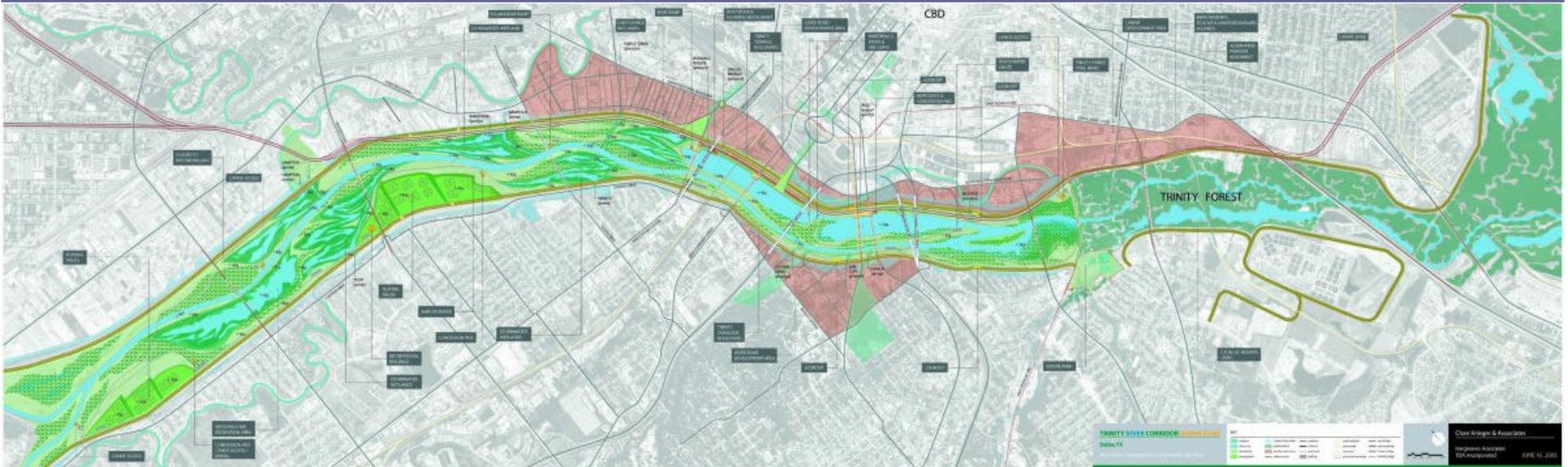
Oak Cliff Gateway Park

Reunion Gathering Place



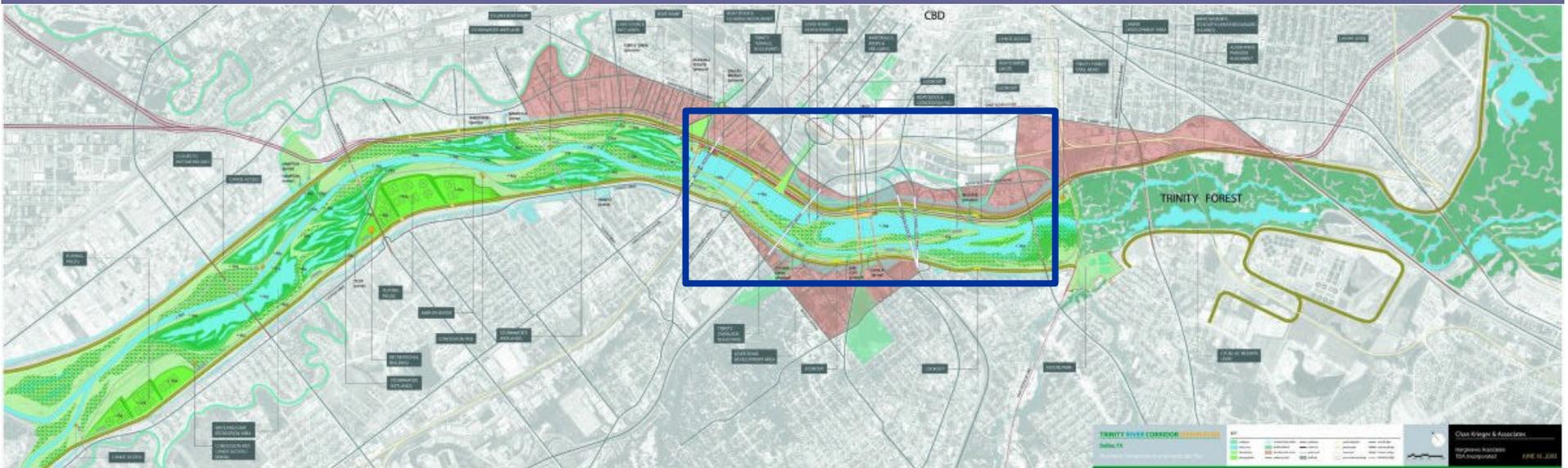
Overview

- Private Study Developed by Chan Krieger & Associates and Hargreaves & Associates through The Dallas Plan
- In Concert with the Dallas Chapter of the American Institute of Architects and the Dallas Institute of Humanities and Culture
- In collaboration with the Trinity River Corridor Project Office and CDM



Downtown Lakes

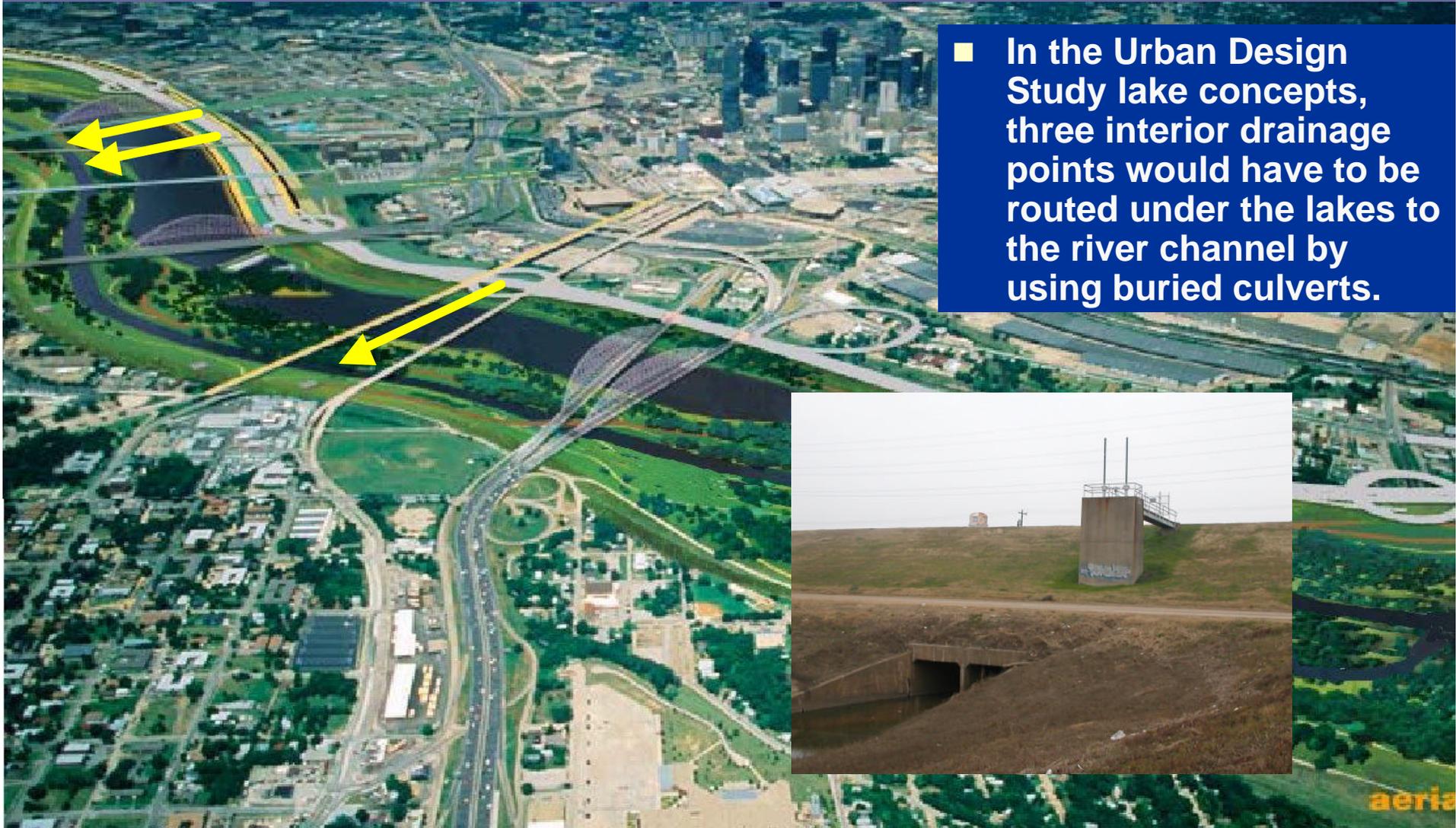
- Two off-channel lakes next to downtown
- Approx. 170 acres total
- Terraced



Downtown Lakes



Handling Interior Stormwater Drainage



- In the Urban Design Study lake concepts, three interior drainage points would have to be routed under the lakes to the river channel by using buried culverts.



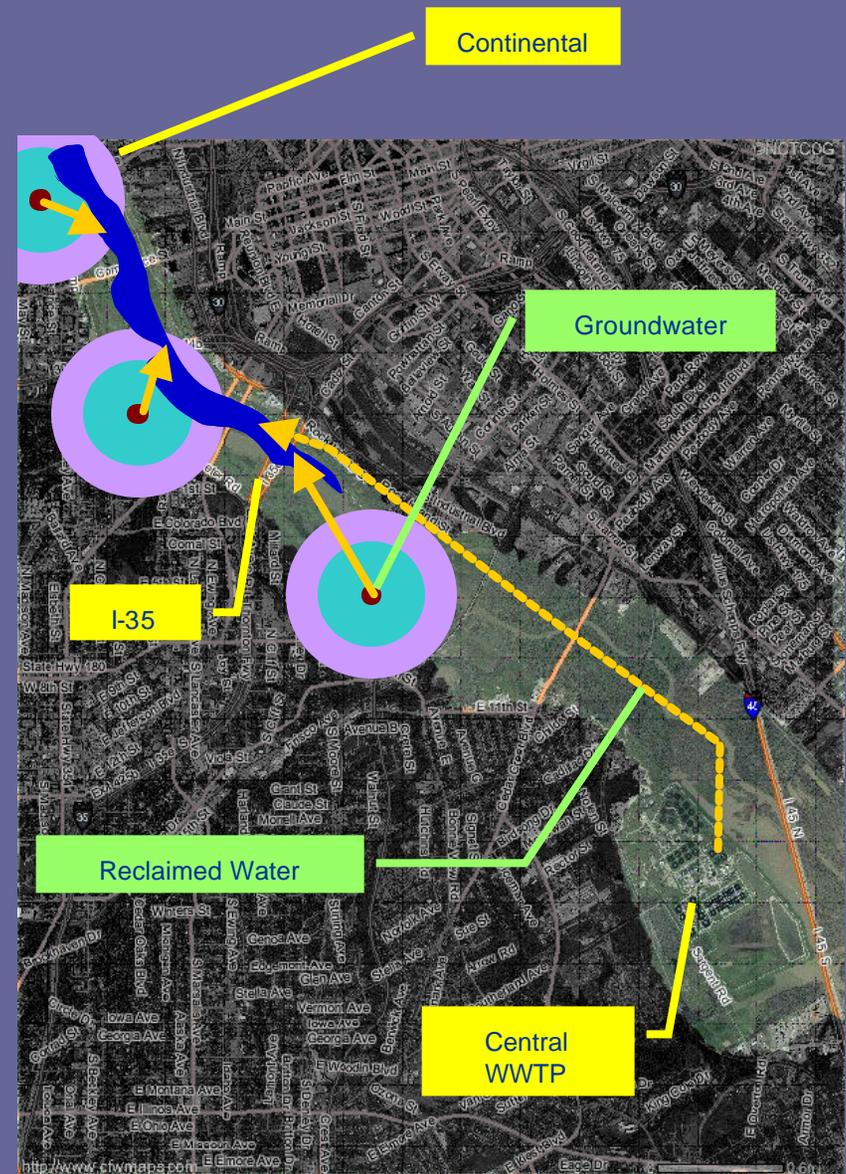
Lake Source Water

■ Phase 1

- Groundwater
- Makeup water only

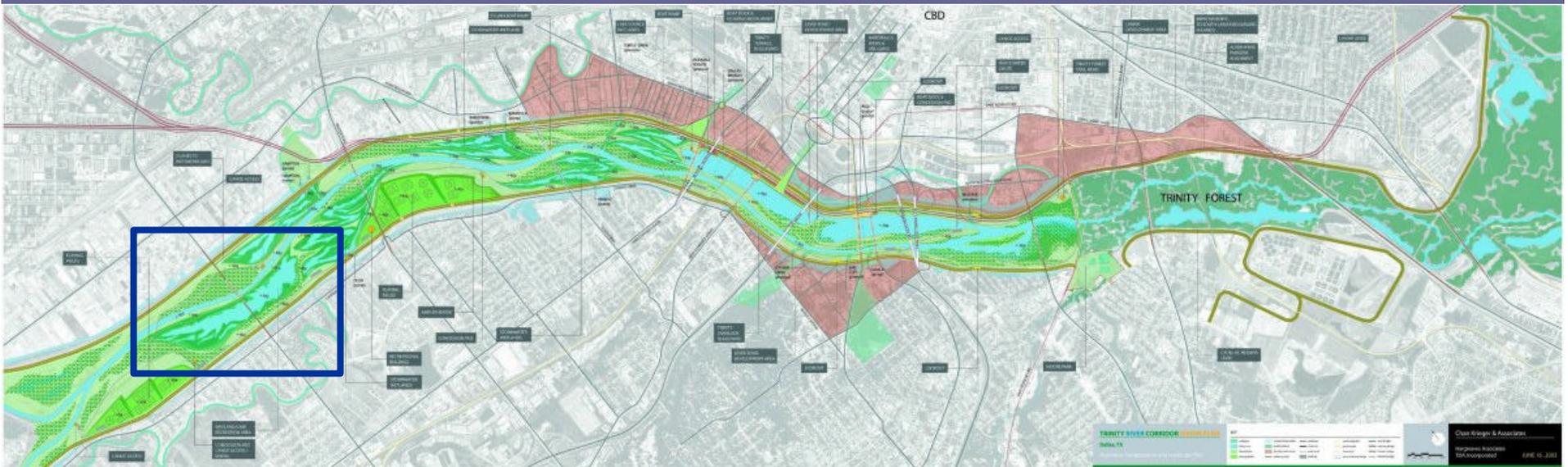
■ Future Phase - unfunded

- Reclaimed water from Central WWTP
- Provides flow-through lake system with additional amenities



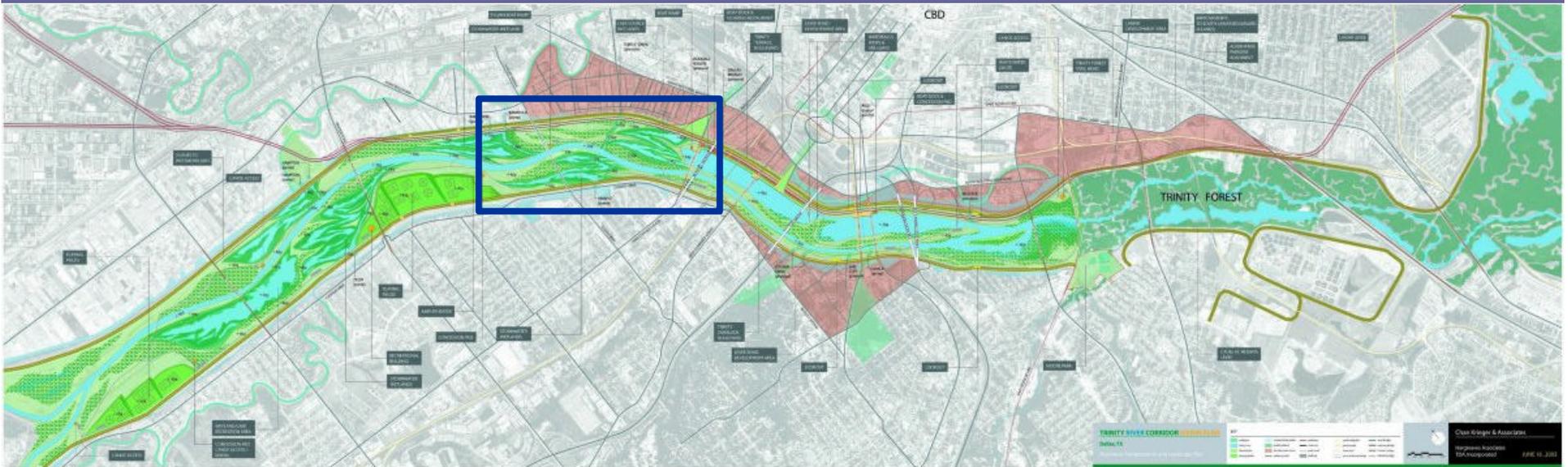
West Dallas Lake

- Approx. 80 acres
- Groundwater as water source
- Elevation approx. 400 feet
- Wetland features
- Future phase - unfunded

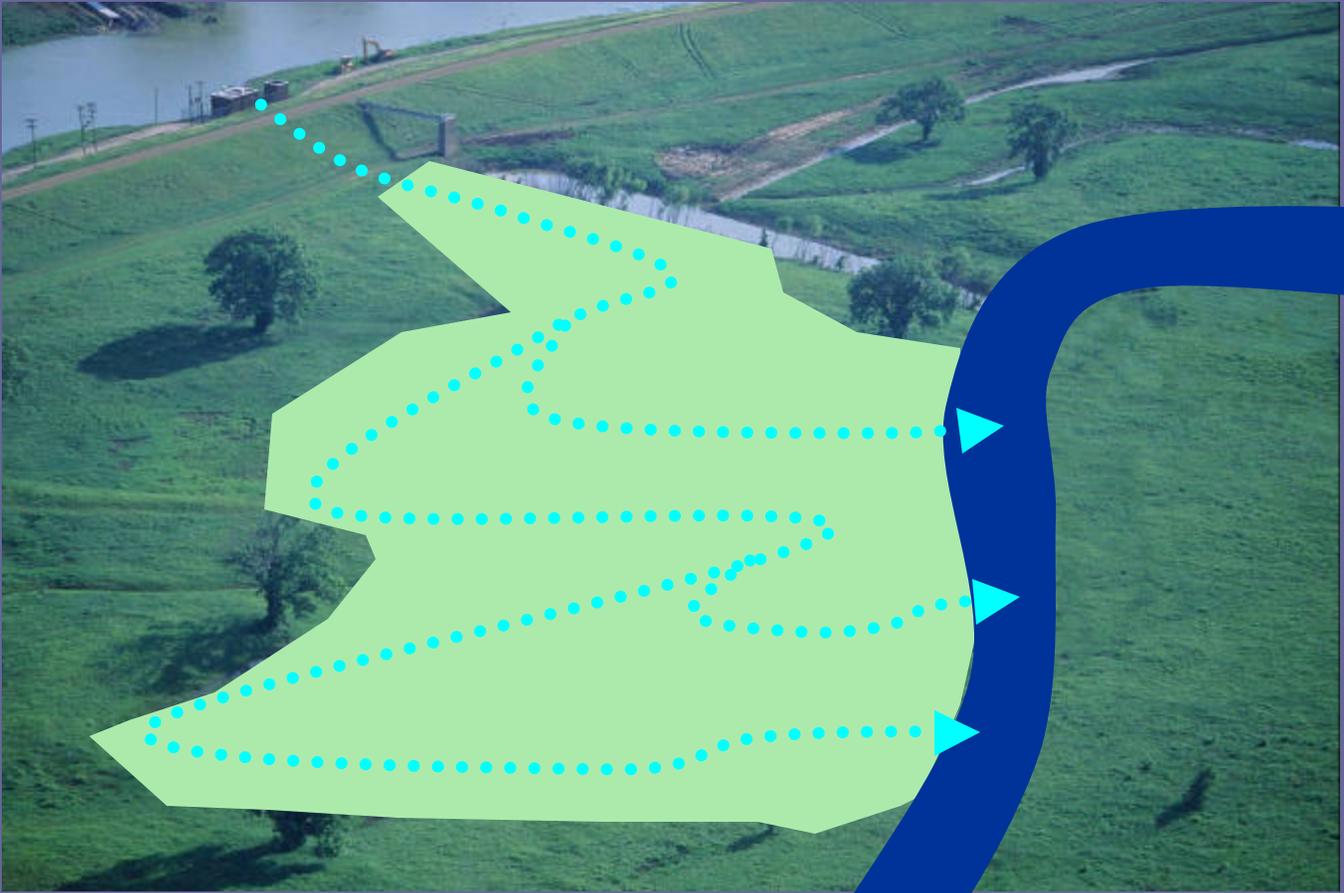


Wetlands and Habitat

- Headwaters wetlands for continuously fed habitat - unfunded
- Storm water wetlands for intermittently fed habitat – Pavaho site funded
- Channel meanders to create a more natural Trinity River – downstream of Sylvan funded



Stormwater Wetland

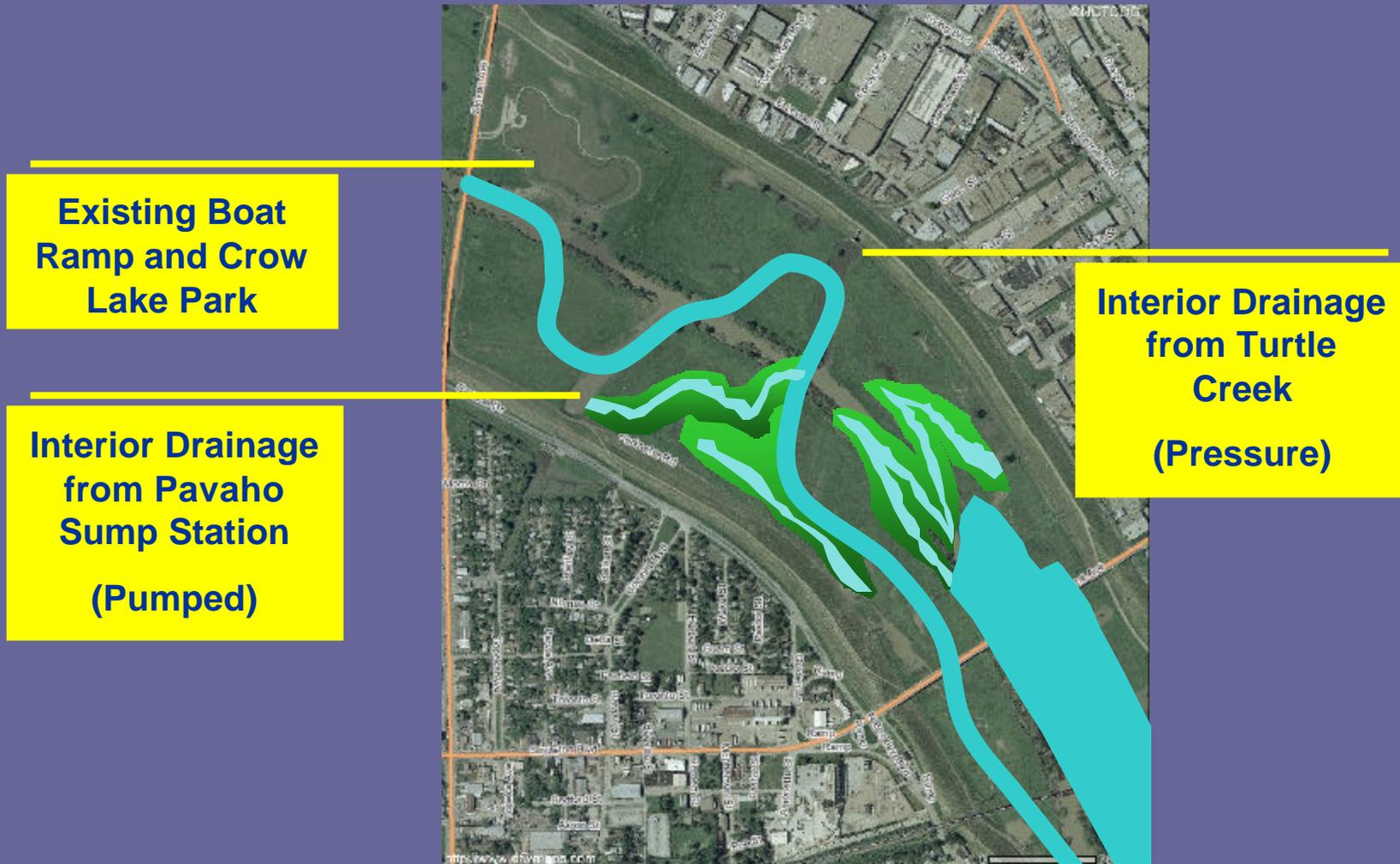


Headwater Wetland

- Expected to be continuously fed by two to five million gallons per day of source water for wetlands
- Continuous flow of water will provide unique wetland habitat
- Protected by berm so that wetland will be protected from two-year frequency flood
- Unfunded

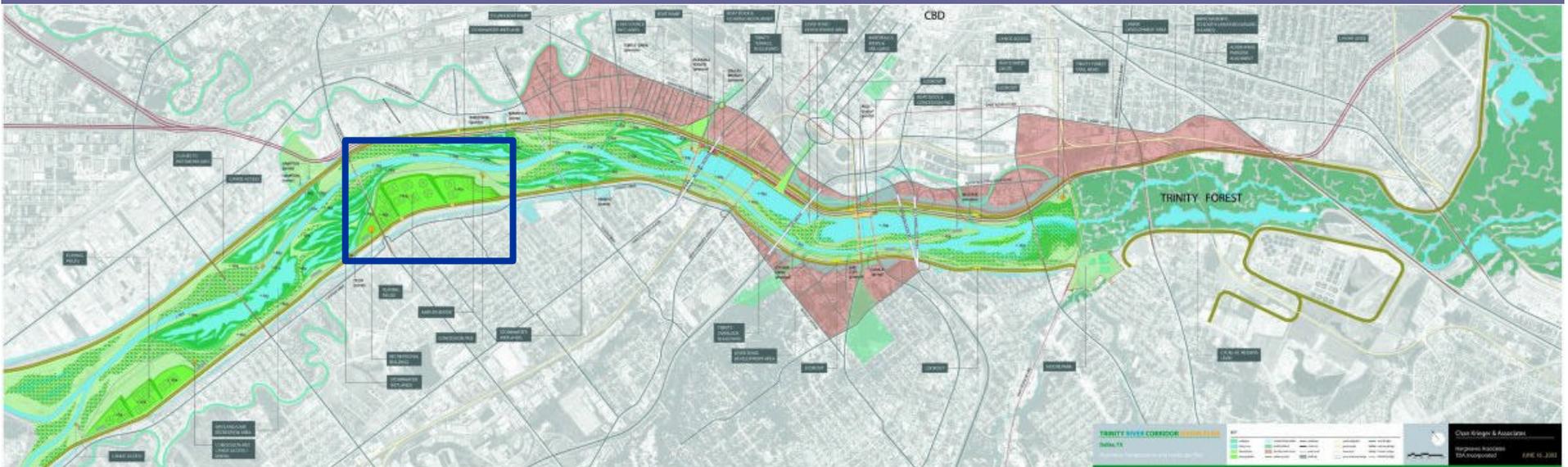


River Meandering Improves Restoration



Amenities

- High use park and recreation areas - unfunded
- Floodway roads for vehicular access - unfunded
- Pedestrian hike/bike trails and connections - unfunded



Basic Package for Phase 1

- The Trinity Parkway bench and the USACE levee raise projects will require about 4.8 million cubic yards of fill.
- The lakes and the river channel work downstream of Sylvan to Corinth should produce the necessary amount of excavation to satisfy the fill needs for the Trinity Parkway and levee raise.
- Thus, the two downtown lakes, channel work downstream of Sylvan, levee raise, and the Trinity Parkway project are all linked and could happen together.



Cost Sharing for the Basic Package of Phase 1

- The levee raise, some of the channel work, some of the wetland development, some of the tree plantings, and the ATSF Bridge modification would be cost shared with the Corps at 35% City cost.
- Some recreation may be cost sharable with the Corps at 50% City cost.
- The Trinity Parkway project would not put a cost burden on the City's Dallas Floodway estimated budget of \$29 million.

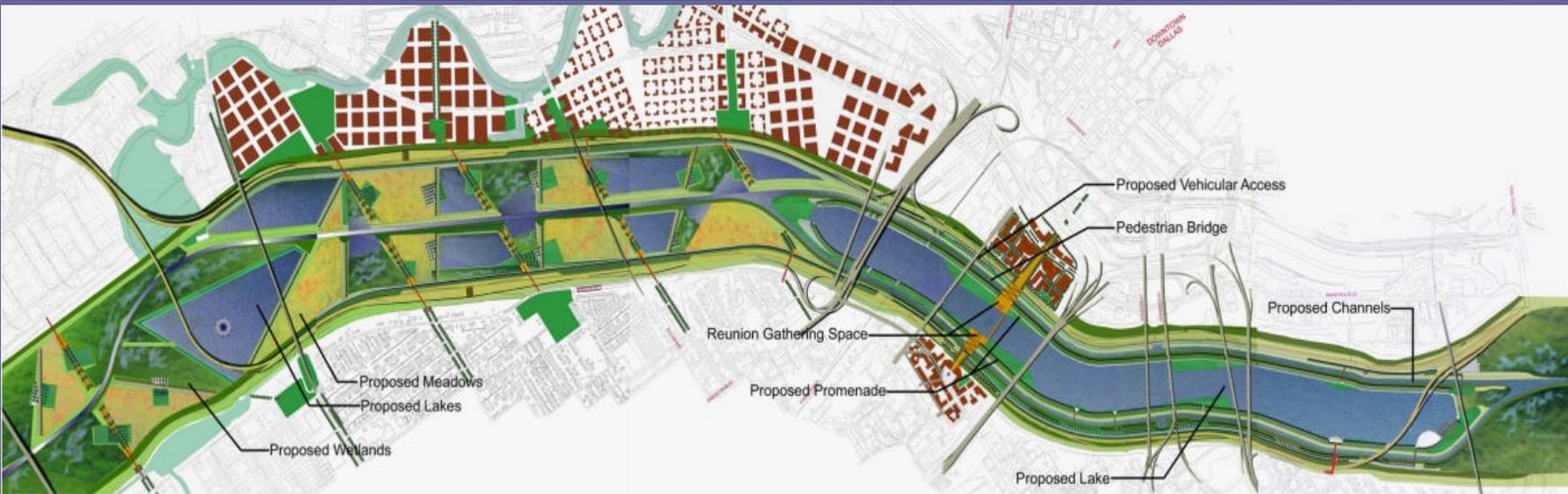


Phase 1 Costs of 2003 UDS

Item	Cost (million \$)
Levee raise (match funds for Corps)	\$5.8
Outlet Works and Berms	\$2.6
Channel Meandering (match funds for Corps) Sylvan to Corinth	\$5.6
Bridge Pier Protection	\$2.7
Stormwater Wetlands	\$0.9
Interior Drainage (3 underground culvert extensions)	\$9.4
Source Water	\$2.6
Total Cost	\$29.6



Comparing Urban Design Study and the MIP



Comparison of Funded Elements for Dallas Floodway

Item	1999 MIP	2003 UDS
Lakes	One 235-acre lake	Two 85-acre lakes
Water Source	CWWTP effluent and groundwater	Groundwater
Restoration	Some restoration components	Significant restoration components
Interior Drainage	No impact	3 drainage points extended under lakes
River Channel	Split channel around lake – no meandering	No split channel, significant meandering
Amenities	Partial promenade and/or trails	Not funded



Comparison of Lake Operation & Maintenance Activities

Activity	1999 MIP	2003 UDS
Oxygen and Reaeration (CWWTP recharge)	\$42,000	N/A
Recirculation (CWWTP recharge)	\$90,000	N/A
Source Water (groundwater recharge)	\$50,000	\$150,000
Nutrient Removal (CWWTP recharge)	\$410,000	N/A
Split River Channel Maintenance	\$108,000	N/A
Lake Maintenance	\$50,000	\$80,000
Interior Drainage	\$0	\$30,000
Total Annual Operation and Maintenance Cost Estimate	\$750,000	\$260,000



Next Steps

- This briefing will be presented to the full City Council on September 17, 2003 as an appendix to the Designing Improvements to the Dallas Floodway briefing.
- The City Council will be asked at that time for approval to continue with the CDM Lake Study to advance the Urban Design Study for the Dallas Floodway water resource components.
- The remaining CDM contract amount is \$175,000 of the previously approved \$400,000 contract.
- By January 2004, City Council could replace the water resource components of the MIP within the Dallas Floodway with those of the Urban Design Study.

