

Memorandum



DATE August 10, 2012

TO The Honorable Mayor and Members of the City Council

SUBJECT Trinity Lakes Project: Potential Phase I Design & Construction

On August 15, 2012, the City Council will be briefed on the Trinity Lakes Project: Potential Phase I Design & Construction. Briefing materials are attached for your review.

This briefing outlines a very preliminary concept that has been developed. Staff is seeking further direction to proceed with additional research and refinement for future consideration by City Council.

Please let me know if you have questions or need additional information.



Mary K. Suhm

cc:

Thomas P. Perkins, City Attorney
Rosa A. Rios, City Secretary
Craig D. Kinton, City Auditor
Judge C. Victor Lander, Administrative Judge
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, Assistant City Manager
Jeanne Chipperfield, CFO
Frank Libro, PIO
Stephanie Cooper, Assistant to the City Manager – Council
Kelly High, Director, Trinity Watershed Management



PRELIMINARY BENDERING OF INITIAL CONCEPT. SUBJECT TO CHANGE.



Dallas City Council
August 15, 2012

Trinity Lakes Project
Potential Phase I Design & Construction

Purpose

- Explore potential construction possibilities for Phase I of the Trinity Lakes
- Seek City Council direction on next steps

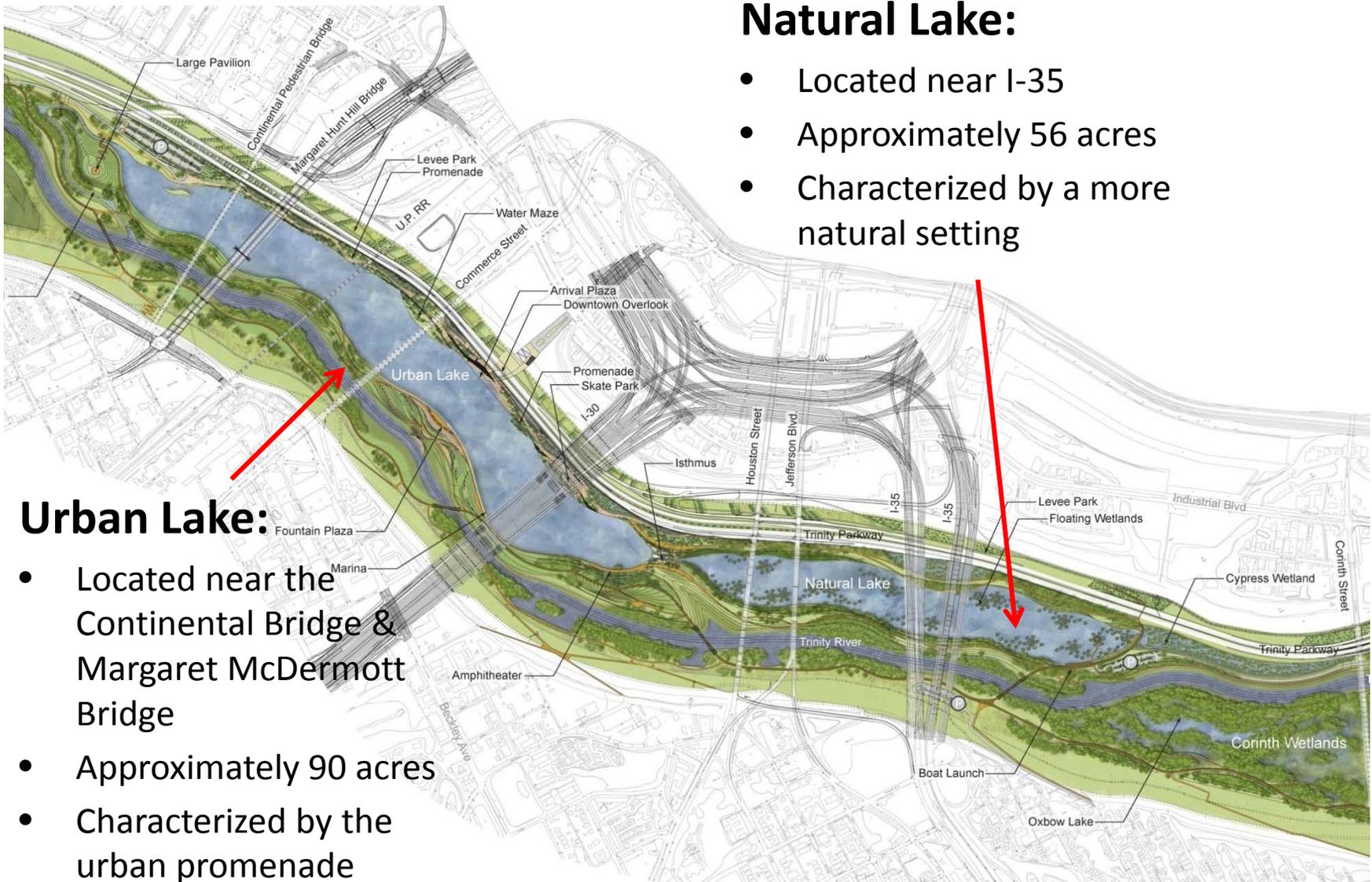
Background: Balanced Vision Plan

Natural Lake:

- Located near I-35
- Approximately 56 acres
- Characterized by a more natural setting

Urban Lake:

- Located near the Continental Bridge & Margaret McDermott Bridge
- Approximately 90 acres
- Characterized by the urban promenade



Background: Balanced Vision Plan

West Dallas Lake:

- Located at Westmoreland
- Approximately 128 acres
- Characterized by a sprint rowing course which will serve as a recreation draw for the corridor



Recent Background

- In 2009, the City and Corps focused efforts on levee analysis to determine the geotechnical condition of the levees
- In June 2012, the Corps determined the levees are more resilient than previously thought
- The Corps and City are proceeding to complete the Environmental Impact Study, which includes a phasing plan to allow build-out over time of the Trinity Project

Trinity Lakes Proposed Phasing Plan

- The City's current estimate of the Corps' timeline for the lakes:
 - Design would begin following the completion of the EIS in mid-2014
 - Construction would not likely begin until mid-2017
 - Design and construction contingent upon federal funding
- City staff is proposing an approach to accelerate Phase I of the Trinity Lakes so that portions of the lakes are complete earlier than the city's current estimate of the Corps schedule
- Staff's phasing plan could provide citizens and visitors portions of the Urban and West Dallas Lakes as early as 2016

Trinity Lakes Proposed Phasing Plan

- Planning details are VERY preliminary at this time
- Additional research is required on a number of items in order to fully determine the feasibility of the proposed phasing plan
- These are preliminary concepts and will be refined following discussions with partners and additional due diligence
- Design development is necessary to provide more detailed information concerning expected costs

The purpose of today's briefing is to present a rough outline of the proposed approach and seek City Council direction on whether to proceed

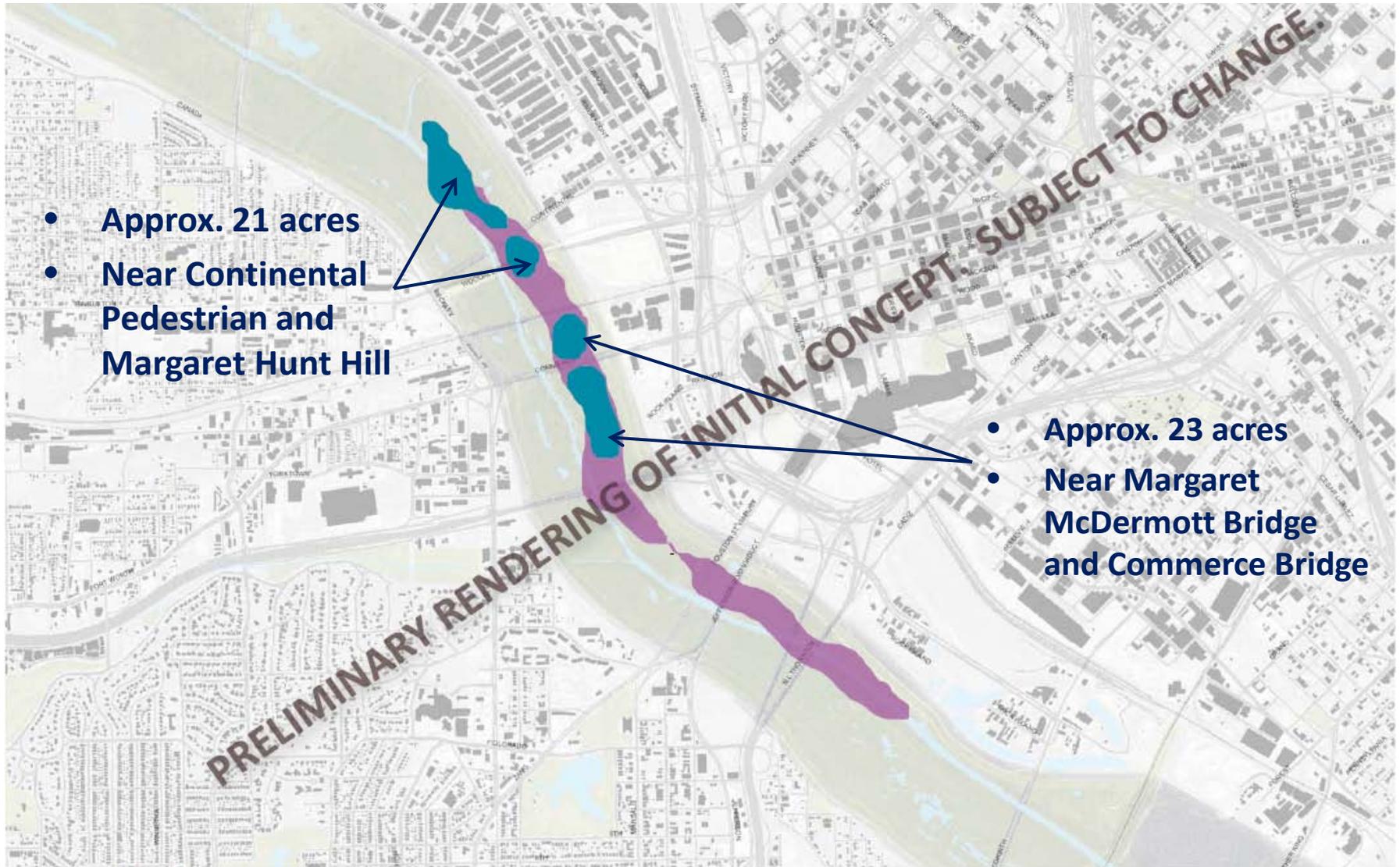
Phase I Priorities

- Utilize the existing footprint of the Balanced Vision Plan lakes to align with the EIS
- Provide possible flood control maintenance enhancements
- Adjacency to existing neighborhoods
- Complement other Trinity Project components such as Sylvan Avenue ramp to Crow Park, Continental Pedestrian Bridge/West Dallas Gateway, and Riverfront Blvd improvements
- Maximize development opportunities directly related to the construction of lakes

Proposed Phase I Urban Lake



Proposed Phase I Urban Lake



- **Approx. 21 acres**
- **Near Continental Pedestrian and Margaret Hunt Hill**

- **Approx. 23 acres**
- **Near Margaret McDermott Bridge and Commerce Bridge**

Ultimate Lake Footprint
Proposed Phase I Lakes

For reference, Lake Cliff is approximately 13 acres and Bachman Lake is approximately 120 acres



Proposed Phase I Urban Lake

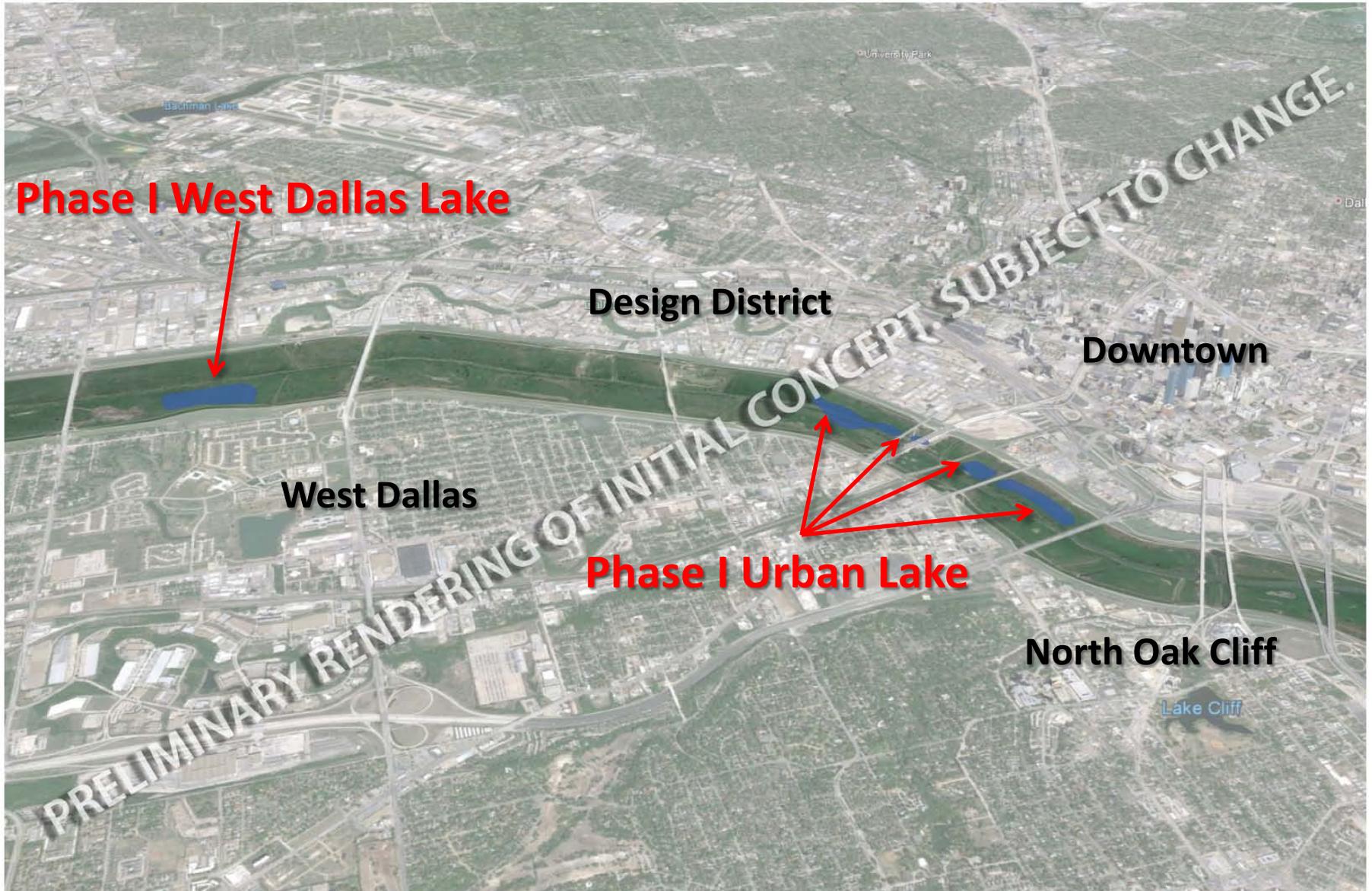


August 15, 2012

Proposed Phase I Urban Lake

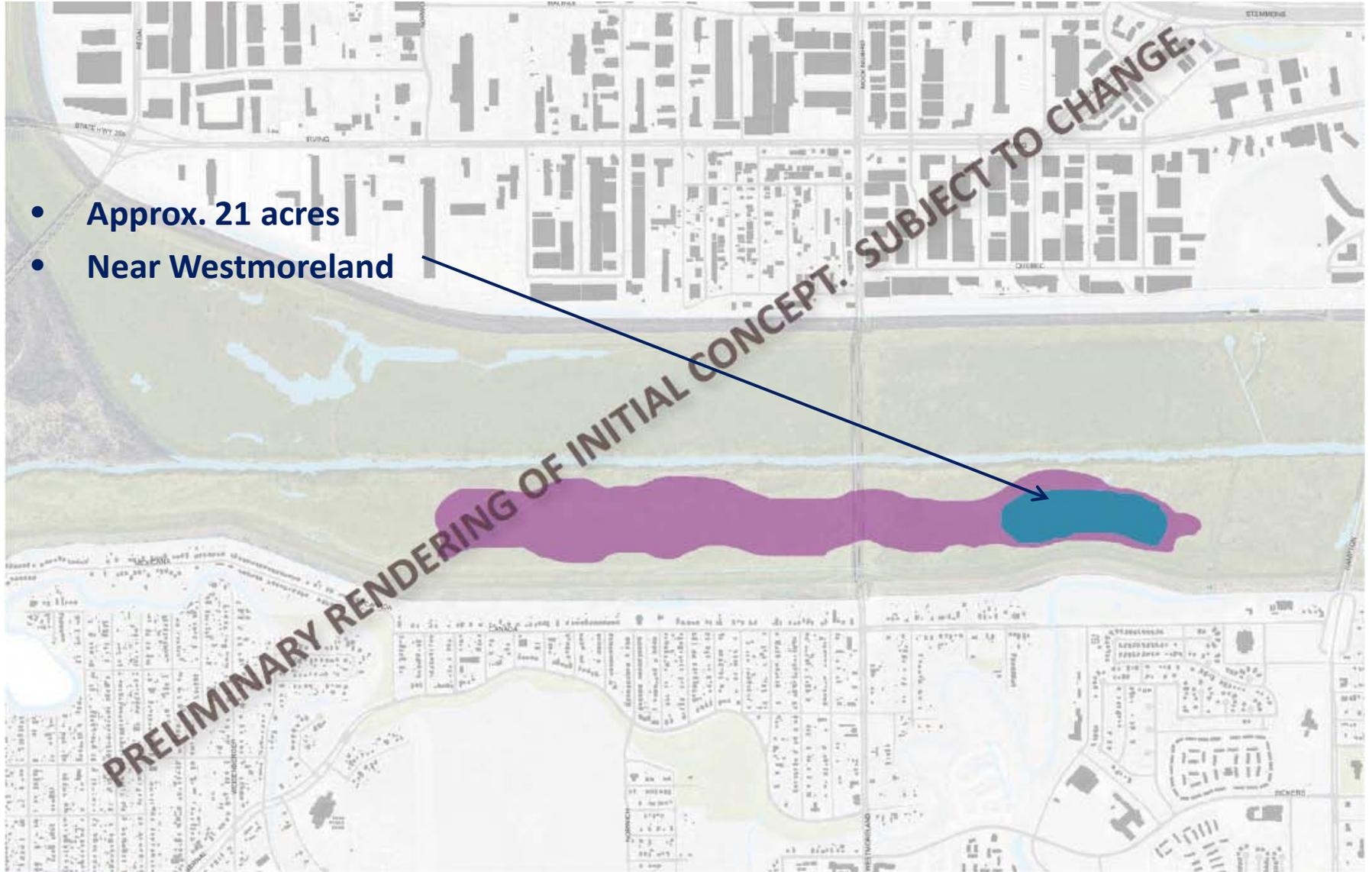
- Estimated Cost –\$33.2M
 - Anticipated funding - combination of 1998 and 2006 bond funds
 - Water source and associated costs still pending
- Approximately 44 acres, providing for nearly half of the Balanced Vision Plan Urban Lake in this first phase
- Contributes to a concentration of Trinity Project components either completed or underway near the downtown core to provide a draw for residents and visitors
- Complements neighborhood improvement and development efforts underway or anticipated in the area
- Avoids the footprint of construction for TxDOT's Horseshoe Project

Proposed Phase I West Dallas Lake



Proposed Phase I West Dallas Lake

- **Approx. 21 acres**
- **Near Westmoreland**



 Ultimate Lake Footprint
 Proposed Phase I West Dallas Lake

For reference, Lake Cliff is approximately 13 acres
and Bachman Lake is approximately 120 acres



Proposed Phase I West Dallas Lake



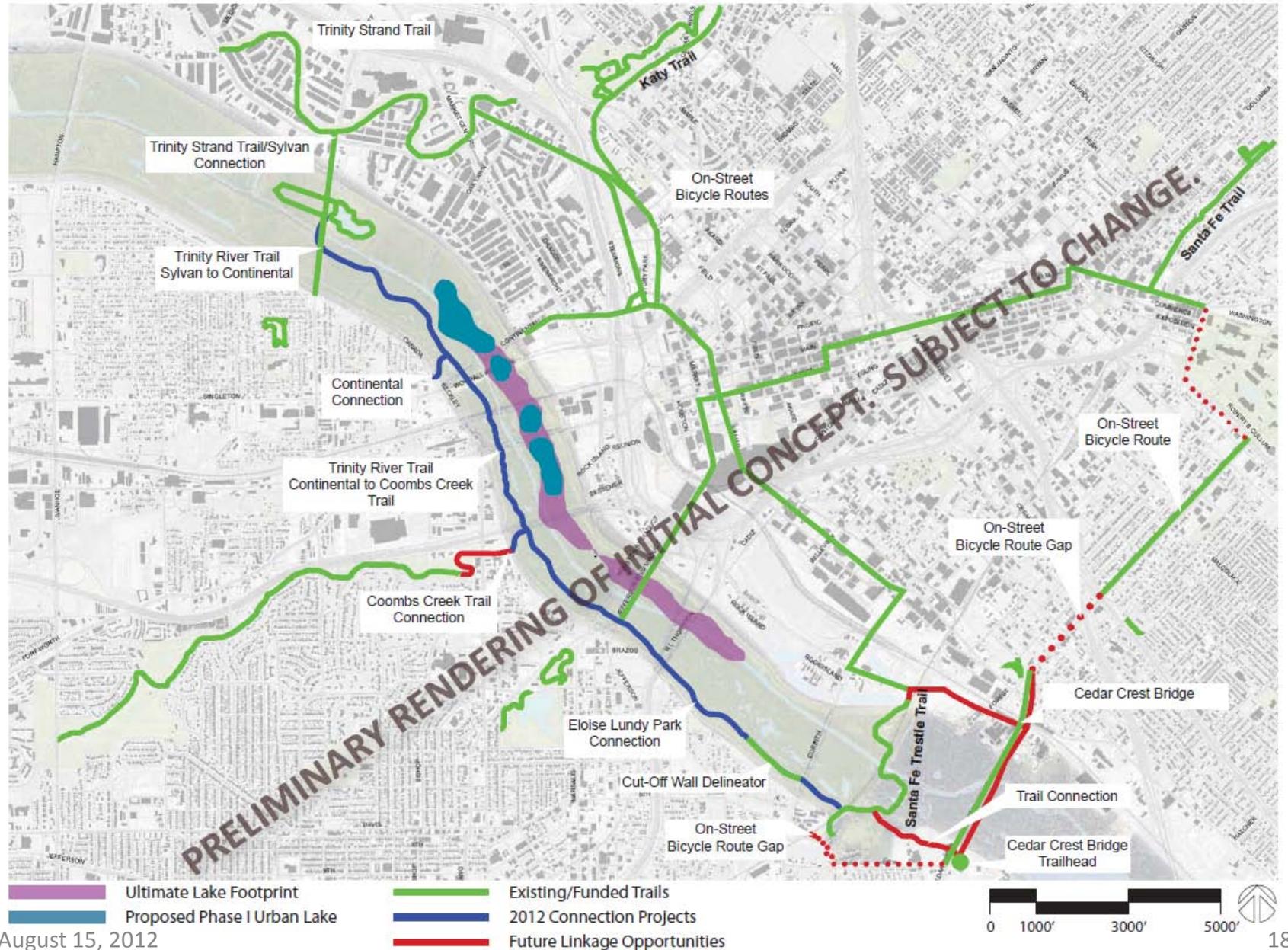
Proposed Phase I West Dallas Lake

- Estimated cost - \$8M
 - Anticipated funding – future storm water funds
 - Water source and associated costs are still pending
- Approximately 21 acres of the 128-acre West Dallas Lake
- Supports implementation of desired operational needs to flatten levee slopes adjacent to the lake
- Could be phased annually to increase the initial 21-acre construction project, depending upon funding available for flood control maintenance
- Interest in building this lake within the private sector for rowing and waterskiing groups

Phase I Linkage Opportunities

- Proposed bond package includes funds to facilitate pedestrian and bicycle connections through the corridor to connect:
 - Victory
 - Design District
 - West Dallas
 - North Oak Cliff
 - Cedars
 - Fair Park

Linkage Opportunities



August 15, 2012

Phase I Items

Requiring Further Evaluation

- There are a number of key concerns that could impact the feasibility of the proposed phasing plan
- Each of these will have to be fully vetted and discussed with partner agencies:
 - Funding constraints with use of City funds and any future credits for City's design and construction
 - Water sources and permitting requirements
 - Potential design criteria such as geotechnical mitigation (i.e. cut off walls, clay liner for the lakes), hydraulic considerations, bench criteria and water quality considerations
- Additional issues may arise following further research and due diligence

Phase I Cost Considerations Requiring Further Evaluation

- Projected costs are only estimates and will be refined once designed
- City staff anticipates use of these funds to count towards our cost share requirements for the Corps' EIS and/or the Trinity Parkway EIS

Phase I Water Source Requiring Further Evaluation

- Lakes will require a source of water to address evaporation losses and mitigate concerns related to downstream water rights
- Permits from TCEQ may be required to address water rights and/or water sources
 - Time to process any permitting requirements by TCEQ is unknown and could be lengthy
- Possible water sources could include groundwater, river water or re-use water
- Cost of water sources is unknown

Next Steps

- Should City Council decide to continue on this path:
 - All work is contingent upon the Corps' and Trinity Parkway's EIS schedules
 - Until a Record of Decision has been received, no construction can commence on the proposed Phase I Lakes
 - If no fatal flaws are discovered through additional research, City Staff estimates the following design and construction timeline:
 - Design of these lakes could begin as early as the end of 2012 by modifying the existing Trinity Lakes Design contract
 - Design and permitting is estimated to last approximately 16-20 months
 - Construction is estimated to last approximately 18 -24 months
 - Timeline will be refined once additional detail is developed for the path forward

Trinity Lakes Proposed Phasing

Next Steps

- Staff is seeking City Council direction to move forward with more detailed planning
- If City Council chooses to direct staff to further refine proposed plan, then staff will brief City Council in 30-90 days on progress



Discussion

Appendix – Trinity Lakes History

Trinity Lakes Background

- In the mid-1990s, thousands of citizens and elected officials met to shape the vision and plan for:
 - flood protection, recreation, transportation, ecosystem restoration and economic development
- In 1998, the voters approved \$246M in bond funds for the Trinity River Corridor Project
- The Balanced Vision Plan was approved by the City Council in December 2003

Trinity Lakes Background

- The Recreation Component of the Balanced Vision Plan called for three lakes that also facilitate :
 - Flood protection through levee flattening and/or raising along areas of low spots
 - Transportation through provision of a multi-purpose bench for short term recreation and long term vehicular needs
 - Ecosystem restoration through creation of the meanders of the river and wetlands
 - Economic Development that would be a result of these amenities

Trinity Lakes Background

- In 2006, the City awarded a contract to design the Trinity Lakes to 35% to advance the Corps' Environmental Impact Study
 - This design was done “at risk” and was intended to be part of the City's cost share for future Corps work on the Upper Trinity River Feasibility Study
- The Trinity Lakes included the:
 - Natural Lake
 - Urban Lake
 - West Dallas Lake

Trinity Lakes Background

- In 2007, Section 5141 of the Water Resources Development Act authorized the Dallas Floodway Project as an official stand alone Corps project
 - Shifted work done for the Dallas portion of the Upper Trinity River Feasibility Study to this project
- In 2008, the plan was to complete the construction of the lakes, amenities and flood control improvements were intended to be complete by 2014
- In 2009, the levees were deemed unacceptable in Periodic Inspection #9

Trinity Lakes Background

- In 2009, City Council approved a contract to investigate the condition of the levees and recommend solutions for 100-Year Flood Improvements
- In Spring 2012, the City began construction of cut off walls to address the 100-Year Flood Improvements
- In Summer 2012, the levees were deemed more resilient than previously thought
- In 2013, the City plans to submit to certification of the levees to FEMA