

BOARD OF DIRECTORS MEETING

October 17, 2023



PLEDGE OF ALLEGIANCE

I pledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation under God, indivisible, with liberty and justice for all.



PLEDGE OF ALLEGIANCE TO THE TEXAS FLAG

Honor the Texas flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.



2

Public Comment



3

Consider Approval of the Minutes from the Meetings Held on September 13, 2023, and September 19, 2023





4

Consider Approval of Consent Agenda



- Consider Approval of Purchase from Thompson Pipe for Replacement and Inventory Pipe Segments for the Richland-Chambers and Cedar Creek Pipelines
- Consider Approval of Contract with Republic Services for Solid Waste Management Services
- Consider Approval of Contract with American United Life Insurance Company (OneAmerica) to Provide Long-Term Disability Insurance Coverage

5

Consider Approval of Purchase from Xylem Water Solutions USA Inc. of Flygt Submersible Pump for George Shannon Wetland Relift Pump Station

Darrell Beason, *Chief Operations Office*

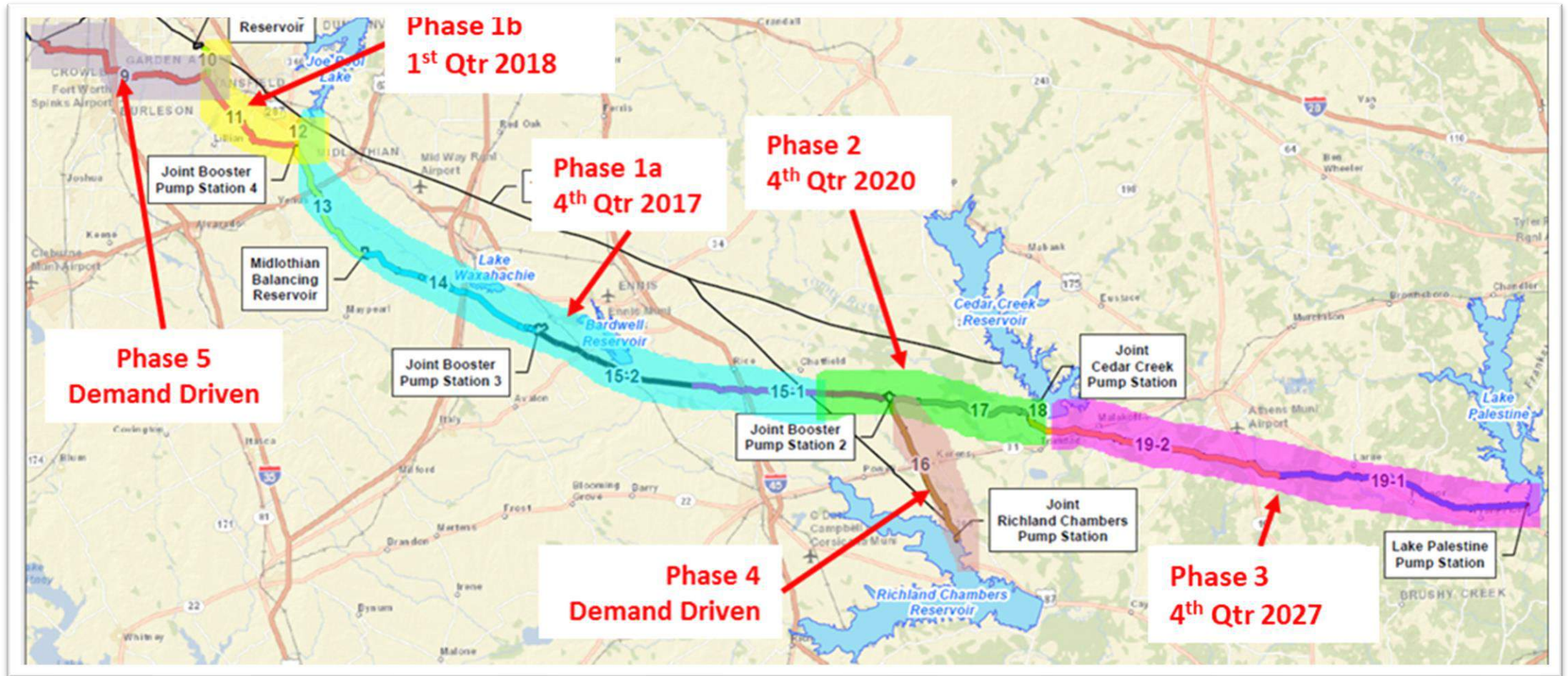


6

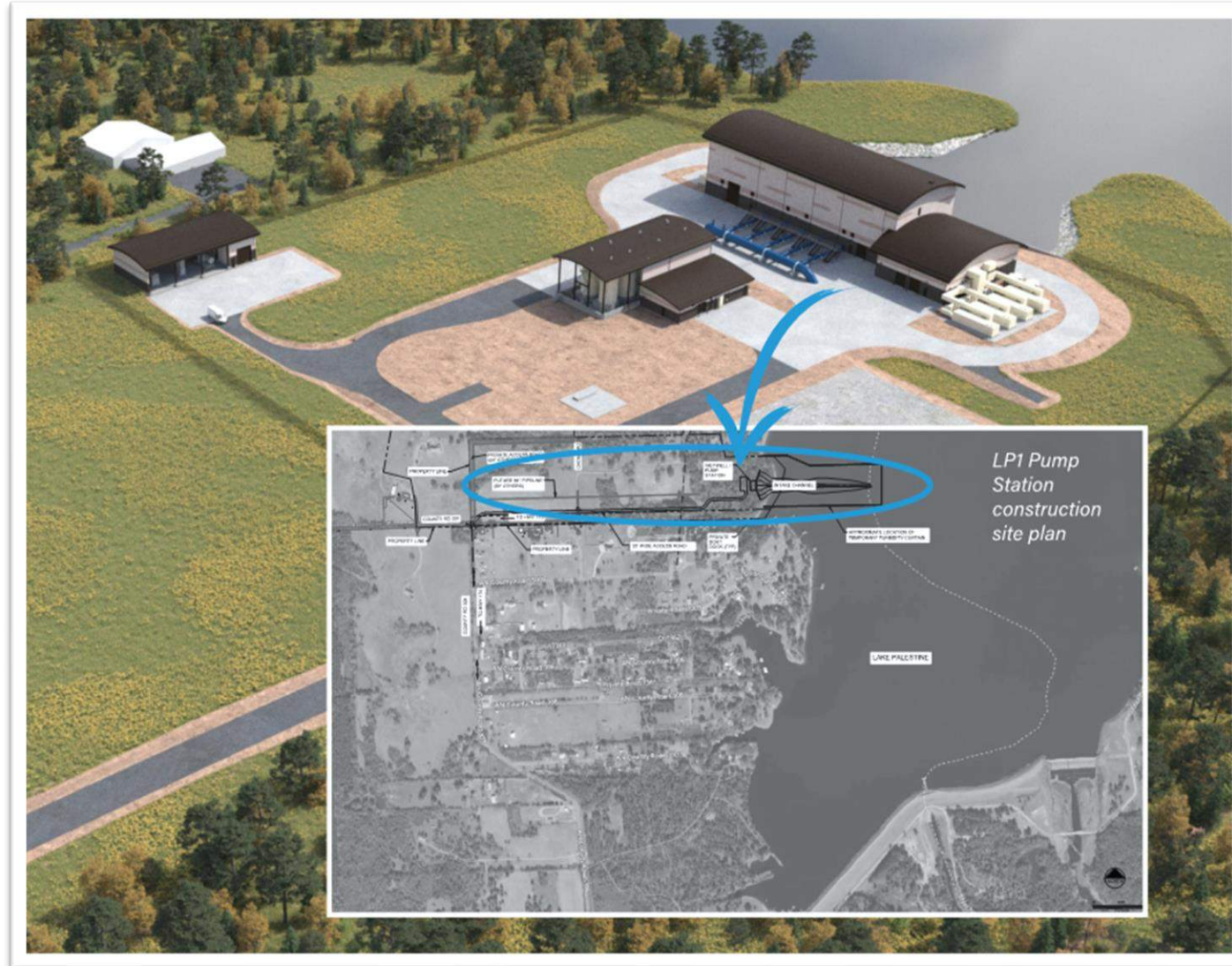
Consider Approval of Task Order Contract with Alliance Geotechnical Group for Construction Materials Inspection and Testing Services for the Integrated Pipeline Lake Palestine Intake and Pump Station

Ed Weaver, *IPL Program Manager*

Integrated Pipeline Layout and Phases



Integrated Pipeline Lake Palestine Pump Station



Integrated Pipeline Project Lake Palestine Pump Station Intake



Cedar Creek and Lake Palestine 3-D Model Cross Section -- Cedar Creek and Lake Palestine Lake Pump Stations are the same design. Primary difference is Lake Palestine is equipped with five pumps while Cedar Creek has seven.

Integrated Pipeline Project Lake Palestine Pump Station Intake Construction Materials Inspection and Testing (CMIT)

WATER SUPPLY · FLOOD PROTECTION · RECREATION



Integrated Pipeline Project Lake Palestine Pump Station Intake

Construction Materials Inspection and Testing (CMIT)

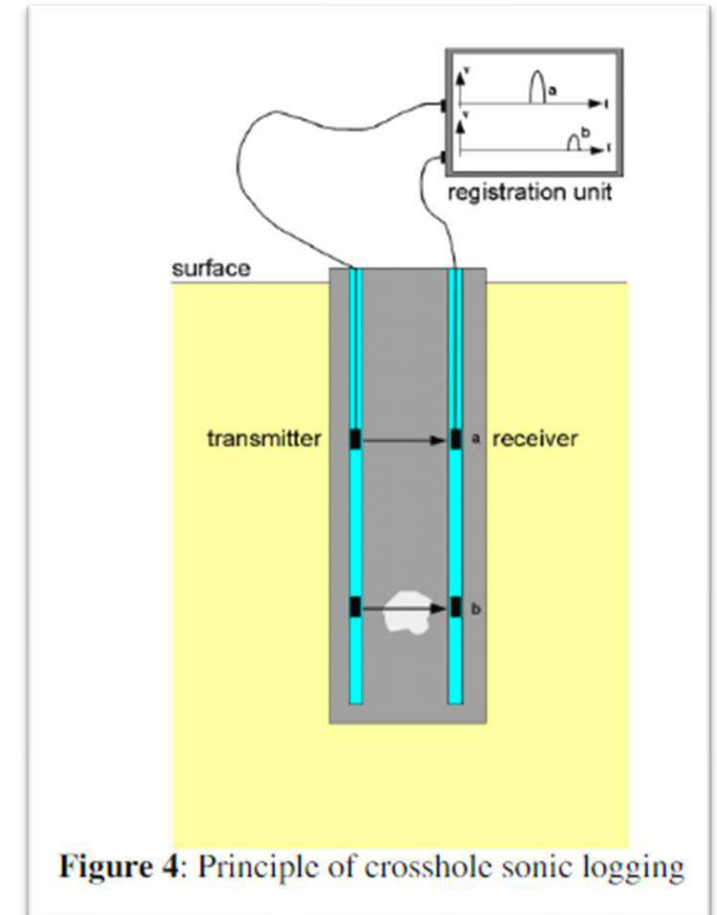
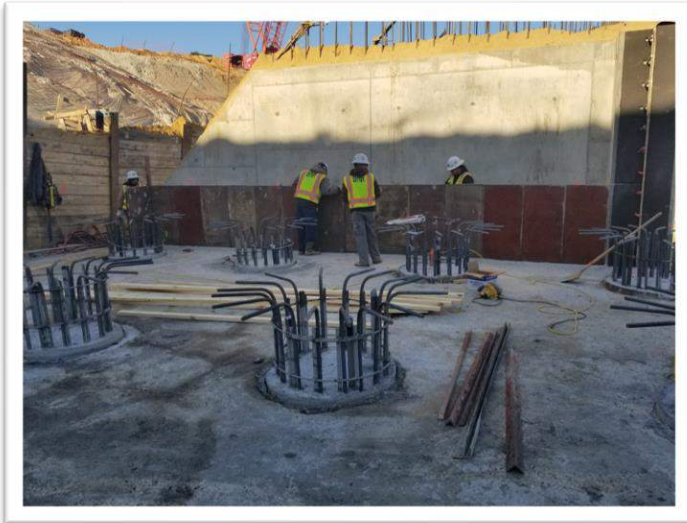


Figure 4: Principle of crosshole sonic logging

7

Consider Approval of Contract with Oncor Electric Delivery Company for Construction of Temporary Three Phase 480 Volt Electric Service for Construction of Lake Palestine Pump Station of the Integrated Pipeline Project

Zachary Huff, *Water Resources Engineering Director*

LP1 Distribution Power



8

Consider Approval of Resolution Authorizing the Issuance, Sale, and Delivery of Tarrant Regional Water District, a Water Control and Improvement District, Water Revenue ECP Series A Refunding Bonds, Pledging Revenues for the Payment of the Bonds, Approving an Official Statement, and Authorizing Other Instruments and Procedures Relating Thereto

Jennifer Mitchell, *Finance Director*

9

Consider Approval of Order Authorizing the Issuance of Tarrant Regional Water District, a Water Control and Improvement District, Unlimited Tax Refunding Bonds; Levying an Ad Valorem Tax in Support of the Bonds; Establishing the Procedures of Selling and Delivering the Bonds; and Authorizing Other Matters Related to the Issuance of the Bonds

Jennifer Mitchell, *Finance Director*

Staff Update

General Manager Update

Dan Buhman, General Manager

Staff Update

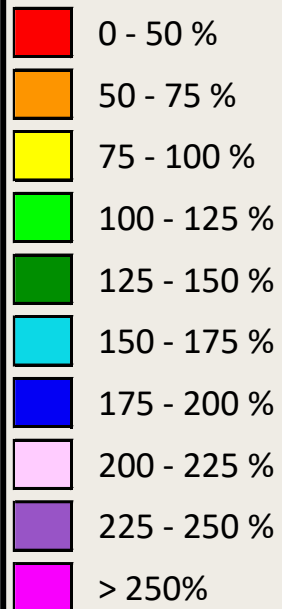
Water Resources and Planning Update

Rachel Ickert, Chief Water Resources Officer

Percent of Normal Rainfall

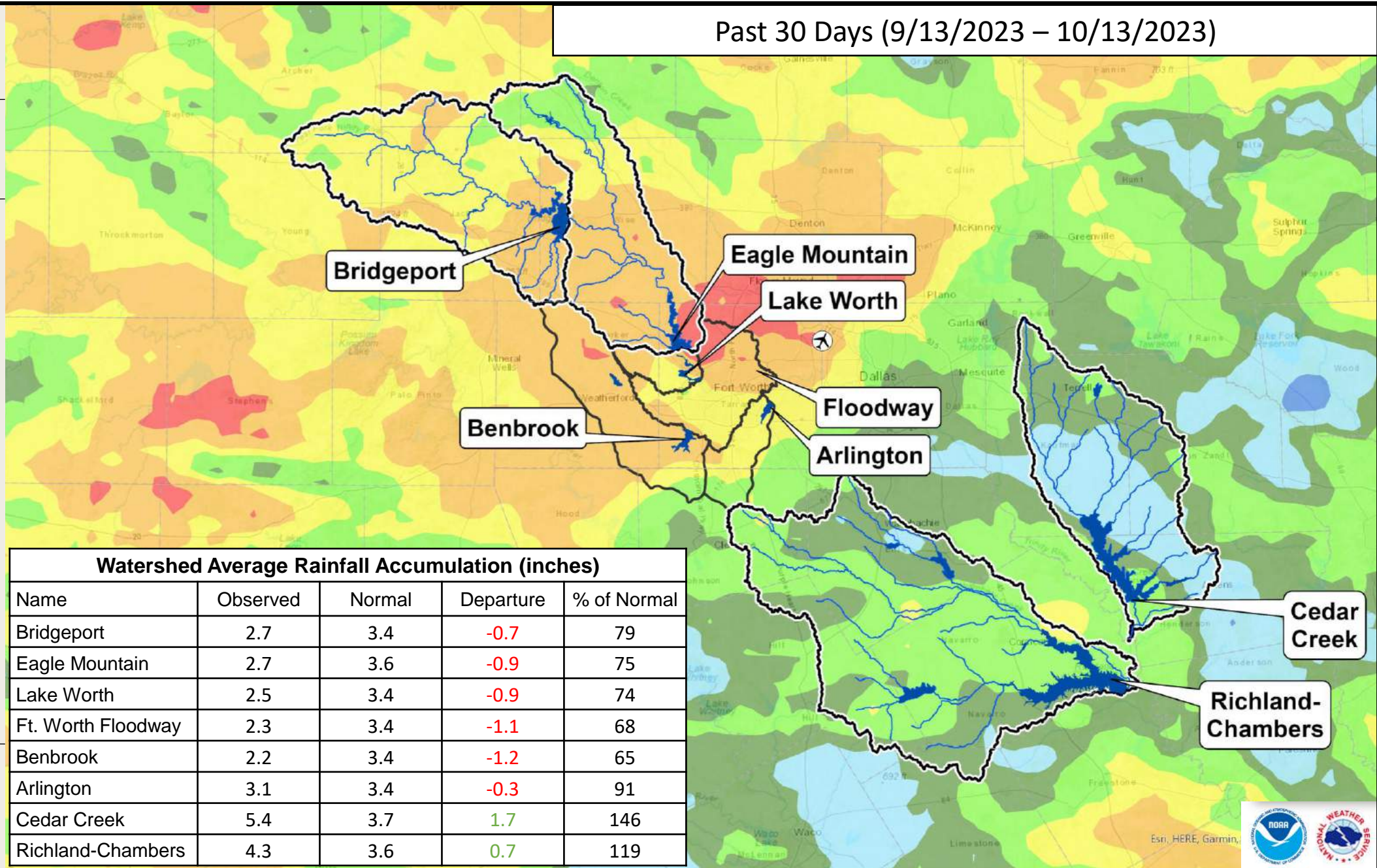


LEGEND



Precipitation totals are obtained from NOAA's NWS. The totals displayed are estimated by the WGRFC. The data is processed and displayed using ESRI ArcGIS.

Past 30 Days (9/13/2023 – 10/13/2023)



Watershed Average Rainfall Accumulation (inches)				
Name	Observed	Normal	Departure	% of Normal
Bridgeport	2.7	3.4	-0.7	79
Eagle Mountain	2.7	3.6	-0.9	75
Lake Worth	2.5	3.4	-0.9	74
Ft. Worth Floodway	2.3	3.4	-1.1	68
Benbrook	2.2	3.4	-1.2	65
Arlington	3.1	3.4	-0.3	91
Cedar Creek	5.4	3.7	1.7	146
Richland-Chambers	4.3	3.6	0.7	119

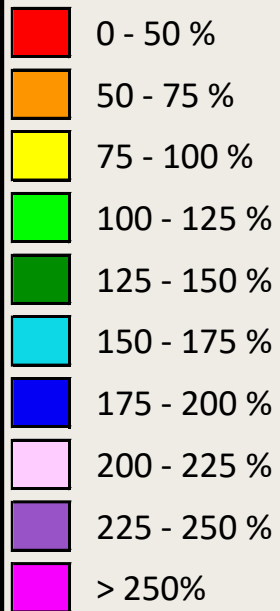


Esri, HERE, Garmin

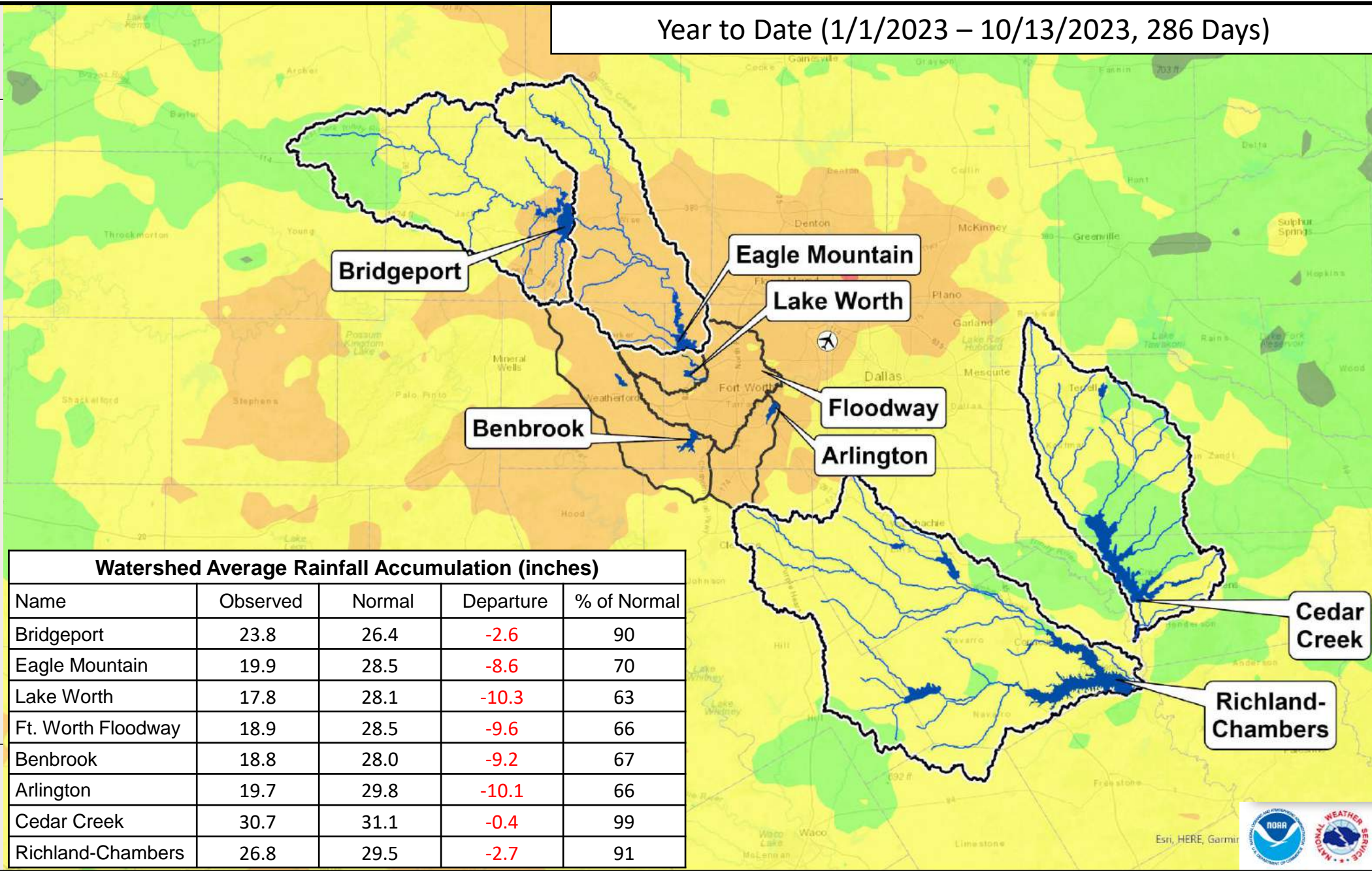
Percent of Normal Rainfall



LEGEND



Year to Date (1/1/2023 – 10/13/2023, 286 Days)

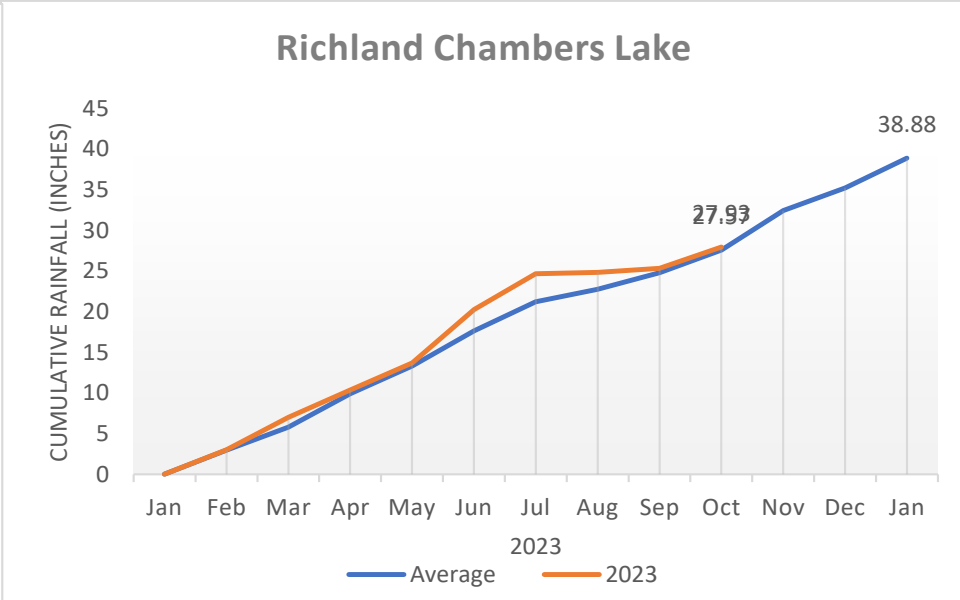
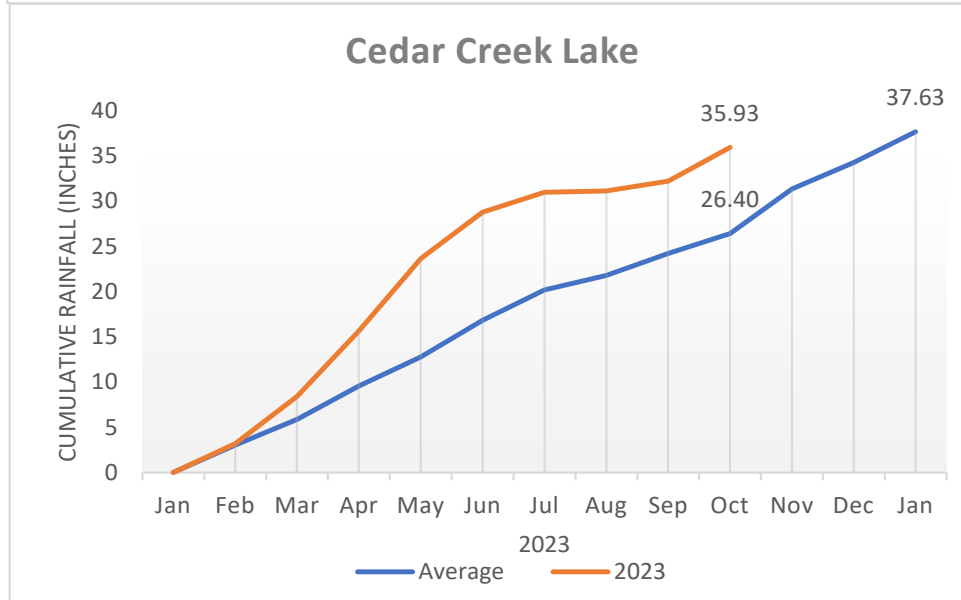
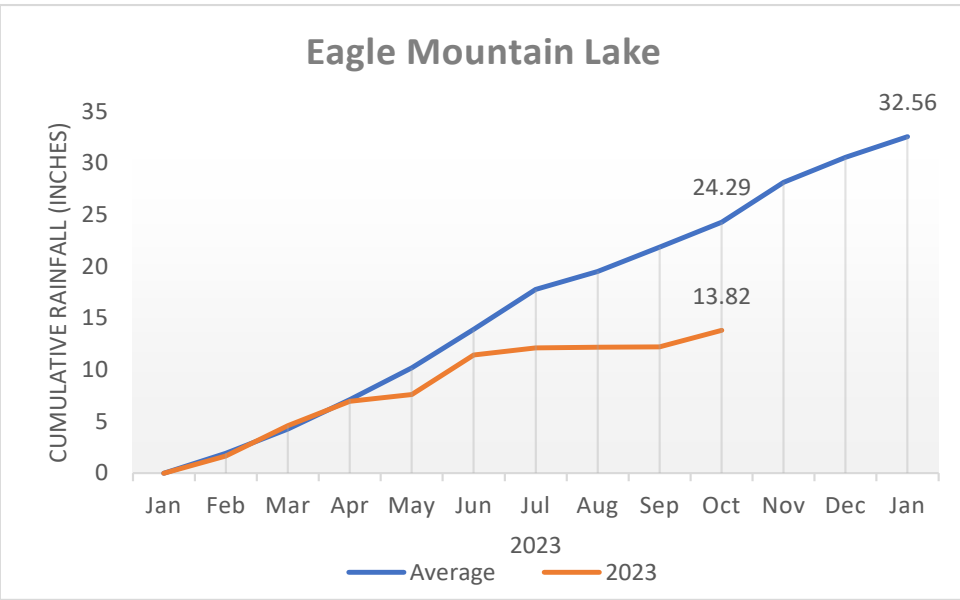
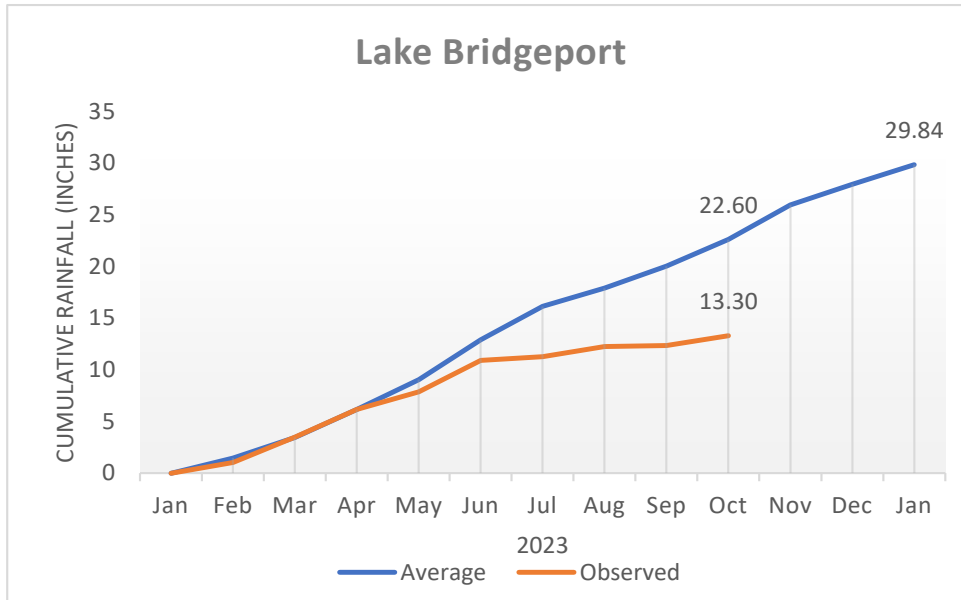


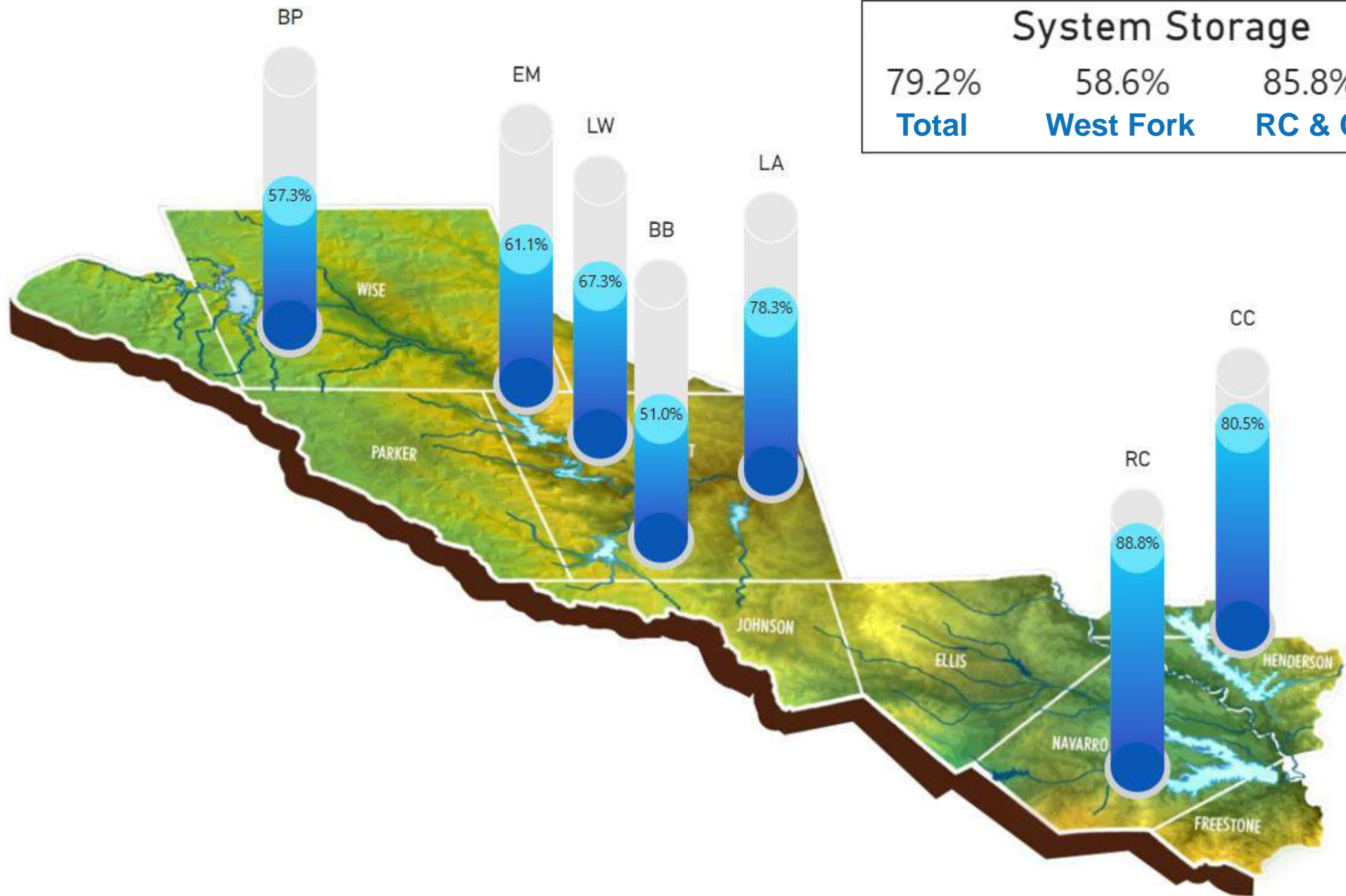
Watershed Average Rainfall Accumulation (inches)				
Name	Observed	Normal	Departure	% of Normal
Bridgeport	23.8	26.4	-2.6	90
Eagle Mountain	19.9	28.5	-8.6	70
Lake Worth	17.8	28.1	-10.3	63
Ft. Worth Floodway	18.9	28.5	-9.6	66
Benbrook	18.8	28.0	-9.2	67
Arlington	19.7	29.8	-10.1	66
Cedar Creek	30.7	31.1	-0.4	99
Richland-Chambers	26.8	29.5	-2.7	91

Precipitation totals are obtained from NOAA's NWS. The totals displayed are estimated by the WGRFC. The data is processed and displayed using ESRI ArcGIS.



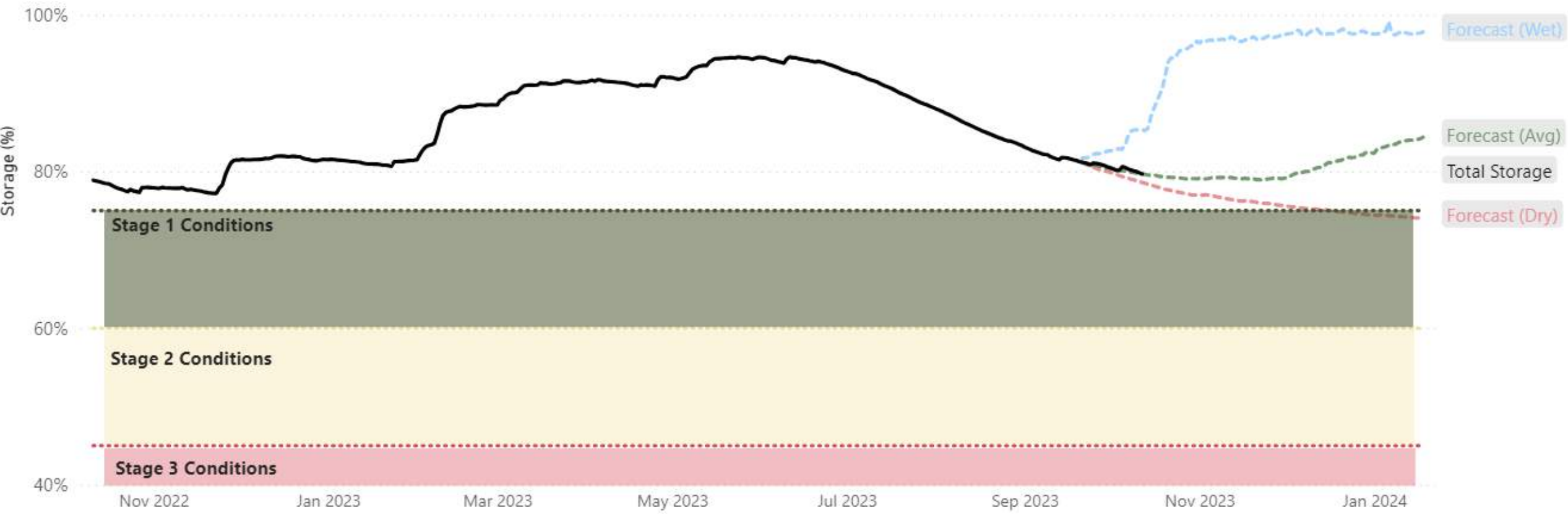
TRWD Lake Rain Gage Totals – Year to Date





System Storage		
79.2%	58.6%	85.8%
Total	West Fork	RC & CC

Historic and Projected Total Water Supply Storage



Staff Update

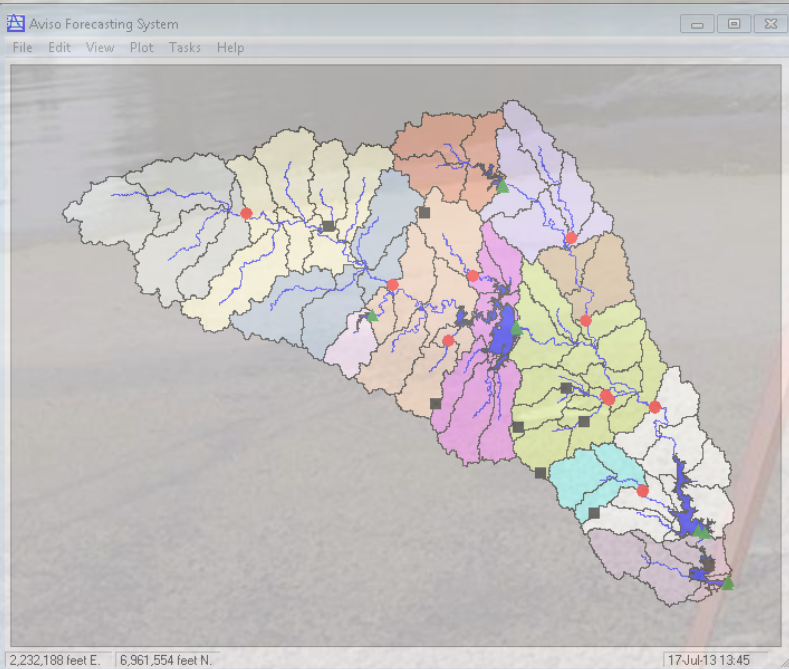
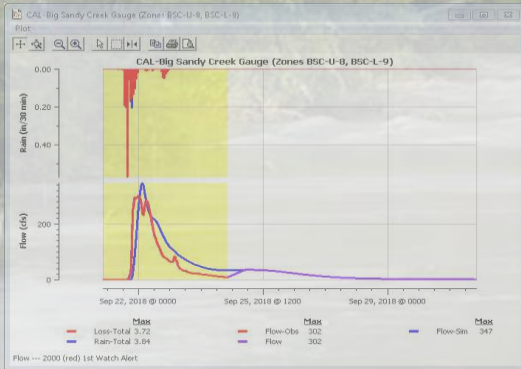
Flood Planning Update

Rachel Ickert, Chief Water Resources Officer

Existing Infrastructure

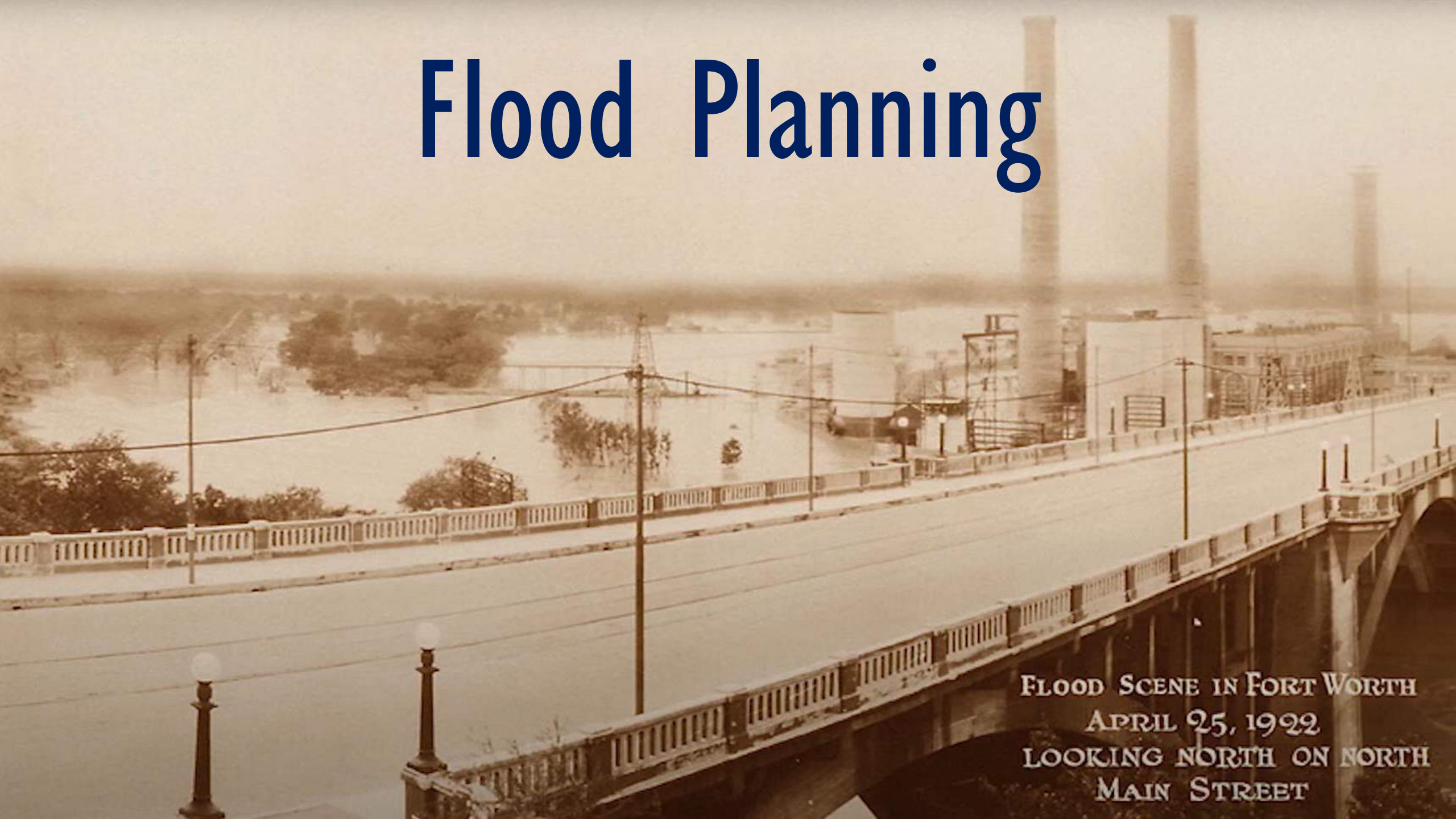


Readiness and Response



ROAD
CLOSED
TO
THRU TRAFFIC

Flood Planning



FLOOD SCENE IN FORT WORTH
APRIL 25, 1922
LOOKING NORTH ON NORTH
MAIN STREET

1940

1950

1960

1970

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2020

2030



***1949 Flood brings
U.S. Army Corps of Engineers to
Fort Worth, Texas***



1940

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1950's, 60's, and 70's

Fort Worth Floodway

***Original Design Flows Established
Levees Designed and Constructed***



1940

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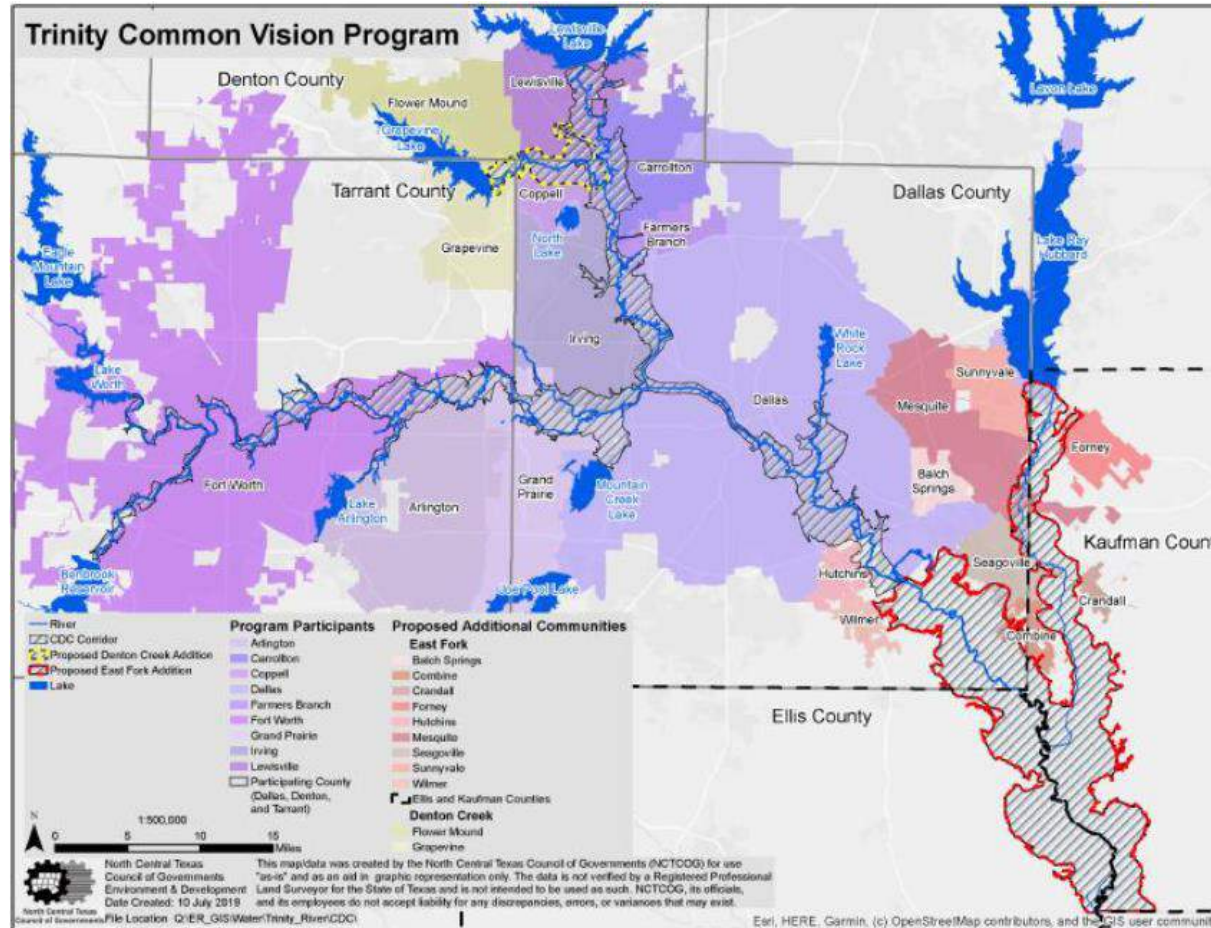
2010

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1990 USACE Upper Trinity Reconnaissance Study and Beginning of the Trinity Common Vision Steering Committee and Flood Management Task Force



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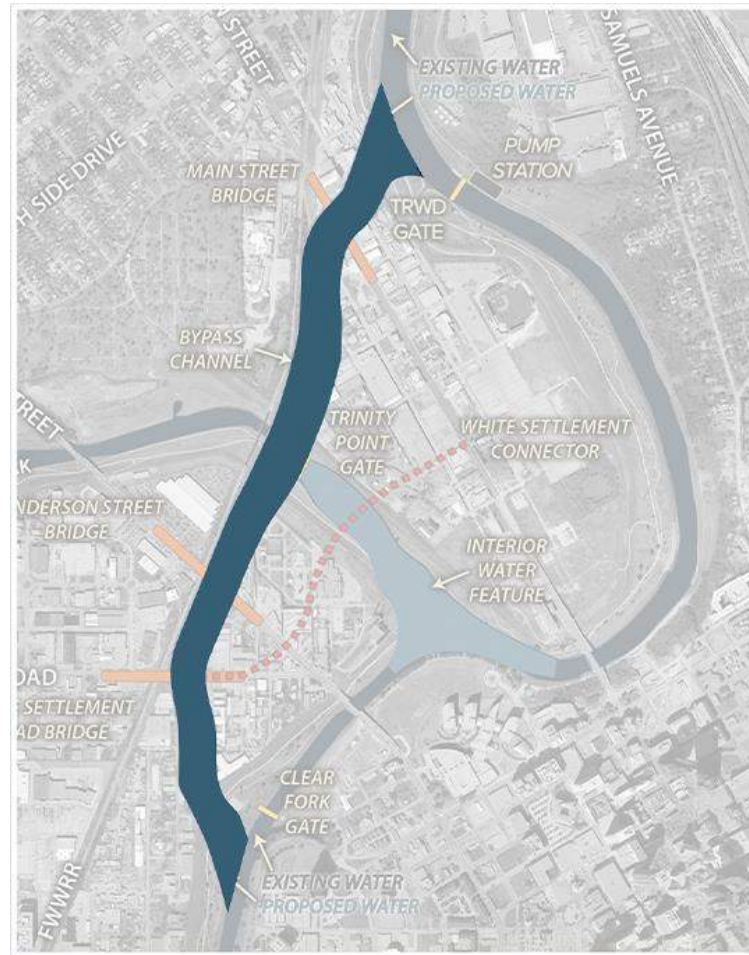
2010

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2003 USACE Central City Interim Feasibility Study



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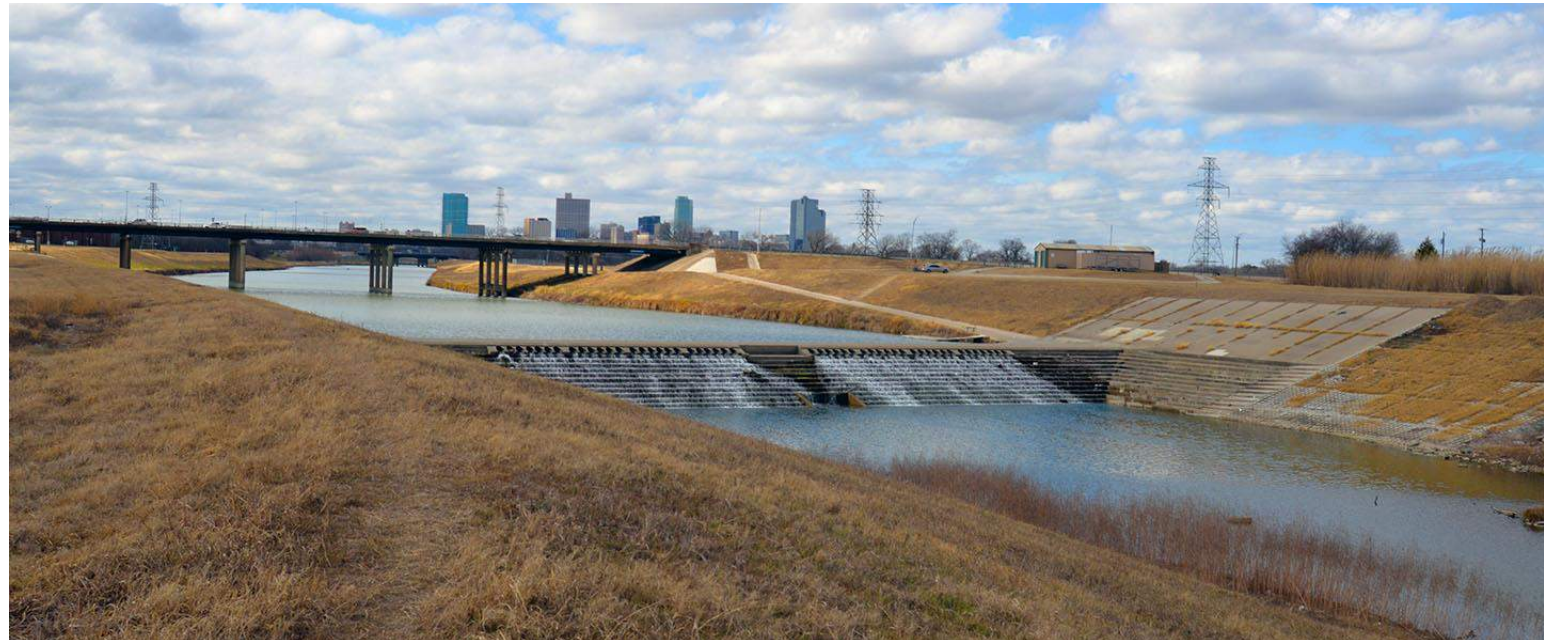
2020

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***2009 USACE H&H Update
Established Central City
Design Flows***

***Increased Flows from Original
Floodway Design Flows***



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2020

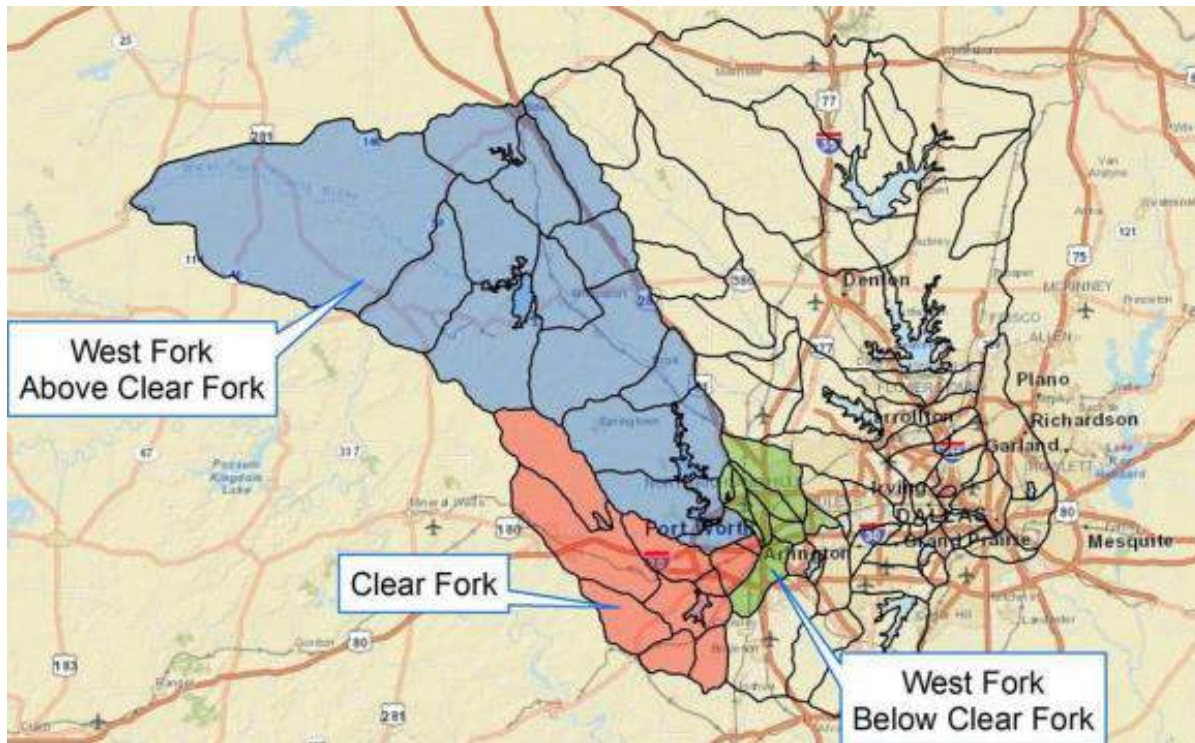
2030



***2013 USACE Corridor
Development Certificate (CDC)
Flow Update***

***Increased Flows from Central
City Design Flows***

***2015 TRWD Led Floodway
Stakeholders Group to Review
the Updated Flows***



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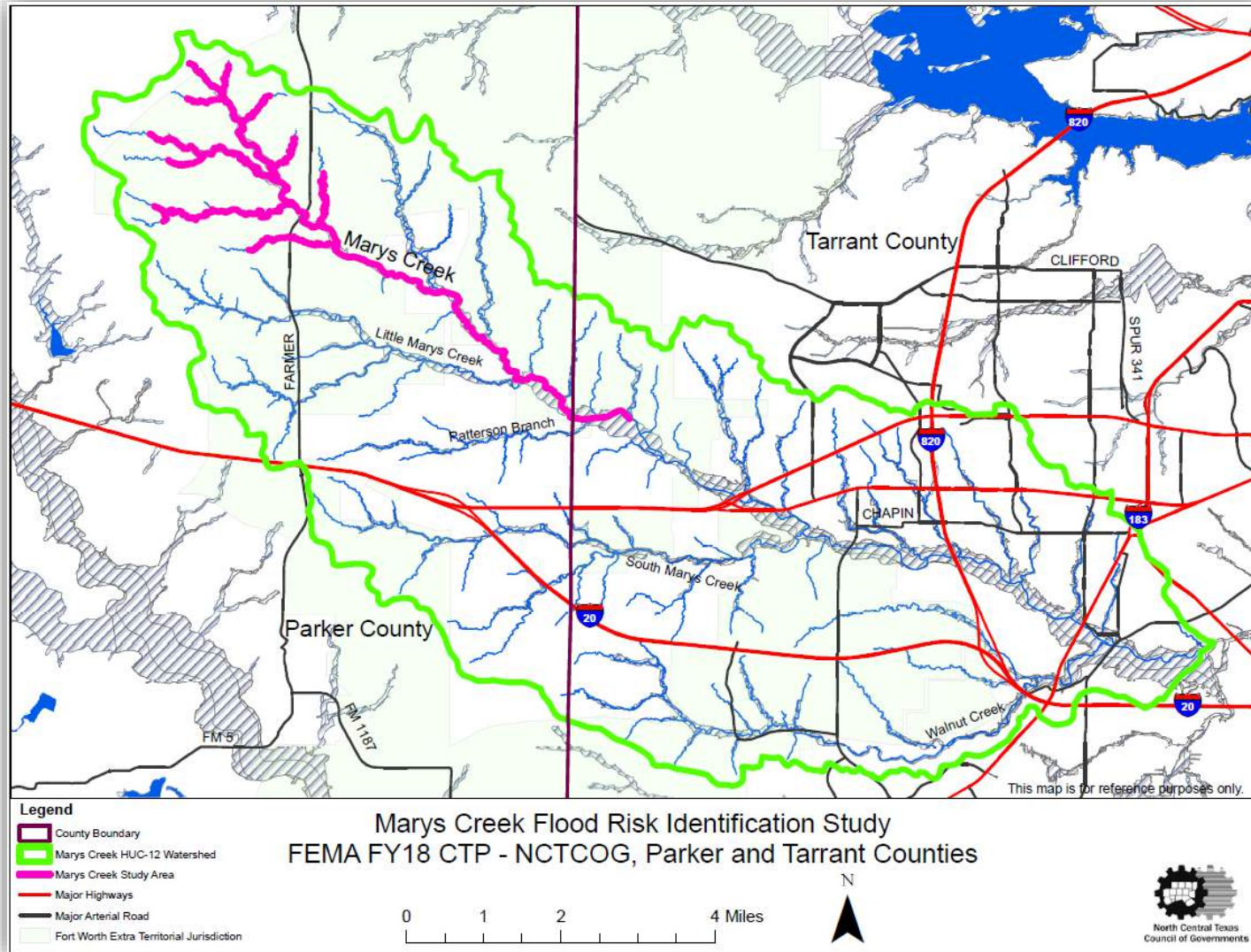
2010

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2018-2021 Mary's Creek Flood Risk Identification Project



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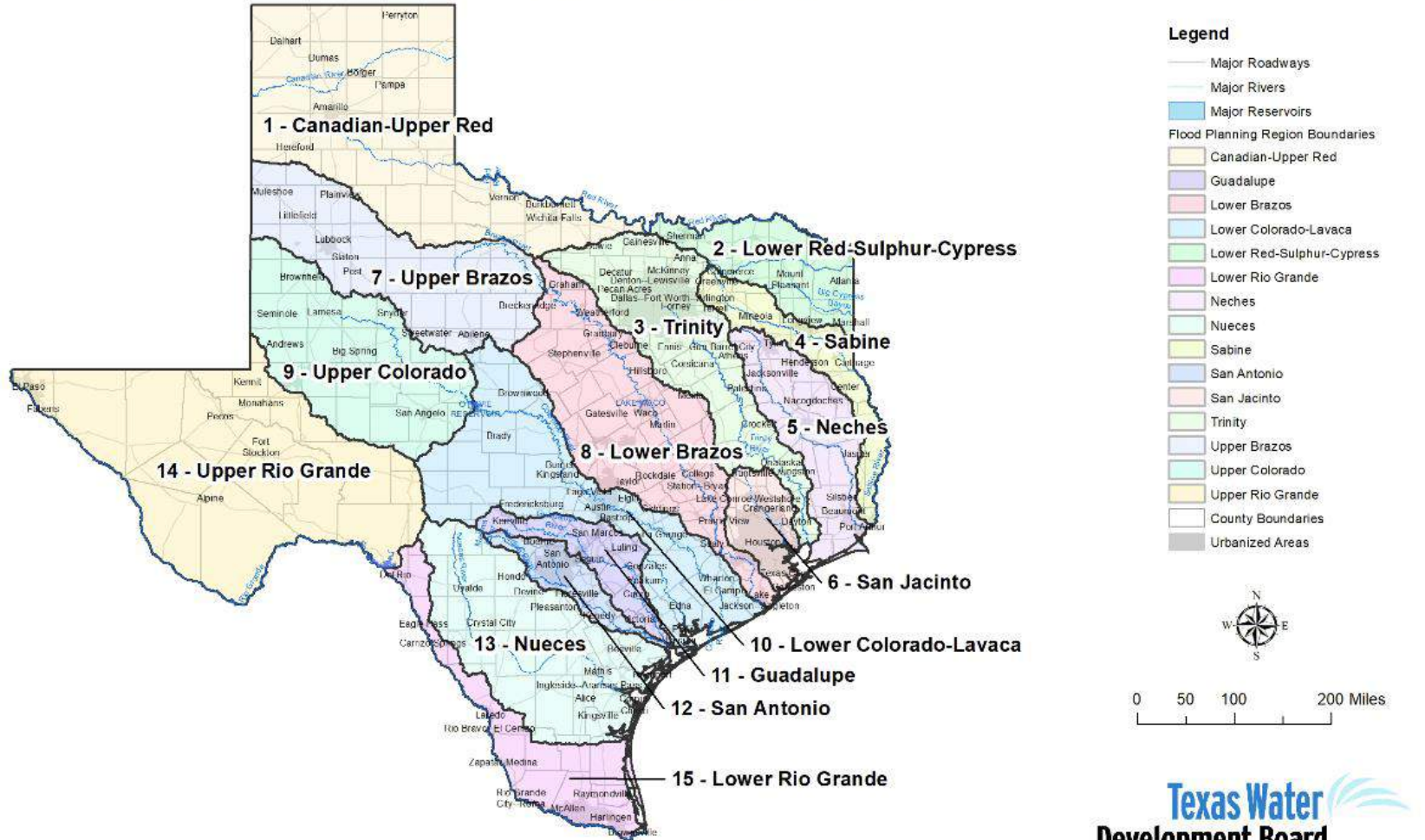
2020

2030



2020 TWDB Regional and State Flood Planning Process Begins

Flood Planning Region Boundaries



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2021 USACE Watershed Hydrology Assessment for the Trinity River Basin

Flow Increase

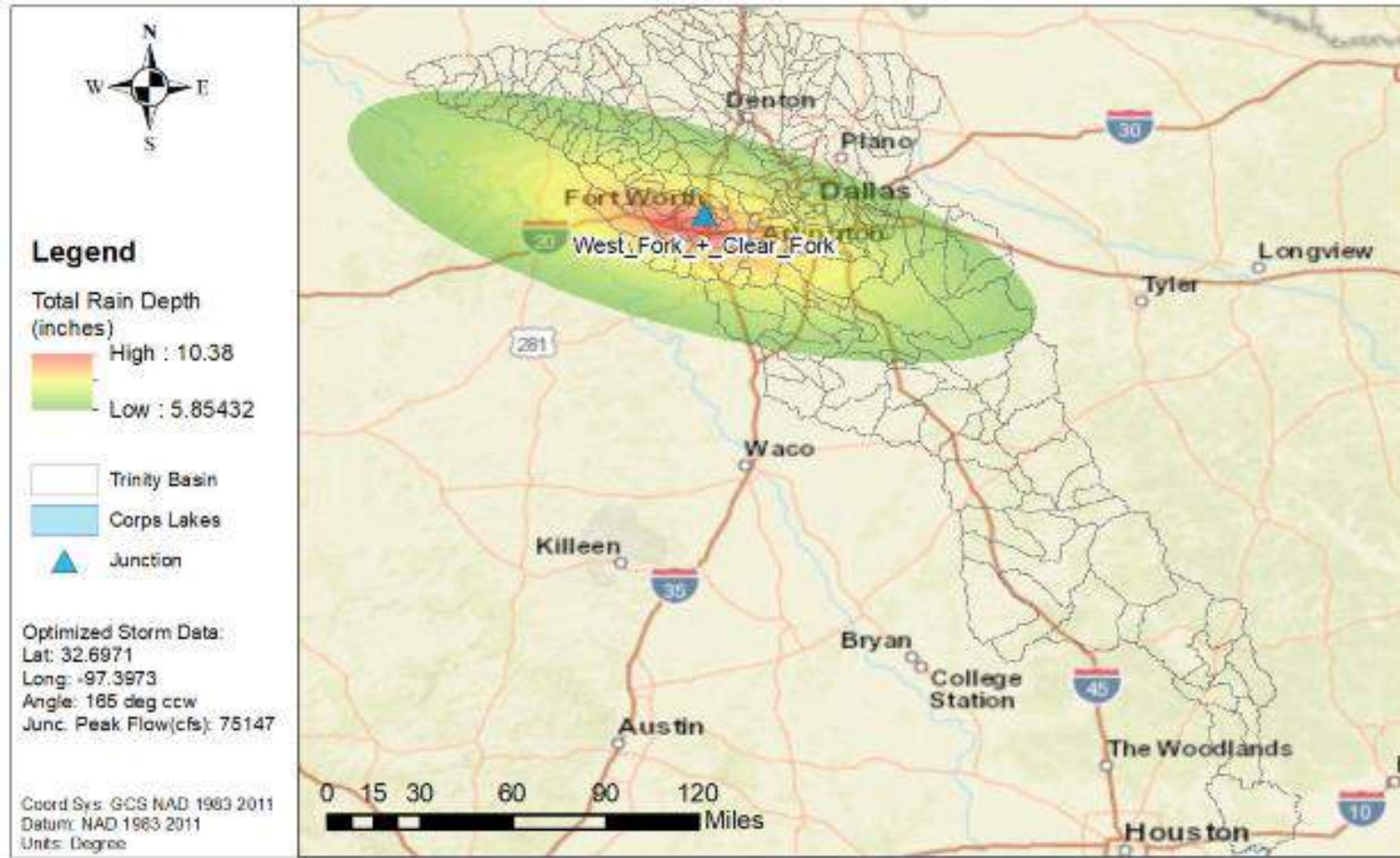


Figure 7.11: 100yr Elliptical Storm for the West Fork Trinity River below the Clear Fork

1940

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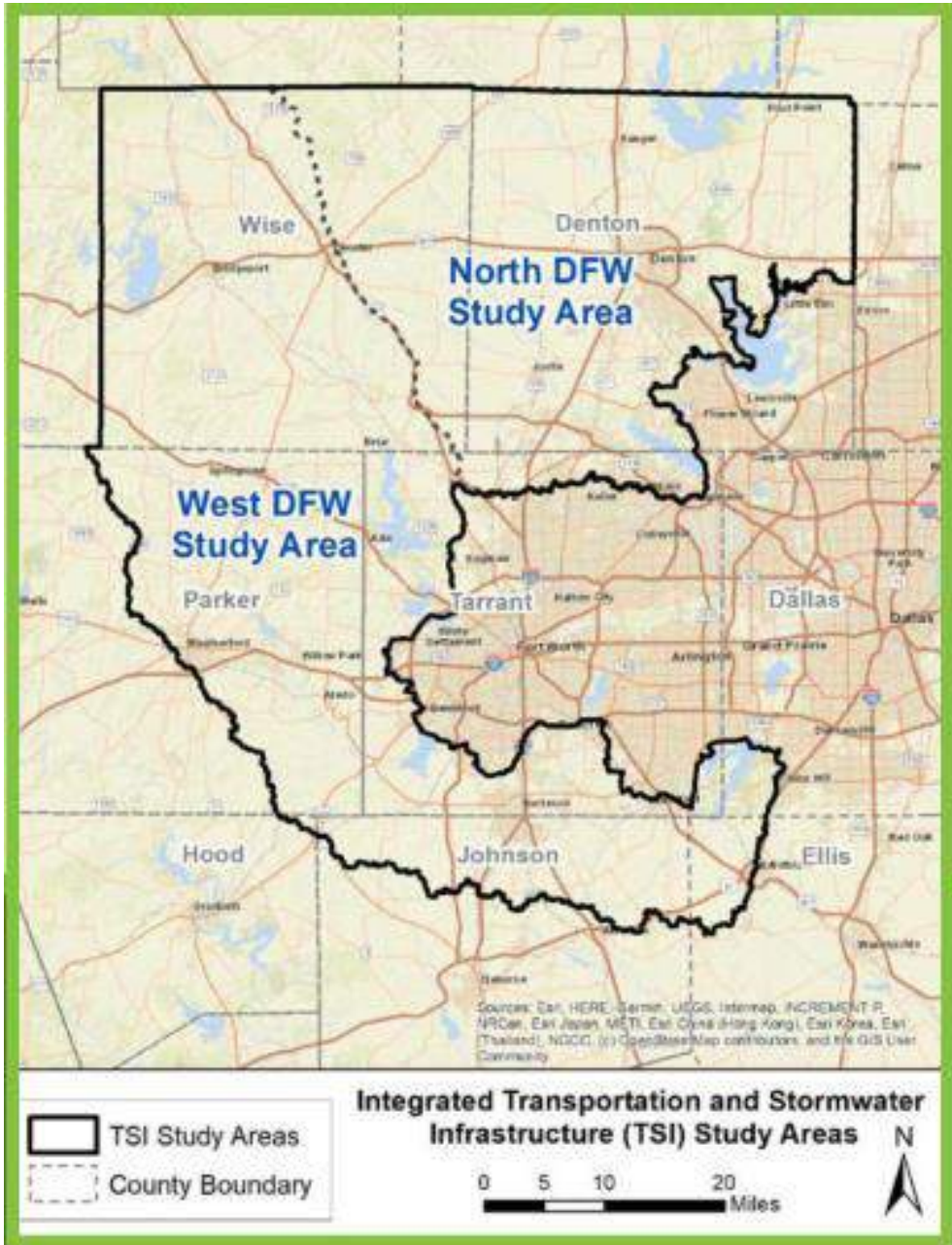
2010

2020

2030



2022 Transportation and Stormwater Infrastructure Project Kickoff



integrating Transportation & Stormwater Infrastructure

PARTNER ORGANIZATIONS

- North Central Texas Council of Governments
- US Army Corps of Engineers
- UTA THE UNIVERSITY OF TEXAS AT ARLINGTON
- TEXAS A&M AGRILIFE
- trwd Tarrant Regional Water District

FUNDING PARTNERS

- Texas Water Development Board
- Texas Department of Transportation/ Federal Highway Administration
- Texas General Land Office
- Federal Emergency Management Agency

LEARN MORE AT WWW.NCTCOG.ORG/TSI

1940

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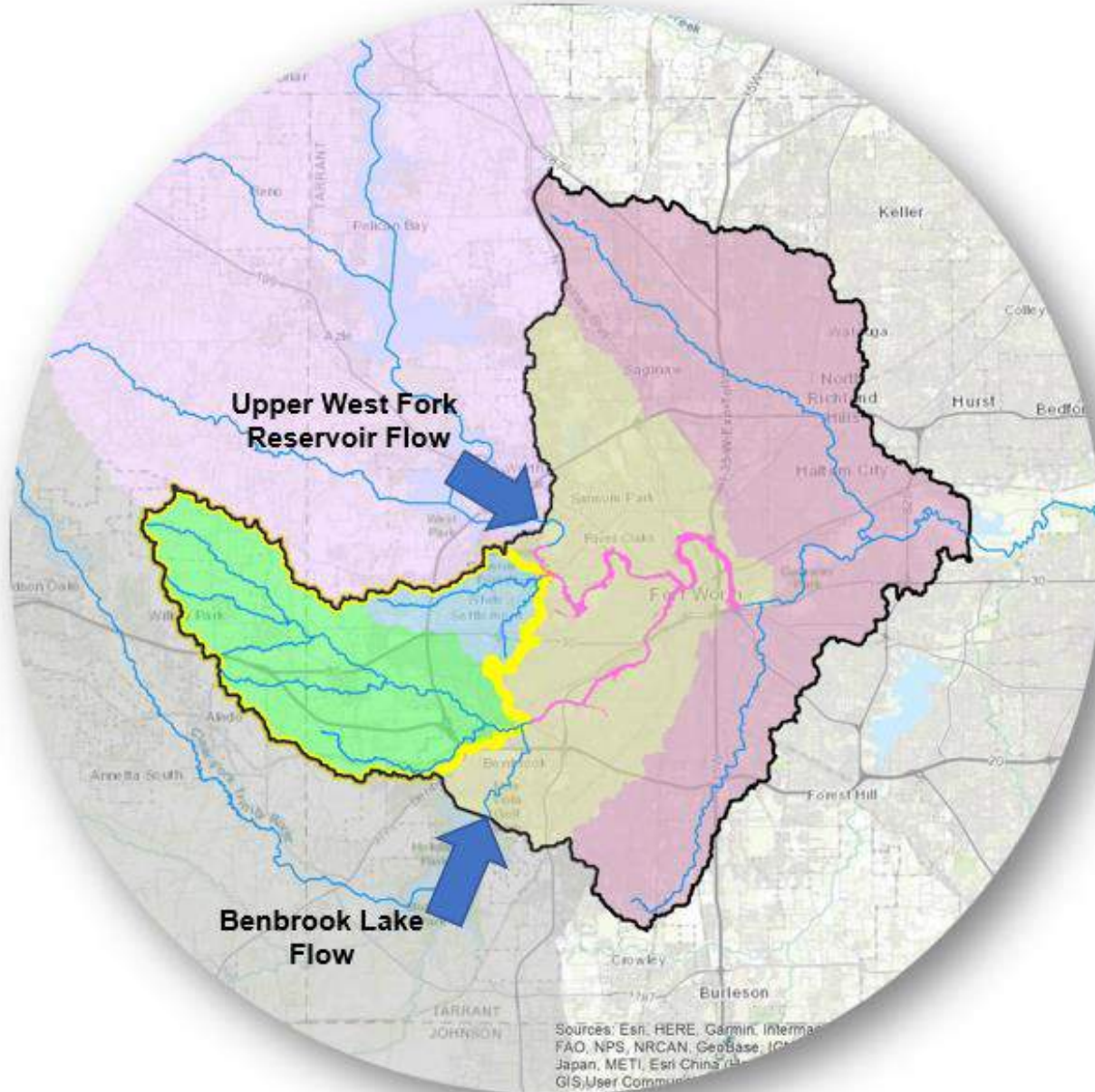
2010

2020

2030



2022 TRWD Upstream Flood Mitigation Analysis Kickoff



Legend

Fort Worth Floodway Federal Limits

Reservoir Controlled Area

Benbrook Lake

Upper West Fork Reservoirs

TRWD Floodway Watershed

Potential Mitigation Area

Floodway Areas

Mary's Creek

Farmer's Branch

Local

Downstream

Sources: Esri, HERE, Garmin, Intermap, FAO, NPS, NRCAN, GeoBase, IGN, Japan, METI, Esri, China, etc. GIS, User Communities

1940

1950

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1970

1980

1990

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2010

2020

2030



***2023 TWDB - First Regional
Flood Plans Completed***

2023
AMENDED
REGION 3
TRINITY REGIONAL
FLOOD PLAN

Prepared for the Region 3 Trinity Regional
Flood Planning Group

VOLUME I

July 2023

TECHNICAL CONSULTANT TEAM
Halff Associates, Inc. (Prime)
Freese and Nichols, Inc.
Nick Fang, Ph.D., P.E.
H2O Partners
Cooksey Communications

REGION 3 TRINITY
REGIONAL FLOOD PLANNING GROUP

1940

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***2024 TWDB - First State
Flood Plan Due***

***2024 TRWD Upstream Flood
Mitigation Analysis Expected
Completion with Identification
of Potential Strategies***

1940

1950

1960

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2020

2030

Next Steps

- ***Central City Project***
- ***Other Flood Mitigation Strategies***

- ***Strategy Identification***
- ***Project Justification***
- ***Partnerships***
- ***Funding Options***
- ***Implementation***

Staff Update

Recognition of Service

Darrell Beason, Chief Operations Officer



11

Executive Session



12

Future Agenda Items



13

Next Scheduled Board Meeting
November 14, 2023 at 9:00 AM



14

Adjourn