BOARD OF DIRECTORS MEETING

December 14, 2021



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







Consider Approval of the Minutes from the Meeting Held on November 16, 2021







4

Consider Approval of Contract with Plummer Associates, Inc. for Wetland Design and Environmental Permitting Services for the Cedar Creek Wetlands Project

Dan Buhman, General Manager



THE CHALLENGE

800,000 PEOPLE DIED last year from water-related dise last year from water-related diseases.





200 MILLION HOURS

are lost every day by women and girls to sourcing water.



2,000,000,000 PEOPLE use a drinking source contaminated with human waste.

MORE THAN

1 IN 2

PEOPLE
don't have a decent toilet.

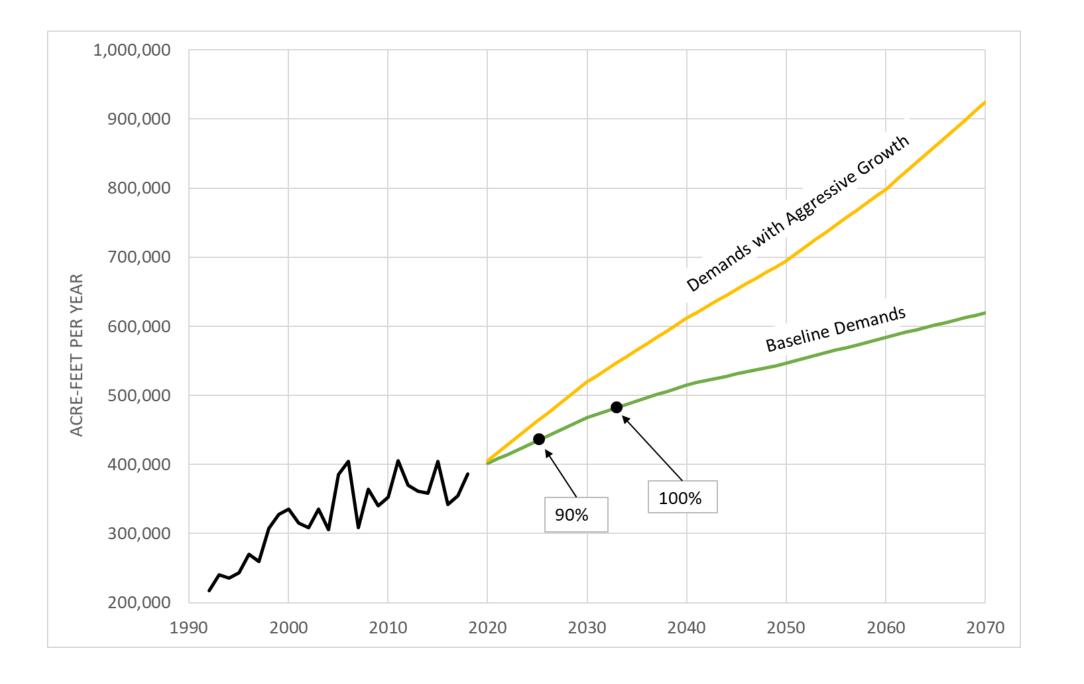


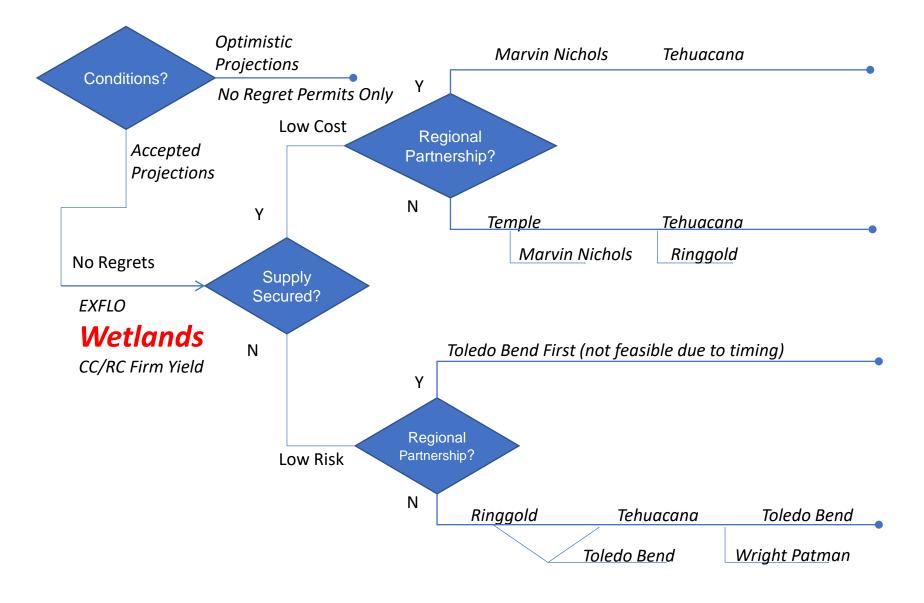
3110 CHILDREN

don't have clean water at school.





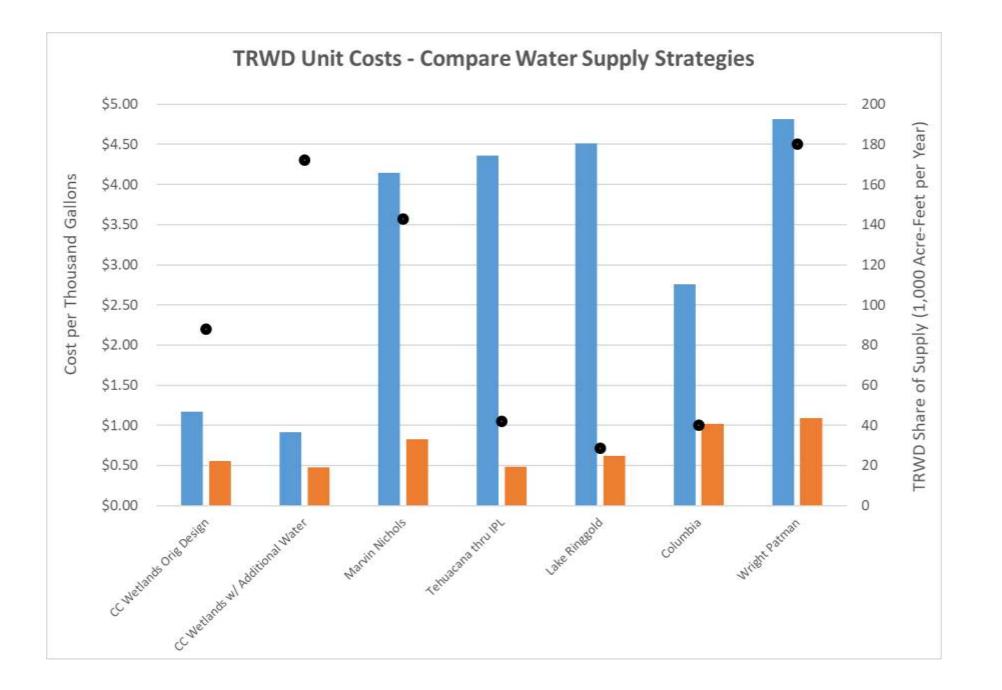


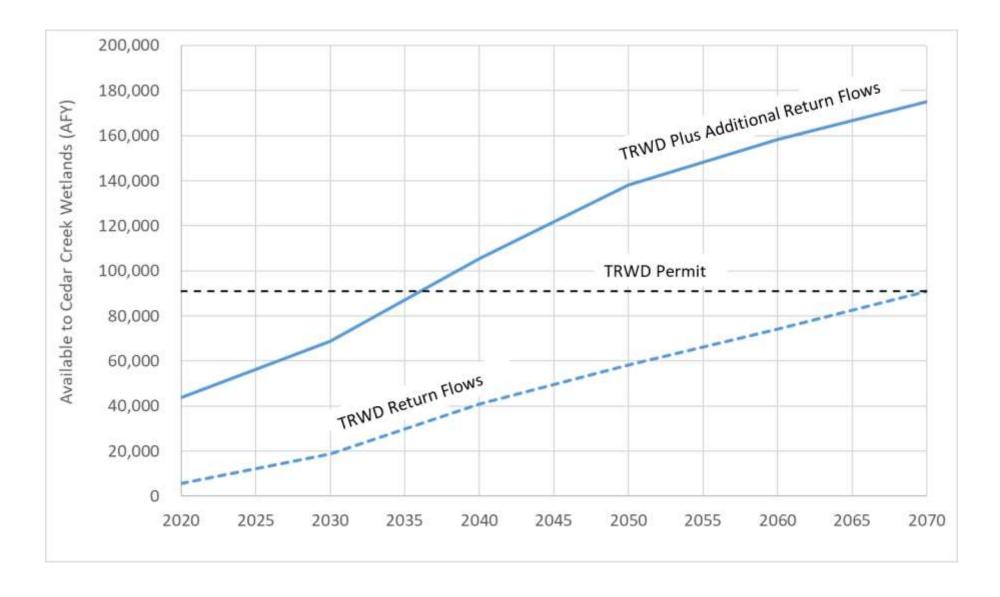




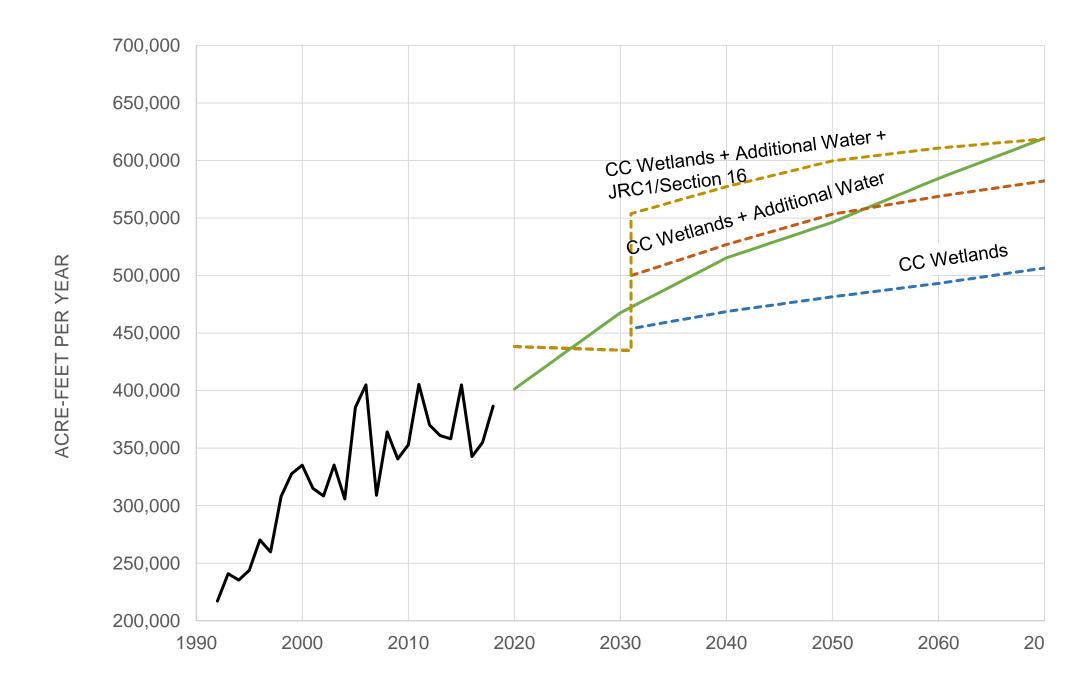




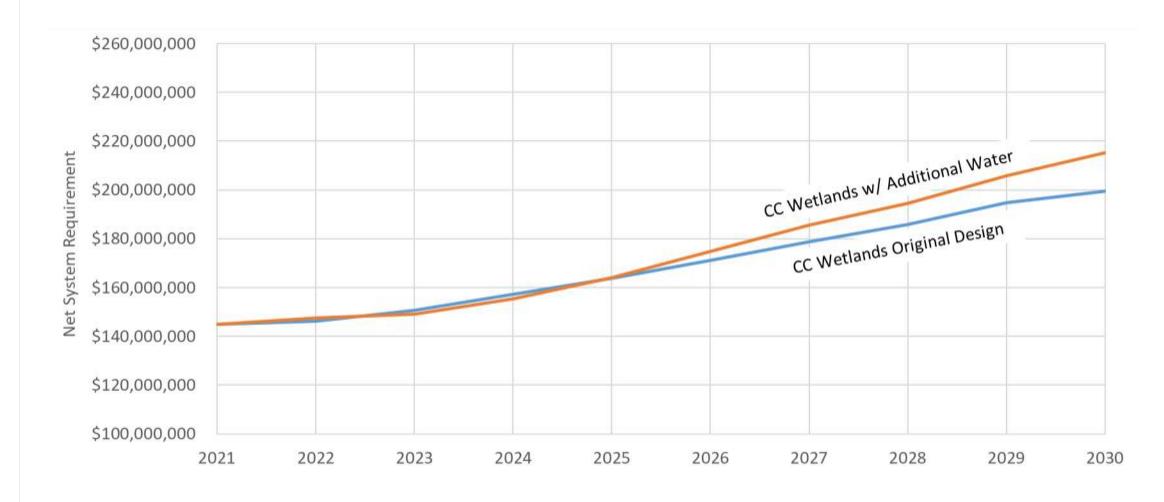














Cedar Creek Wetlands Project Implementation Schedule





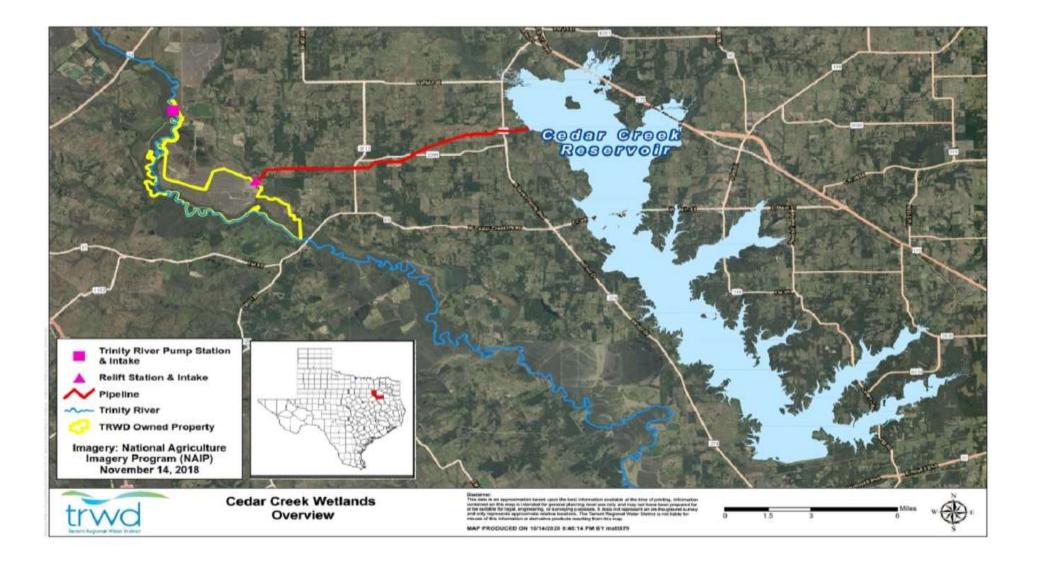
Vegetation Growth

Shannon Wetland System at Richland-Chambers



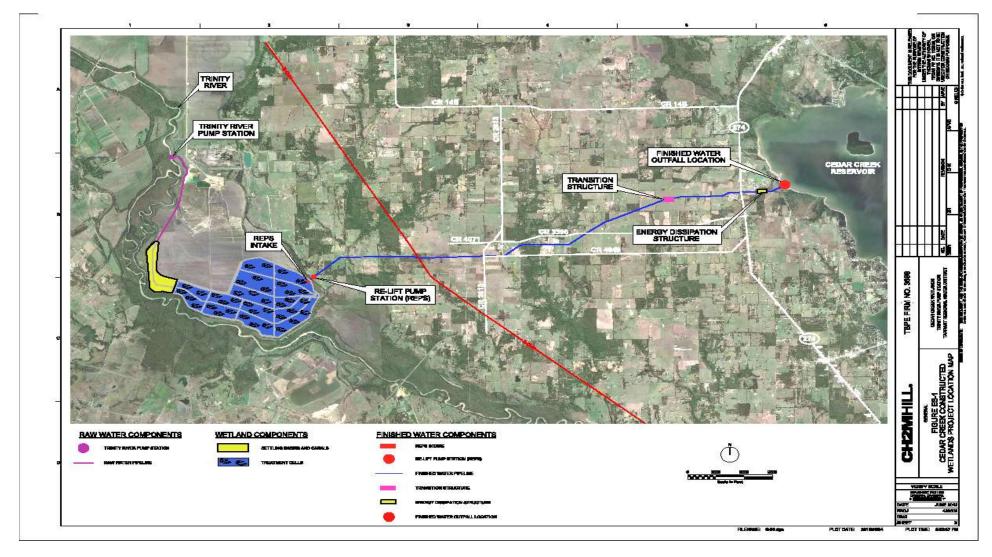


Cedar Creek Wetland Property Location





Cedar Creek Wetland Property Location





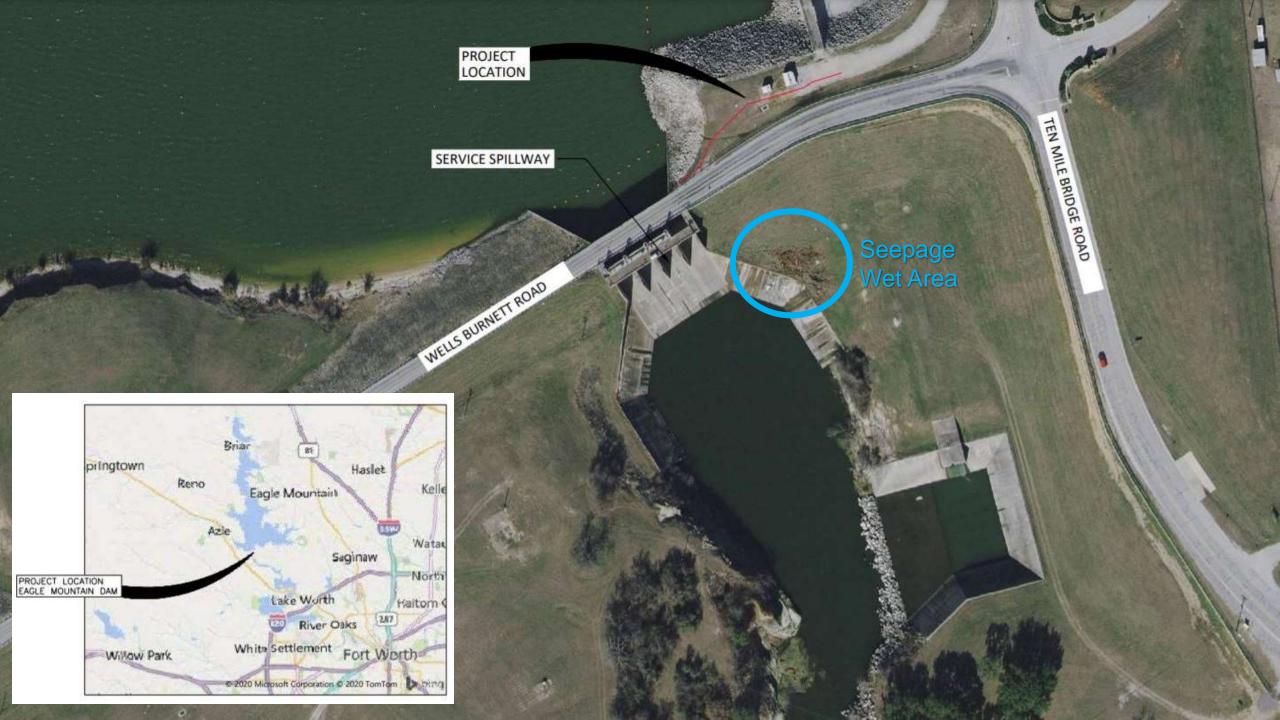




Consider Approval of Contract with Bauer Foundation Corporation for Eagle Mountain Dam Side Channel Spillway Seepage Remediation

Jason Gehrig, Infrastructure Engineering Director







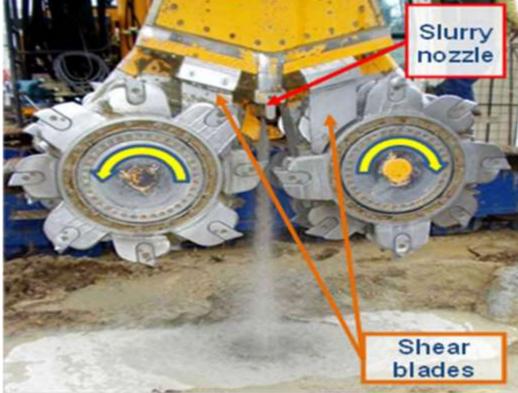
Tools Used for Cutter Soil Mixing

- Track-mounted rig
- Rotating cutting head in alignment trench
- Closeup of rotating cutting head





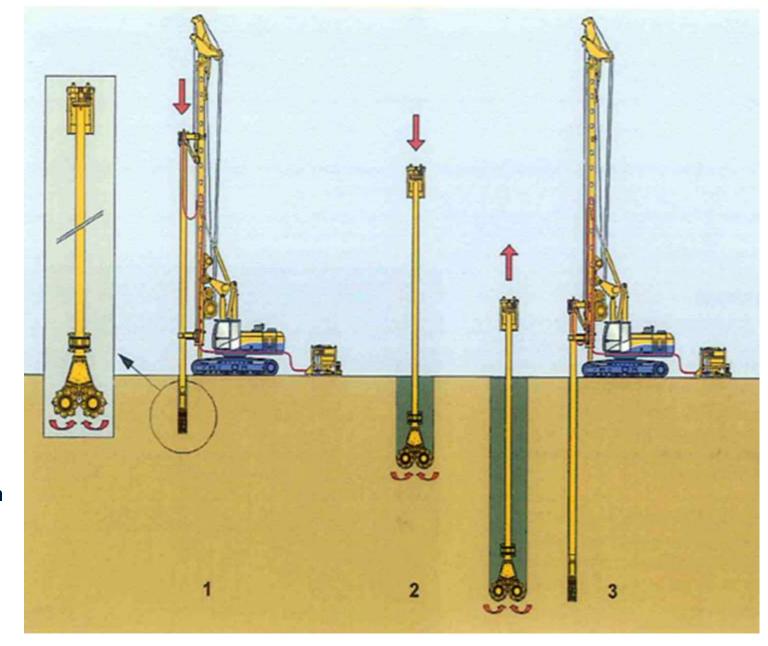






General Overview of Cutter Soil Mixing Panel Installation

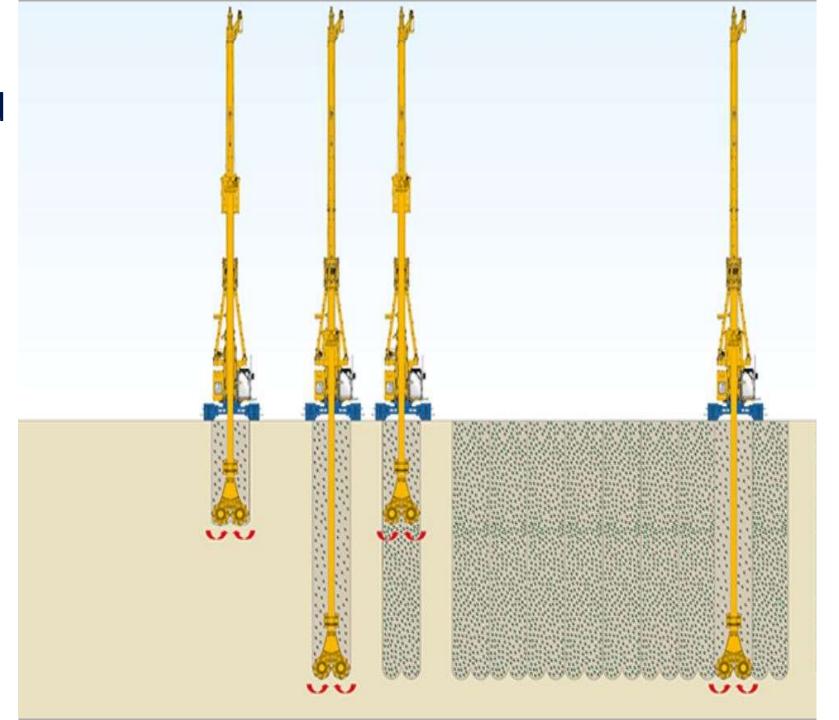
- Excavator advances panel, side view
- Excavator advances panel, front view of tool
- 3. Excavator extracts tool, leaving a cement-mixed soil in place / side view of excavator and panel





Constructing the Cutter Soil Mixed Panel Wall

- Panel slots being excavated, first two figures
- Panel slot being filled with cement-mixed soil while extracting tool
- Installing an overlapping panel between two previously constructed panels







6

Consider Approval of Contract with Davis Crane Service for a 110 Ton Hydraulic Crawler Crane

Darrell Beason, Chief Operations Officer



110 Ton Hydraulic Crawler Crane





Removing Damaged Segment





Installing New Segment







7

Consider Approval of Capital Expenditure Revision

Darrell Beason, Chief Operations Officer





Consider Approval of Change in Calculation of Retainage with BAR Constructors, Inc. for the Joint Cedar Creek Lake Pump Station Package 2 of the **Integrated Pipeline Project**

Ed Weaver, IPL Program Manager



























Integrated Pipeline Cedar Creek Lake Pump Station







Integrated Pipeline Cedar Creek Lake Pump Station







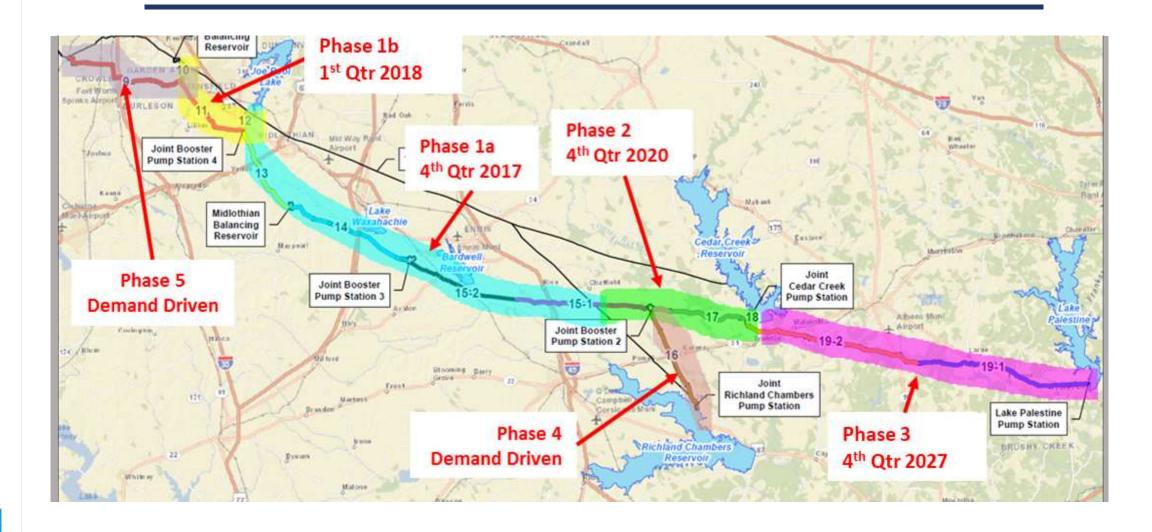


Consider Approval of Reconciliation Change Order with Lambda Construction for Joint Cedar Creek Lake Pump Station High Voltage Substation Project of the Integrated Pipeline Project

Ed Weaver, IPL Program Manager



Integrated Pipeline Layout and Phases







10

Consider Approval of Release of Retainage, Final Payment, and Contract Closeout with Lambda Construction, Ltd. for Joint Cedar Creek Lake Pump Station High Voltage Substation Project of the **Integrated Pipeline Project**

Ed Weaver, IPL Program Manager



Integrated Pipeline Cedar Creek Lake Pump Station High Voltage Substation









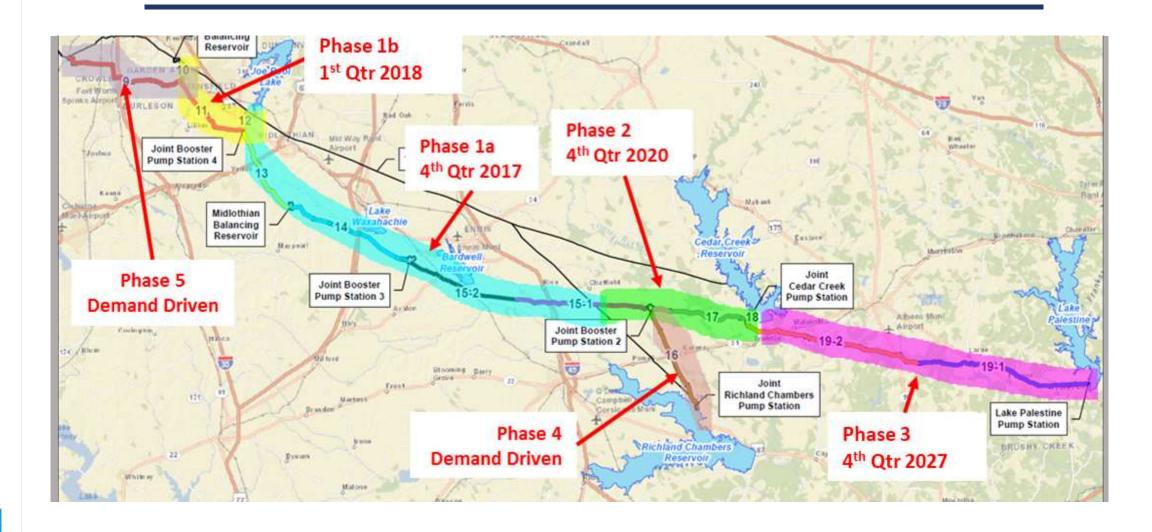


Consider Approval of Release of Retainage, Final Payment, and Contract Closeout with IPL Partners for Sections 10 and 11 of the **Integrated Pipeline Project**

Ed Weaver, IPL Program Manager



Integrated Pipeline Layout and Phases





Integrated Pipeline Sections 10 and 11







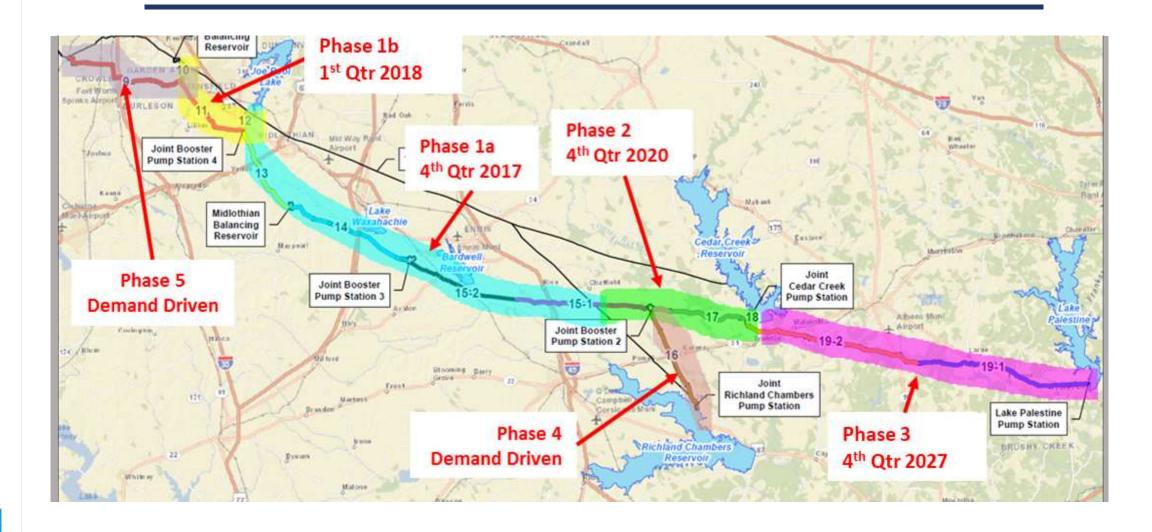
12

Consider Approval of Reconciliation Change Order with Thalle Midlothian Partners for Sections 17 and 18 of the Integrated Pipeline Project

Ed Weaver, IPL Program Manager



Integrated Pipeline Layout and Phases







13

Consider Approval of Release of Retainage, Final Payment, and Contract Closeout with Thalle Midlothian Partners for Sections 17 and 18 of the Integrated Pipeline Project

Ed Weaver, IPL Program Manager



Integrated Pipeline Sections 17 and 18







Transparency Report Update

Sandy Newby, Chief Financial Officer



Comptroller Transparency Star Program



Transparency Star Award Debt Obligations

Displays summarized debt obligations

- Governmental Fund:
 - Tax-supported debt summary
 - Bond election information
- Enterprise Fund:
 - Revenue-supported debt summary

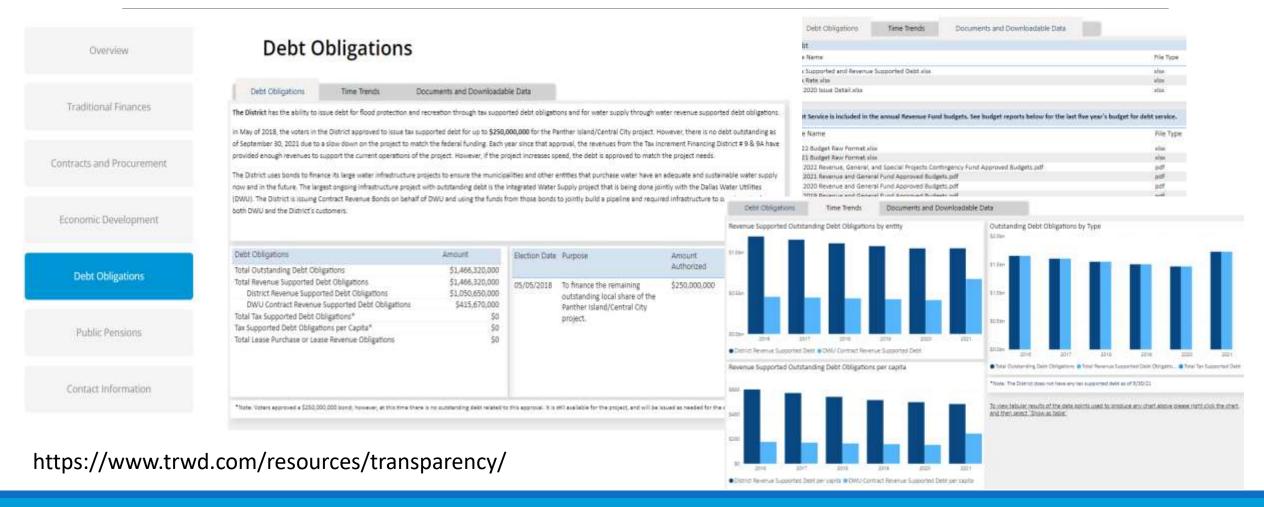
Presents time trend of outstanding debt over the last 5 years

Provides downloadable tax rate information by year

Provides links to Comptroller website for more information on the District and Texas overall

Note: Currently the District only has Revenue-supported debt obligations.

Transparency Star: Debt Obligations



Year End Review Update

Sandy Newby, Chief Financial Officer



GENERAL FUND

BUDGET





ACTUAL





Expenditures

RECREATION

BUDGET



Revenues

TOTAL: \$2.36 MILLION



Expenditures

TOTAL: \$3.59 MILLION

NET INVESTMENT: \$1.23 MILLION

ACTUAL



Revenues

TOTAL: \$2.22 MILLION



Expenditures

TOTAL: \$3.29 MILLION

NET INVESTMENT: \$1.07 MILLION

CENTRAL CITY PANTHER ISLAND PROJECT

EXPENDITURES

Budget Actual

TAX INCREMENT FINANCING REVENUE



REVENUE FUND

EXPENDITURES

OTHER REVENUES

WATER RATE







INTEGRATED PIPELINE PROJECT

PHASE I & II TRWD & Dallas Water Utility



Budget



Actual

PHASE III
Dallas Water Utility







Actual

TO COMPLETE: \$1.240

TOTAL: \$582 MILLION

STRAIGHT A'S IN FINANCE (ACCT. & PURCH.)

- A Government Finance Officer Association Award of Excellence
- A Achievement of Excellence in Procurement (by the National Procurement Institute)
- A AAA Bond Rating by Standard & Poors

City of Dallas Partnership Update

Linda Christie, Government Affairs Director





Dallas Water Conservation Program

Tarrant Regional Water District Board of Directors December 14, 2021

> Terry S. Lowery, Director Dallas Water Utilities City of Dallas

Purpose of Briefing

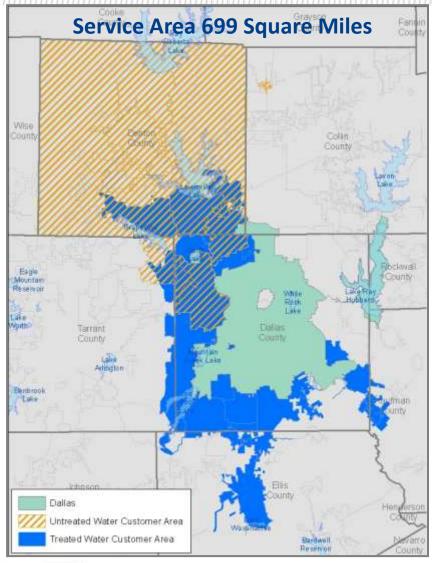


- Provide brief overview of Dallas Water Utilities
- Provide an overview of Dallas' Water Conservation Program



Dallas Water Utilities Overview





- Established by City Charter in 1881
- Regional provider of water, wastewater, stormwater and flood control services
- Fiscal Year 2020 net capital water and wastewater assets of \$5.5B
- Approximately 1,600 employees
- Combined operating and capital budgets of \$1.1B



City of Dallas One Water

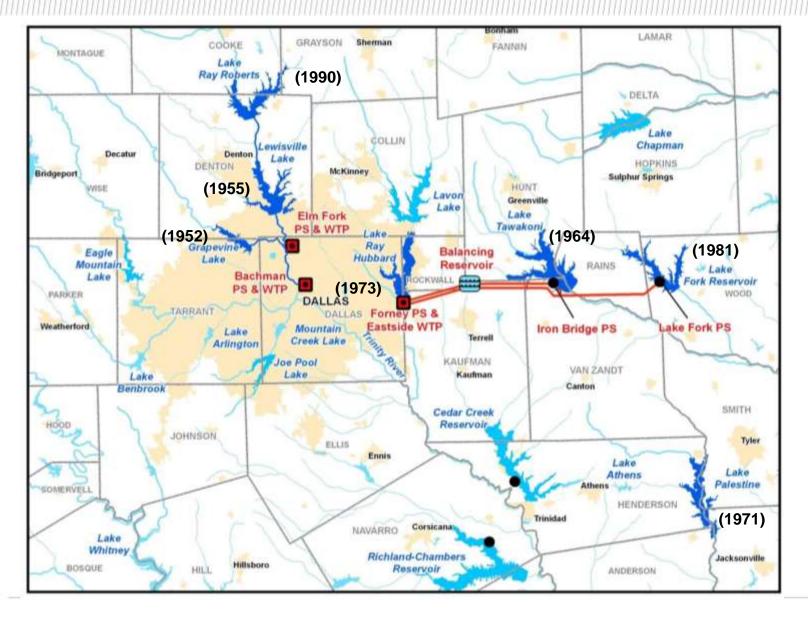


	ASSETS	CUSTOMERS
	 WATER 7 reservoirs, (6 connected) 5,017 miles of water mains 3 water treatment plants (900 MGD capacity) 	 2.5 million treated water customers 1.3 million – Retail (City of Dallas) 1.2 million – Wholesale 23 wholesale treated water 4 wholesale untreated water
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	 WASTEWATER 2 wastewater treatment plants (280 MGD capacity) 4,053 miles of wastewater main 15 wastewater pump stations 	320,000+ retail customer accounts11 wholesale wastewater
	 STORMWATER 8 storm water pump stations (5.7 BGD capacity) 1,963 miles of storm sewers 30 miles of levees 39,000 acres of floodplain 	 300,000 storm water accounts 265,979 Residential 29,470 Commercial



Dallas' Regional Water Supply System







History of Dallas' Water Conservation Program



1981:

Dallas bregan adding bill inserts to encourage customers to conseve water.



1987:

Plumbing retrofit program begins with low flow shower heads and toilet dams



2001:

Dallas City Council amended ordinance to include conservation water rates and prohibition of landscape water waste including time of day watering and the requirement of rain and freeze sensors.. Water Conservation Division created

2002:

Initiated extensive, ongoing multimedia local public awareness campaign.



2006

Water Conservation
Mascot DEW joins the
Water Conservaiton Team
and augmented existing
school education programs
with an Environmental
Education Initiative (EEI).



2010

EPA spotlighted Dallas' "Great Dallas Fix a Leak Roundup.".



2019:

NTMWD joins regional media campaign with DWU and TRWD

Dallas' Approved Water Conservation Plan submitted to TCEQ, Previous submittals include 2014, 2009 and 2005.



North Texas Municipal Water District



1984: School education and media relations



1993:

Water-wise demonstration garden at White Rockk Pump Station.



Dallas City Council adopts a Water Conservation Five-Year Stretigic Plan to further reduce peak demands and curb water waste. Subsequent plans in 2010 and 2015.

Annual Water Wise Landscape Tour begins.

Proactive leak detection and repair begins.



2009

DWU and TRWD partner on regional media campaign to minimize the potential for customer confusion by providing uniform water conservation messages to the entire media market.



2011:

Water Conservation
Hospitality Industry
Program to
encourage
hotels/motels and
resturants to expand
efforts to save water.



2012

Irrigation Ordinance amended to include mandatory twice weekly maximum schedule



2021:

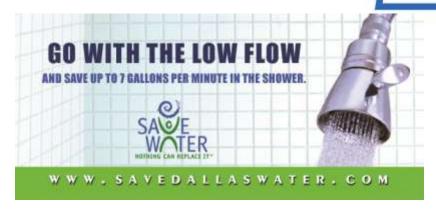
New Water Is Awsome reginoal campign launched



Achieving Water Conservation Goals



- Programs to reshape behaviors
 - Public education and outreach
 - Rebate and incentive programs
- Programs impacting structural changes
 - Water loss/leak detection
 - Main replacement program
 - Toilet replacement programs
 - ICI and irrigation audit programs



DON'T MAKE YOUR LAWN A POND.







Water Conservation Irrigation Ordinance





- Mandatory Irrigation Efficiency Scheduling
 - 2001 Irrigation prohibited between 10 a.m. and 6 p.m.
 - 2012 Maximum Twice Weekly Watering Schedule
- Prohibited Reckless Irrigation Behaviors
 - Watering with broken, misaligned or missing heads
 - Watering causing excessive runoff
 - Watering impervious surfaces (sidewalks, streets, etc.)
 - Watering during precipitation or freezing temperatures
 - Rain/freeze sensors required on all automatic systems
- Enhanced Enforcement



Public Education and Outreach





- Public Awareness Campaign
 - Regional Campaign with TRWD- 'Water Is Awesome' www.WaterIsAwesome.com
 - Local Campaign- 'Save Water. Nothing Can Replace It' <u>www.SaveDallasWater.com</u>
- Environmental Education Initiative K-12
 - 10,772 students reached in FY2021
- Water-Wise Landscape Tour
 - Currently in its 27th year
- Water-Wise Seminars Year-Round



Rebate and Incentives



- City Leadership and Commitment Grant
- Toilet Voucher and Rebate Program
- Free Irrigation Audits
- Industrial, Commercial, and Institutional (ICI) Surveys and Rebates
- Minor Plumbing Repair Program





Distribution System Enhancements



- Pipeline Replacement Program
- Leak Detection and Repair
- Universal Metering
- Meter Testing and Replacement







AWARDS



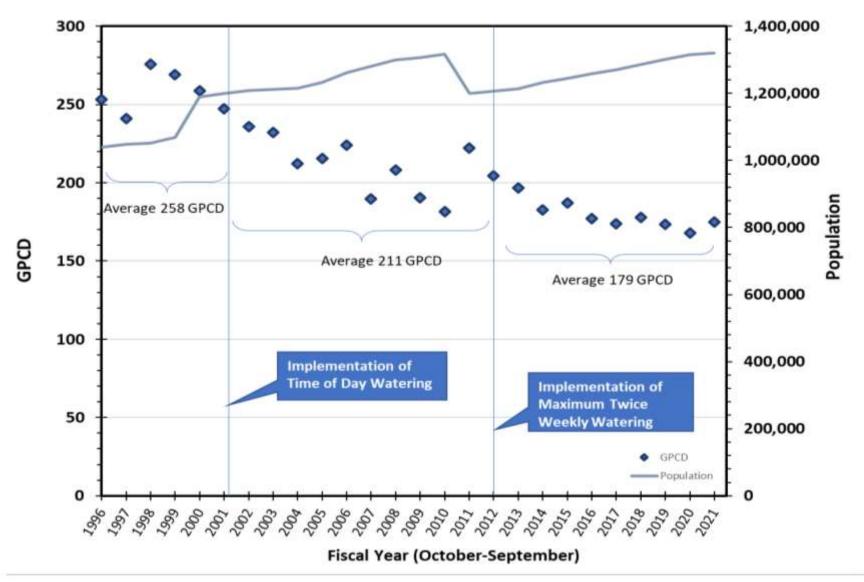
- Wyland Foundation National Mayor's Challenge
 - Won Challenge for Water Conservation in 2017, 2018, 2020, and 2021
 - Named most "Water Wise" large city in the United States
- 2009 entered into WaterSence® Partnership with Environmental Protection Agency (EPA)
- 2010 EPA WaterSence® Program selects "The Great Dallas Fix a Leak Roundup" to spotlight national Fix a Leak Week
- 2014 Texas AWWA Section Conservation Award, Large Utility
- 2014 North Texas Recycling Leadership Awards Finalist: Public Education and Outreach
- 2016 Texas Environmental Excellence Award Water Conservation
- 2017 Green Awards, Celebrating Efforts to Reduce, Reuse and Recycle Honorable Mention: Excellence in Environmental Education
- Texas Water Conservation Scorecard
 - 2016 Score 65
 - 2020 Score 75, Ranked in the top 7 utilities in the Large and Medium Size Retail Water Utilities





Impacts of Water Conservation Program







Questions



2019 Water Conservation Art Contest

T-Shirt Grand Prize Winner Arim Jun

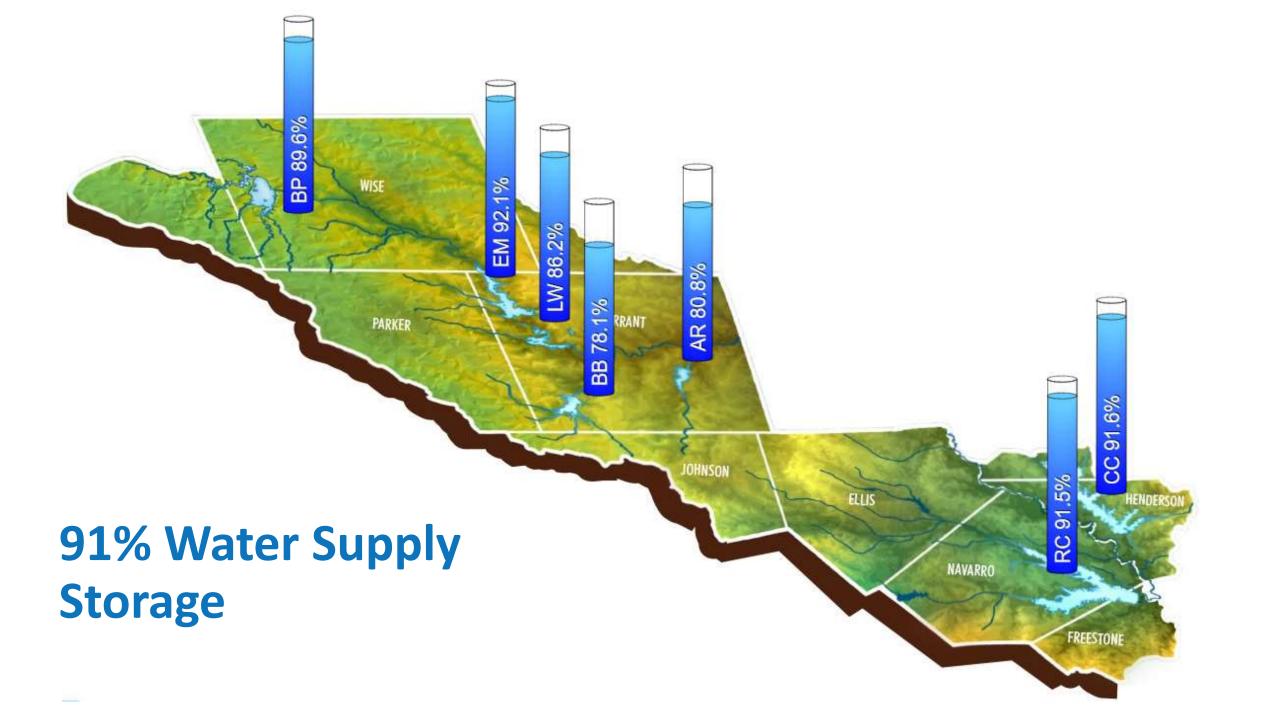




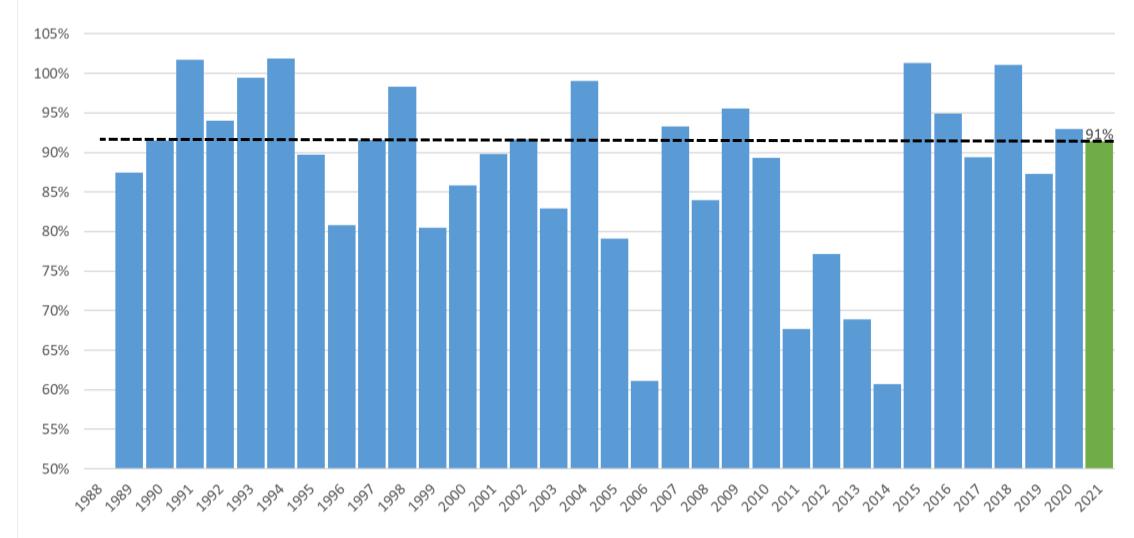
Water Resources Update

Rachel Ickert, Chief Water Resources Officer



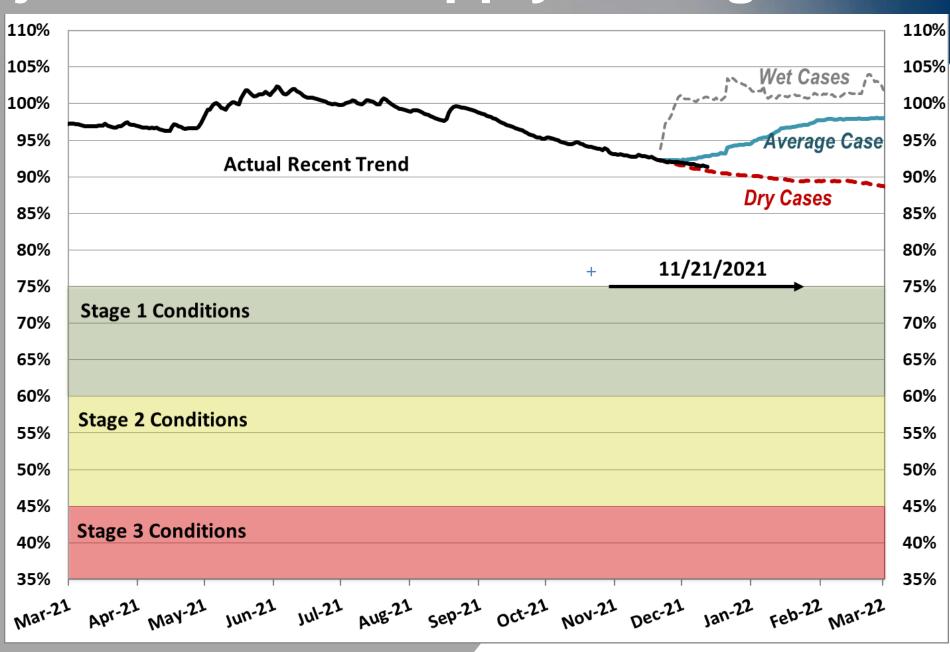


Percent of Total Storage on December 13

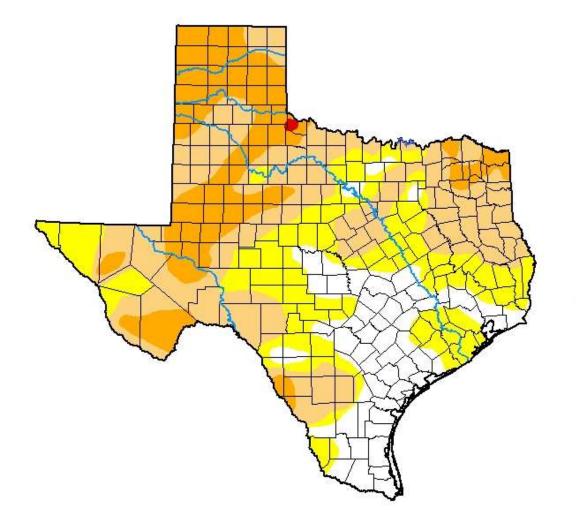




Projected Water Supply Storage



U.S. Drought Monitor Texas



December 7, 2021

(Released Thursday, Dec. 9, 2021) Valid 7 a.m. EST

Drought Conditions (Percent Area)

- S	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	18.80	81.20	55.01	20.05	0.14	0.00
Last Week 11-30-2021	28.64	71.36	49.01	17.09	0.00	0.00
3 Month's Ago 09-07-2021	89.25	10.75	0.48	0.00	0.00	0.00
Start of Calendar Year 12-29-2020	8, 80	91.20	81.11	50.33	30.09	13.03
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 12-08-2020	5.22	94.78	79.18	45.18	25.16	13.03

Intensity:

None D2 Severe Drought
D0 Abnormally Dry D3 Extreme Drought
D1 Moderate Drought
D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

David Simeral Western Regional Climate Center









droughtmonitor.unl.edu

Rainfall Forecast



LEGEND

0.01 - 0.1 inches

0.1 - 0.25 inches

0.25 - 0.5 inches

0.5 - 1 inches

1 - 1.5 inches

1.5 - 2 inches

2 - 3 inches

3 - 4 inches

4 - 5 inches

5 - 6 inches

6 - 8 inches

8 - 10 inches

10 - 15 inches

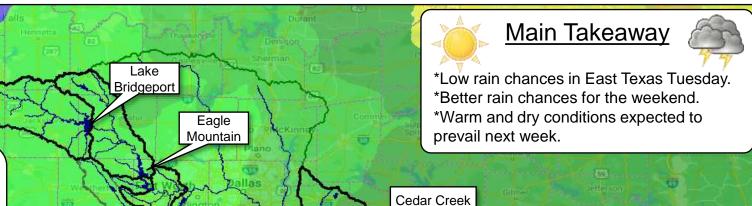
15 - 20 inches

20 - 30 inches

> 30 inches

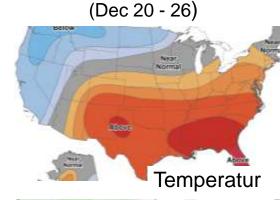
Precipitation forecast is obtained from NOAA's NWS and provided by the Weather Prediction Center (WPC). The data is processed and displayed using USACE Met-Vue software

15DEC2021 (WED) - 19DEC2021 (SUN) Duration: 5 Days



Richland-

Chambers



8 to 14 Day Outlook

Above normal temperatures and

below normal rainfall.

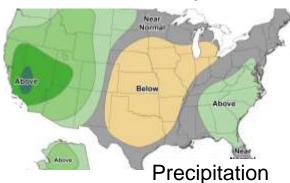
Note on QPF - QPFs depict the amount of liquid precipitation

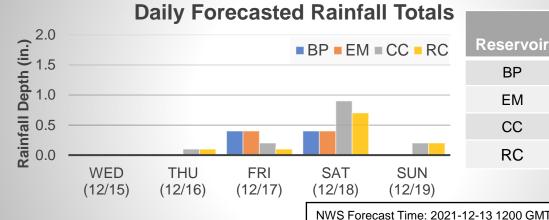
expected to fall during a specified time period in the future. Because precipitation can vary significantly over short distances, QPFs are reported as the expected "areal average"

on a 20-kilometer (12.4 mile) grid. Several factors contribute

to QPF estimates, including the current state of the atmosphere, modeled pressure systems, satellite trends, and

manual adjustments made by forecasters.





Reservoir	Forecast Total (in.)
BP	0.8
EM	0.8
CC	1.4
RC	1.1





Social Responsibility Update

Dan Buhman, General Manager





Executive Session







Consider Approval and Adoption of the Following Proposed Board Policies Effective January 1, 2022: Arbitrage Policy, Budget Policy, Capital Asset Policy, General Fund Reserve Policy, Investment Policy, Other Post-Employment Benefits Funding Policy, Public Information Policy, Records Management Policy

Lisa Cabrera, Chief Human Resources Officer



BOARD GOVERNANCE POLICIES

This is how the Board governs itself.

COMPLETED NOV. 1



BOARD-ADOPTED POLICIES

This is how the Board exercises its governance over operations of the District.

- Financial
- Public Information
- Records Management
- Human Resources
- Operations



ADMINISTRATIVE PROCEDURES

This is how Staff executes Board-adopted Policies.

- Presented to the Board
- Posted to the website



Discussion of the Following Proposed Board Policies: Employment Practices; Employee Standards of Conduct and Code of Ethics

Lisa Cabrera, Chief Human Resources Officer





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ADMINISTRATIVE PROCEDURES

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Consider Approval of Acceptance of Donation of Land Located in Block 8, North Fort Worth Addition to the City of Fort Worth, Tarrant County, Texas

Woody Frossard, Environmental Director





Consider Approval of Authorization to Acquire Land in the J.T. Hobbs Survey, Abstract No. 806, City of Fort Worth, Tarrant County, Texas

Steve Christian, Real Property Director







Future Agenda Items







Next Board Meeting January 18, 2022







Adjourn



