

Quarterly Presentation to El Paso City Council

John Balliew, PE President & CEO

March 13, 2023

Topics for this quarter's presentation

- Water system resiliency
- Customer resiliency
- Sustainability initiatives
- Working with you

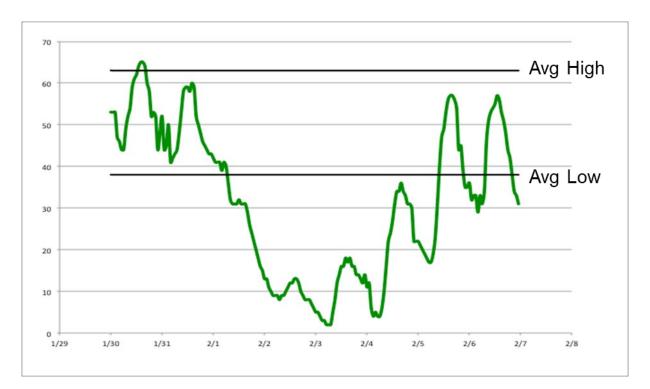


System Resiliency

Resiliency during emergencies

The 2011 Freeze was a wake-up call

- Controls and pumps froze and failed, causing depletion of reservoirs and resulting water shortages
- Mayor John Cook declared a water emergency
- Burst pipes mostly on private properties – resulted in 43,000 calls over six days, inundating customer service and 911 call center



2011 – Worst weather in 45 years

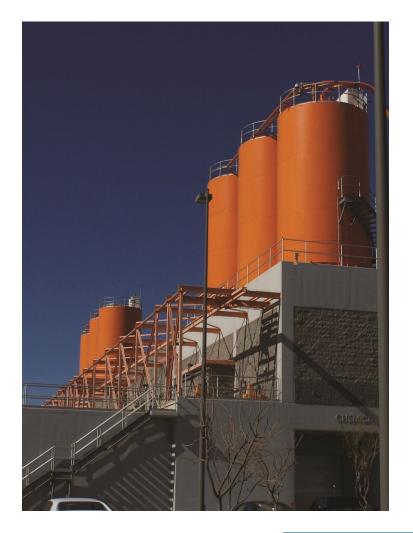
El Paso was protected in recent storms

Improvements made to weatherize the water and wastewater systems after 2011 included:

- \$35 million investment in back up power generation
- New reservoirs for added storage
- Physical protection of systems and hardware



Building resiliency into more systems



In 2021, the Texas Legislature passed Senate Bill 3 in response to Winter Storm Uri, and the Governor signed it into law.

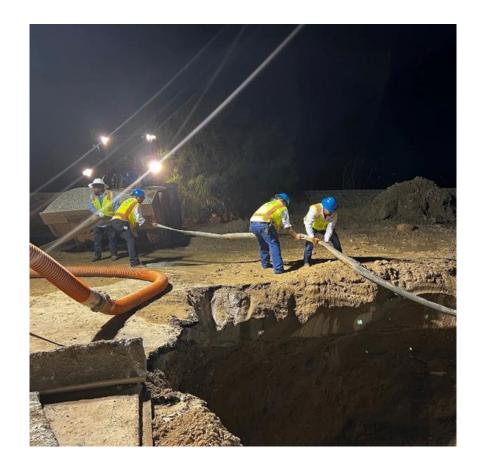
- The bill requires water utility systems to be able to operate in extreme weather and have sufficient backup power for as long as needed
- EPWater's FY 23/24 budget includes \$32.5 million for additional improvements to:
 - Storage tanks
 - Pump stations
 - Additional power generation
- Future fiscal years will see another \$68 million in improvements

EPWater has a large pipeline distribution system



- 5,200 miles maintained (water and wastewater)
- Equivalent to a trip from El Paso to Seattle to Chicago and back to El Paso
- Average age of installed pipes:
 - 45 years old for wastewater
 - 37 years old for water

El Paso's main breaks better than national average



- EPWater maintains 2,850 miles of water lines throughout our service area.
- On average, the system experiences eight breaks per 100 miles of pipe
 - The national average is about 25 breaks per 100 miles of pipe
- EPWater is proactive in replacing aging water lines



New tech for resilient systems



- EPWater started the leak detection program in 2001, long before other cities and utilities
 - Leak detection includes about 12,000 leak detection loggers for small diameter lines
 - CCTV inspections and electromagnetic robot inspection for larger lines
- EPWater proactively replaces pipes in areas where intel show breaks could occur in the future.
- We are upgrading to a newer condition assessment model to improve our capabilities to analyze our systems and predict potential line failures

EPWater contributes to new street paving yearly

- EPWater takes advantage of tunneling methods where possible to avoid impact to street pavement and disruption to traffic
- Many EPWater construction projects result in full street repaying from curb to curb
- In 2022, EPWater spent a total of \$10 million in street repaying





Neighborhood outreach -major construction project



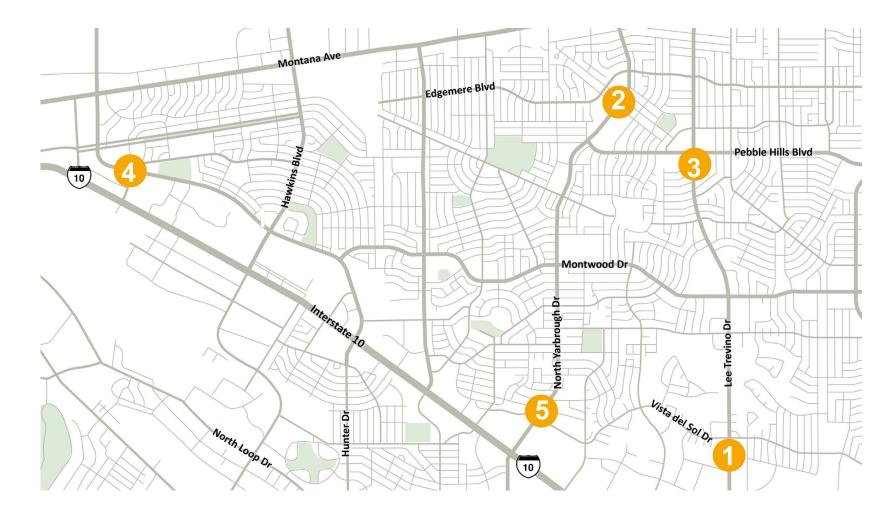
Pipeline Protection Project

- Proactively replacing water lines near high-pressure gas lines to prevent corrosion and avoid breaks
- Hosting community meetings near project sites to make residents aware of possible impacts
- Project will utilize tunneling method where possible to avoid impacts to traffic and street pavement

Water and gas line crossing locations

5 locations for line replacements:

- Lee Trevino Drive at Vista del Sol
- 2. Yarbrough Drive at Kinross
- 3. Lee Trevino Drive at Pebble Hills
- 4. Viscount Blvd at Airway
- 5. Yarbrough at Vista del Sol





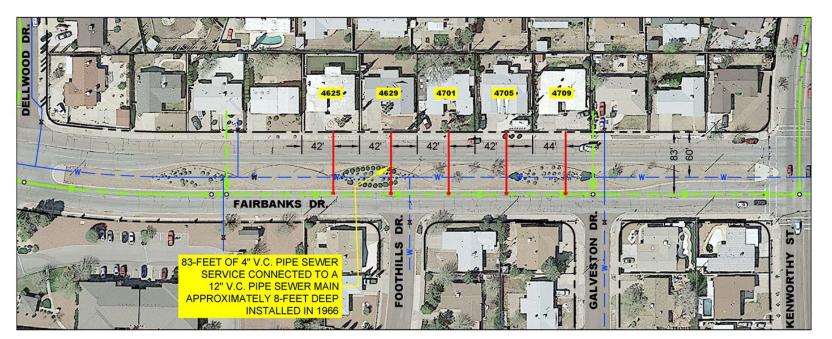
Customer Resiliency

Helping customers improve their own resiliency

PSB amended rules and regulations in 2022 to change the point of ownership of sewer lines from the main to the property line

- Previously owners were responsible for sewer service line beyond their property line
- Change will save customers from costly repairs in areas outside of their control

Fairbanks Street Sanitary Sewer Main & Services





New programs to benefit customers





The PSB recently approved adoption of two new programs to help our customers

- Service Line Warranty Program (opt-in): Covers leaks or breaks in customers' service lines, which is very expensive and can save customers thousands of dollars
- Leak Protection Program (opt-out): Excess water use adjustment of 100% up to \$1000 for enrolled customers who experience a leak on their property
 - Customers are automatically enrolled for \$0.98 a month (residential) and <u>may opt-out at any time</u> with a full refund for the first year.
 - Saves customers from burden of lost water cost when paying for costly repairs

Tackling challenges of leaks and water loss

- Leaks are expensive for our customers and to EPWater
- Leaks result in water loss, threatening conservation goals
- EPWater is working to reduce water loss at every point in our distribution system and helping our customers reduce water loss, too
- National figures show that an estimated 10% of customers experience a leak in any given year
- Utility receives no compensation from the program



Annual utility figures (based on 3-year avg):

- **\$1,642,827** in leak adjustment requests
- **3,891** customers requesting leak adjustments
- **\$422** average cost of leak adjustment per customer (out of pocket tends to range from 50-100% of that amount)



- EPWater is preparing to post an RFP to partner with one or more non-profit organizations that will administer a new program to help low-income customers with leak repairs.
 - Habitat for Humanity and Rebuilding Together have both expressed interest
- Non-profit partner will qualify customers and contract plumbers to perform the necessary repair work. EPWater will provide a set amount of funding for repair work.

Partnerships + federal funding helps customers



SERVING OUR COMMUNITY SINCE 1976

Year	Customers Assisted	Total Amounts
2020	2,566	\$ 682,356
2021	2,821	\$1,736,023
2022	5,688	\$1,608,469





Sustainability

Energy management initiatives



Collaboration with EPE's Large Commercial Solutions team on a major project at our Rogers plant saved 872 kilowatts and corresponding amount of CO2 that would be equivalent to removing 859 passenger cars from road. (2021)

Energy Master Plan is guiding energy efficiency improvements

- Installed power meters on all significant electric motors at wastewater plants to trend and benchmark each sub-process at plants. Planning to do the same at water plants.
- Pump testing pilot program (since pumps consume much of the electricity used by utility) to plan for upgrades of those underperforming

Derceto program offers AI energy management systems



Renewable energy initiatives



Feasibility study underway on viability, alternatives and cost-benefit of renewable energy sources to power plant operations

- Biogas Power Generation
 - Project uses biogas generated in treatment process to help power Haskell wastewater plant

Fred Hervey Solar Farm

 The northeast plant has emerged as an ideal location for photovoltaic power generation

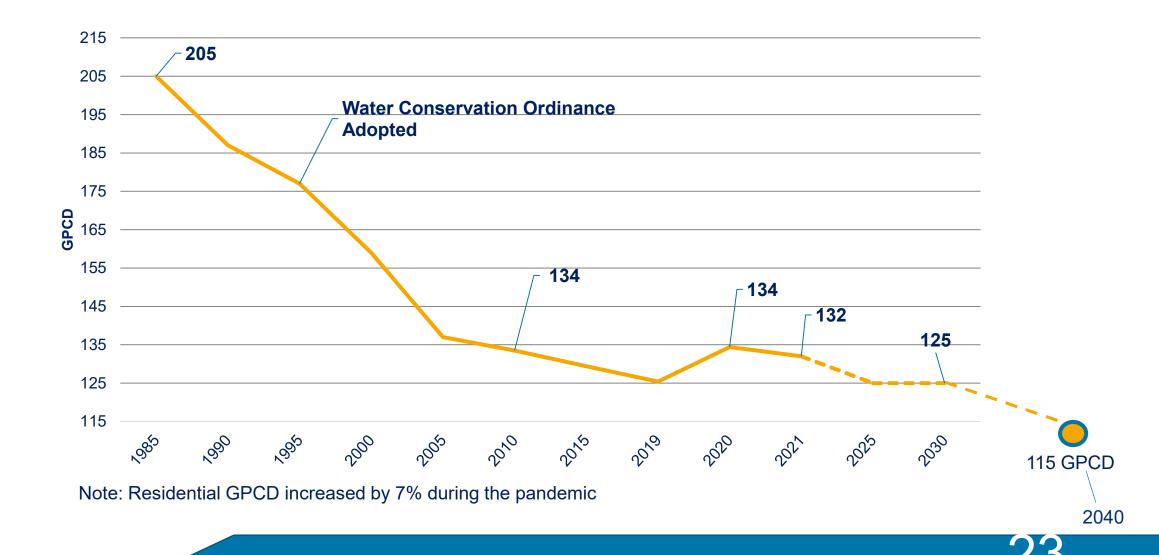
Climate change action



- EPWater has been monitoring drought and climate change for years and continually adapts plans to assure a sustainable water future
- EPWater's sustainability lead serves on Rep. Veronica Escobar's Climate Change Action Committee
 - Contributed water resiliency chapter of regional climate change action plan



Water conservation is key to water resiliency





Working With You



PSB Selection Committee Appointed by Council

- **PSB** Selection Committee consists of:
- Current PSB members
- Eight council appointees
 - Each council member appoints one member to the committee

Committee convenes to :

- Review applications from candidates
- Rank candidates
- Select top three candidates for council consideration
- Select one candidate to appoint to PSB



PSB Selection Committee Members

Dist. 1 – Richard TeschnerDist. 5 – Juan UribeDist. 2 – Edward EscuderoDist. 6 – Christian BotelloDist. 3 – Susie ByrdDist. 7 – Richard MartinezDist. 4 – Nicholas CostanzoDist. 8 – Angie Rosales



Land Sales and Bond Approvals

- City council considers and approves utility land sales and bond sales
- Land sales involve parcels deemed inexpedient to the systems
 - Proceeds used to help offset future rate increases
 - Percentage of proceeds paid to City by ordinance
- Bond sales are necessary to fund critical infrastructure projects



EPWater provided the land for Haddox Family Park in Central El Paso



Increasing avenues of communication



 Water 101 briefings are provided to new council members to provide an overview of the utility and its operations

Updates on key projects

 Regular communication is provided to council members on new initiatives and construction projects within given districts

EPWater Open House and Tours

 A new initiative to offer Council and constituent access to EPWater staff and facilities upon request



Thank You

