



COST OF SERVICE AND RATE DESIGN STUDY PUBLIC FORUM



**ELDORADO AREA WATER & SANITATION DISTRICT
January 31, 2024 – RATE STUDY PUBLIC FORUM**



- I. Historical Timeline**
- II. Rate Study Committee**
- III. Need for Rate Adjustment**
- IV. Success in Pursuit of Grant Funds to offset costs**
- V. Rate Study Consultant**
- VI. Cost of Service and Rate Design Study (Nelisa Heddin)**
- VII. Next Steps**
- VIII. Questions and Audience Input**



RATE STUDY FORUM | I. HISTORICAL TIMELINE

- 1973** Eldorado developer, AMREP forms El Dorado Utilities (EDU)
- 1997** EAWSD was formed
- 2002** Voters approve bond issue to purchase utility from EDU
- 2004** EAWSD files condemnation suit; jury valuation: \$11+ Million
- 2005** Purchase completed; EAWSD management begins *(original rates set by PRC)*
- 2018** Initiated Rate Study to establish current rates
- 2019** December – Current 2020 - 2024 rate schedule approved
- 2022** November – New Rate Study authorized, work begins
- 2023** October 18th – Presentation to Board of Preliminary Results
- 2024** January 31st – Today's informal Public Forum
- 2024** March 27th – Public Hearing to present Rate Design Study



RATE STUDY FORUM | II. RATE STUDY COMMITTEE MEMBERSHIP

- **Elizabeth Roghair**, Chair; Board Member, Treasurer*
- **David Burling**, Board Member, Finance Committee Chair*
- **Steve King**, General Manager
- **Phil Speicher**, Past Board Director/Treasurer, Finance Committee Member*
- **Joe Loewy**, Capital Planning and Advisory Committee Member*
- **Leslie Bischoff**, Finance Committee Member*
- **Jessa Huybrechts**, CPA, EAWSD Controller

* *EAWSD Customer and Local Resident*



CURRENT 2020 – 2024 RATE SCHEDULE FEATURES

- Revenues cover original purchase bond issues
Final payment June 2025
- Revenues to cover current capital projects debt obligations
Insufficient to meet projected needs
- Covers \$600,000 in annual system rehab and repairs
No provision for future cost increases
- Covers current Operating and Administrative costs
No provision for future cost increases
- **Insufficient to cover in Santa Fe County Supplemental Water Deliveries**



- a. Rising Operating and Maintenance costs due to inflation.**
- b. Aging water facility infrastructure much of which is over 45 years old.**
 - ✓ Rehab and Repair of existing facilities to extend useful life.**
 - ✓ Replacement of existing facilities at the end of their useful life.**
- c. Payment for a new source of supplemental water supply from Santa Fe County essential to addressing declining groundwater levels.**



a. RISING OPERATING AND MAINTENANCE COSTS

- **CPI 20 Cities average has increased an average of 5% a year over the past three years.**
- **Recent trends and forecasts project lower rates of inflation in the coming years.**



b. AGING WATER FACILITY INFRASTRUCTURE

6 Water Storage Tanks — AGES: 21 to 40 years

TYPICAL USEFUL LIFE: 50 to 60 years

Requires repainting and new corrosion protection every 15 to 20 years

— \$400,000 to \$500,000

5 Booster Pump Stations — AGES: 6 to 40 years

TYPICAL USEFUL LIFE: 50 to 60 years

Requires mechanical and electrical rehab every 20 to 25 years

— \$100,000 to \$200,000



b. AGING WATER FACILITY INFRASTRUCTURE - *CONTINUED*

11 Active Wells — AGES: 6 to 40 years

TYPICAL USEFUL LIFE: 45 to 60 years

Requires Inspection, cleaning and mechanical rehab every 5 to 6 years

— \$50,000 to \$75,000

✓ **39 Pressure Reducing Valves** — AGES: 4 to 40+ years

TYPICAL USEFUL LIFE : 30 to 40 years

Requires Rehab every 5 years — \$5,000 to 15,000

Replacement cost — \$30,000 to \$60,000

✓ **130 Miles of Pipeline** — AGE: 2 to 50 years

EXPECTED USEFUL LIFE: 50 to 70 years

Includes 106 miles of substandard PVC pipe 30 to 40+ years old (83%)

Replacement costs including new service connections — \$500,000 to \$1,000,000 per mile



c. DECLINING WATER LEVELS

Implementation of Santa Fe County Water Delivery project provides a critically needed supplemental source of water supply as required to address declining groundwater levels.

- Initial water deliveries of 100 acre feet/year (afy) to ramp up to 200 afy (approx. 40% of total demand) in four years. Current wholesale water delivery rate of \$7.46 per thousand gallons or \$243,000 per 100 af.
- Payment of in lieu of surface water rights based at \$19,431 per acre foot (af) for 200 afy discounted by \$1.5M due to shared project cost savings. Annual payments of \$238,620 over ten years.



SUCCESS IN PURSUIT OF GRANTS AND LOAN FORGIVENESS TO OFFSET HIGH COSTS OF CAPITAL PROJECTS (2020 TO 2023)

• Drinking Water Loan Forgiveness	\$ 985,000
• Legislative Grants	\$ 1,950,000
• Water Trust Board Grant/Loans (grant portion)	\$ 1,750,000
Total	<hr/> \$ 4,685,000



- **Industry expert in financial planning and management for municipal utilities.**
- **Specialist in cost of service and rate design studies.**
- **20 years experience providing consulting services to utilities of all sizes throughout the Southwest.**
- **Masters of Business Administration from NMSU with a specialty in finance.**
- **Past Chair of the Texas American Water Works Association Rates and Charges Subcommittee.**
- **Consultant for 2015 and 2019 EAWSD Rate Studies.**

Eldorado Area Water & Sanitation District

Cost of Service and Rate Design Study

January 31, 2024



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Presentation Overview

- ❖ Economic Reality of Water
- ❖ Driving Forces for Change in Rates
- ❖ Project Approach
- ❖ Findings
- ❖ Recommendations

“When the well is dry, we learn the worth of water.”

- Ben Franklin -



Economic Reality of Water



- Water has an inherent value to fund infrastructure necessary for treatment and distribution



- Water is critical to a variety of businesses, and as a result, the economy



- Water is a fundamental building block for communities



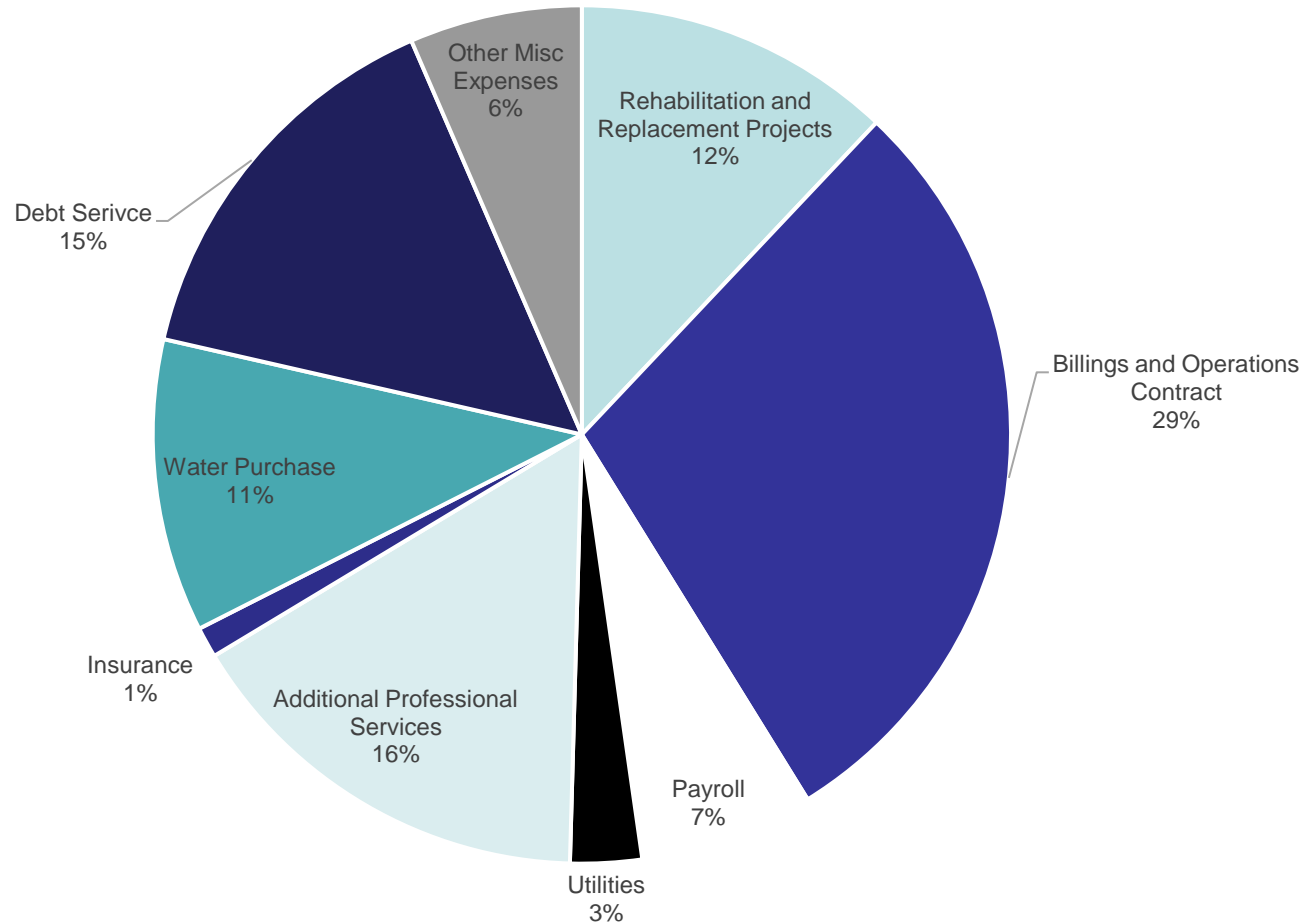
- Water is a commodity which we cannot live without and is a limited and scarce resource in the Southwest

Driving Forces

- Rising O&M costs due to inflation
- Aging water facility infrastructure (40 plus year old system) requiring extensive repair and replacement
- New water supply from the County essential to address declining groundwater levels
- Revenues required to meet capital needs
 - Over \$13M in capital needs in next 5 years
 - District requires revenues sufficient to fund these projects



Driving Forces Expense Summary



2025 Total Expenses = \$5,131,183



Revenues Rates are Set to Recovery

- Expenses – Off-sets = Revenue Requirements
- Based Upon FY2024 Budget, with Adjustments
- Includes Annual Rehabilitation and Replacement Funding
- Includes Adjustments to Maintain a Proper Level of Reserves



Revenue Requirements

- Includes CIP Funding:
 - \$8.8M in CIP Projects, includes replacement of only 6% (\$6M) of aging water system
- Does **not** Include:
 - Profit
 - Funding for replacement of remaining 94% of aging water system
 - Additional Items

	2025	2026	2027	2028	2029
Revenue Requirements	\$ 3,078,103	\$ 3,375,766	\$ 3,688,576	\$ 3,894,252	\$ 4,100,479



Recommended Rate and Fee Design

	2024 Adopted	2025	2026	2027	2028	2029
Monthly Minimum Charge	\$ 29.91	\$ 31.41	\$ 32.98	\$ 34.29	\$ 35.32	\$ 36.38
Volumetric Charge (per thousand gallons)						
1-3,000 Gallons	\$ 12.82	\$ 13.27	\$ 13.73	\$ 14.21	\$ 14.71	\$ 15.32
3,001-6,000 Gallons	\$ 16.03	\$ 16.59	\$ 17.16	\$ 17.76	\$ 18.38	\$ 19.15
6,001-10,000 Gallons	\$ 21.82	\$ 23.22	\$ 24.03	\$ 24.87	\$ 25.74	\$ 26.81
10,001-20,000 Gallons	\$ 37.46	\$ 40.64	\$ 42.05	\$ 43.52	\$ 45.04	\$ 46.92
20,001-30,000 Gallons	\$ 64.53	\$ 71.12	\$ 73.58	\$ 76.16	\$ 78.82	\$ 82.11
Over 30,001 Gallons	\$ 96.81	\$ 106.68	\$ 110.38	\$ 114.24	\$ 118.23	\$ 123.16
Tax Levy Assumption*	\$ 4.36	\$ 4.36	\$ 4.36	\$ 4.36	\$ 4.36	\$ 4.36
Out of District Charge	\$ 60.56	\$ 75.78	\$ 78.23	\$ 80.46	\$ 82.41	\$ 84.41
Average annual increase for customer using 3,700 gallons		4.1%	4.0%	3.7%	3.3%	3.7%



Effect on Bill at Various Use Levels

Bill Analysis	2024	2025	2026	2027	2028	2029
3,000 Gallons	\$ 68.37	\$ 71.22	\$ 74.17	\$ 76.92	\$ 79.45	\$ 82.34
3,700 Gallons (Average Use)	\$ 79.59	\$ 82.83	\$ 86.18	\$ 89.36	\$ 92.31	\$ 95.75
5,000 Gallons	\$ 100.43	\$ 104.39	\$ 108.49	\$ 112.45	\$ 116.21	\$ 120.64
7,000 Gallons	\$ 138.28	\$ 144.20	\$ 149.68	\$ 155.08	\$ 160.34	\$ 166.60
10,000 Gallons	\$ 203.74	\$ 213.87	\$ 221.76	\$ 229.68	\$ 237.55	\$ 247.03
20,000 Gallons	\$ 578.34	\$ 620.26	\$ 642.24	\$ 664.86	\$ 687.96	\$ 716.21
30,000 Gallons	\$ 1,223.64	\$ 1,331.45	\$ 1,378.09	\$ 1,426.43	\$ 1,476.18	\$ 1,537.26
50,000 Gallons	\$ 3,159.84	\$ 3,465.02	\$ 3,585.61	\$ 3,711.13	\$ 3,840.85	\$ 4,000.43

**Average use is approximately 3,700 gallons per month*



Recommendations

- Proceed with Adoption and Implementation of Recommended Rates
- Monitor Operating Results Monthly and Annually
- Review Need for Change in Mill Levy Annually
- Continually Evaluate CIP Needs
- Implement Future Increases to Fund CIP Requirements
- Update Analysis Every 3-5 Years (Minimum)





RATE STUDY FORUM | VII. NEXT STEPS

- ❑ Rate Study Committee will consider input from **January 31st PUBLIC FORUM**.
- ❑ Board will consider RATE STUDY FINAL REPORT at its **Wednesday February 21, 2024, Board Meeting**.
- ❑ The Board's rate proposal will be presented at a **PUBLIC HEARING** presided over by a Hearing Officer certified by the Public Regulation Commission, (PRC) scheduled for **Wednesday, March 27th @ 5:30 pm** at the District's Administration Office-Public Conference Room, 2 North Chamisa Drive.
- ❑ The Hearing Officer will adopt, reject or modify the Board's proposal within 30 days following the PUBLIC HEARING.
- ❑ Any District qualified elector may appeal the Hearing Officer's decision within 20 days after it is published.
- ❑ If there is no appeal, the Hearing Officer's decision becomes final.
- ❑ If there is an appeal, the Board must take action to approve, reject or amend the Hearing Officer's decision.
- ❑ The Board's decision can be appealed to District Court.

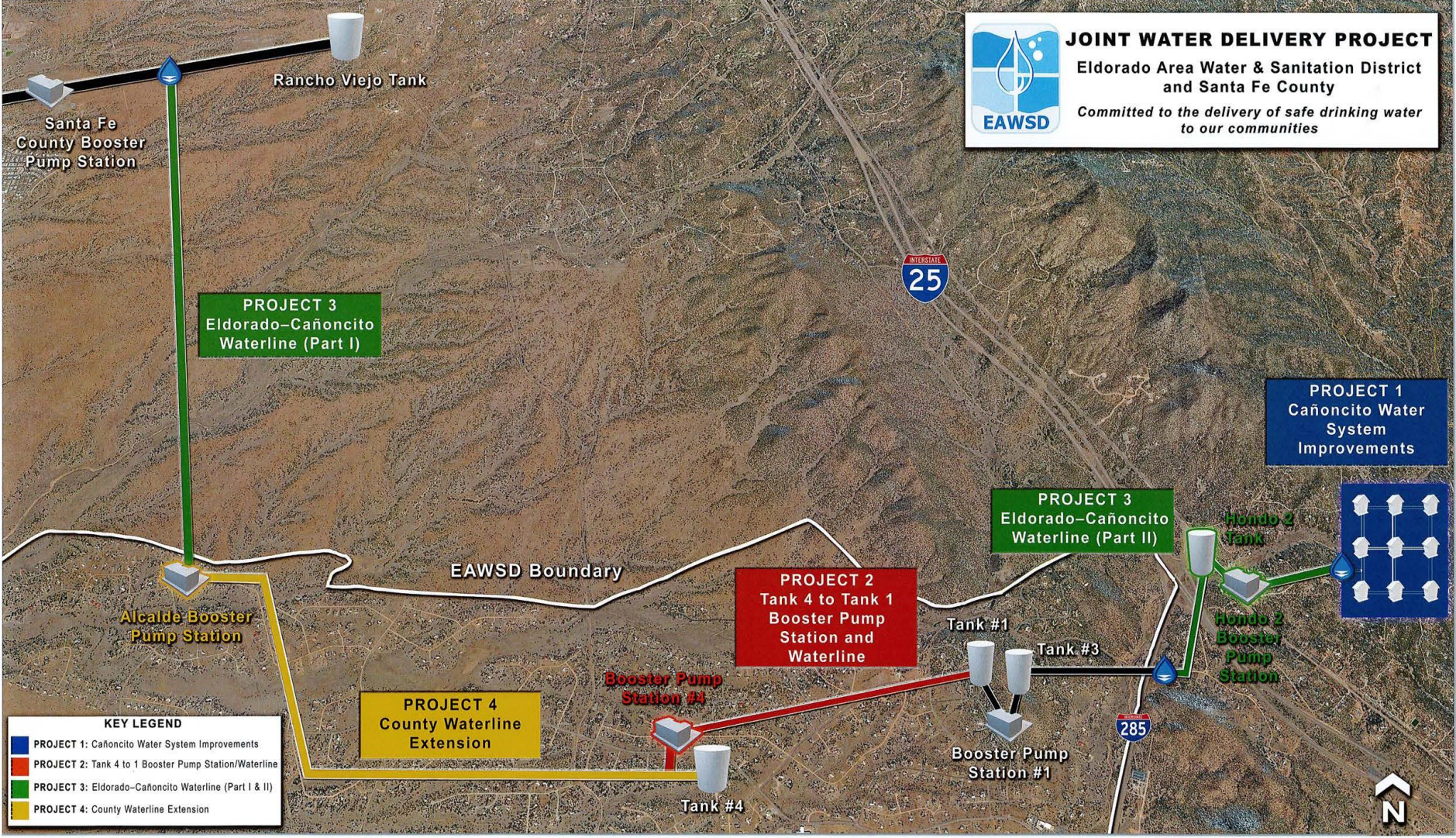


RATE STUDY FORUM | VIII. QUESTIONS & AUDIENCE INPUT



EMAIL ADDITIONAL QUESTIONS, COMMENTS OR OBSERVATIONS TO:

- info@EAWSD.org
(Reference the 1/31/2024 RATE STUDY PUBLIC FORUM in the subject line)





ELDORADO AREA WATER & SANITATION DISTRICT | Capital Projects & Infrastructure Improvements 2018 - 2023

Benefits of these much-needed investments in capital improvements to the District's aging infrastructure include reduced loss of our precious and limited water supply, reduced service interruptions, and an overall increase in the level of service that we can provide to our customers. In total the District has invested just over \$11.6M in upgrades and improvements to our water infrastructure, \$3.6M or 31% of which was paid for by grants or loan forgiveness. Thanks to our State Representatives and funding agencies who have fully supported these projects. Many thanks to each of our customers who provided the revenue required to pay for and finance these critically important projects.

2018

2019

2020

2021

2022

2023

Well 2A/2B Dual Production Facility — 2016 ~ 2018

Completed the Well 2A/2B Dual Production Project, which allows simultaneous pumping from both a new well and an older well at the Well 2 site, increasing potential water production from the site by 70% to approximately 120 gallons per minute.

TOTAL PROJECT COST: \$300,000
SOURCES OF FUNDING: \$115,000 Legislative Grant, \$185,000 DWSRLF Loan

Tank 4 Recoating and Cathodic Protection System — 2019 ~ 2020

As recommended in the findings of a 2017 inspection performed on each of the District's six above grade steel water storage tanks, the interior of Tank 4 was recoated, and a new cathodic protection system was installed.

TOTAL PROJECT COST: \$392,000
SOURCE OF FUNDING: self-funded from revenues

Tank 3 Road Improvements — 2021 ~ 2023

Tank 3 is the District's highest elevation tank located east of the Sierra del Sol and Avenida del Monte Vista intersection. The tank was constructed in 1994. Access to the tank is provided by a steep and narrow road base course road that has significant gully and erosion problems caused by runoff from upslope areas or the road itself. The condition of the road made access to Tank 3 for regular inspections and maintenance difficult and potentially hazardous. Improvements to the road completed in 2023 have dramatically improved access to tank.

TOTAL PROJECT COST: \$405,000
SOURCE OF FUNDING: Self-funded from Revenues

Cathodic Protection Systems — 2017 ~ 2018

As recommended in the findings of a 2017 inspection performed on each of the District's six above grade steel water storage tanks, new cathodic protection systems were installed in District Tanks 1 and 2 as required to extend the useful life of these important facilities.

TOTAL PROJECT COST: \$277,000
SOURCE OF FUNDING: Self-funded from Revenues

Tank 4 to Tank 1 Booster Pump Station (BPS) & Transmission Line — 2019 ~ 2021

Completed construction of the Tank 4 to Tank 1 Booster Pump Station (BPS) and Transmission line (TL) project. This is one of two projects to improve the ability to move water throughout the District's system required as part of the Santa Fe County/Eldorado joint water delivery project. The project includes a new two-pump booster pump station at the District's Tank 4 site and approximately 8,000 feet of 8-inch pipeline from Tank 4 along Avenida Vista Grande and Avenida Del Monte Alto.

TOTAL PROJECT COST: \$1,100,000
SOURCES OF FUNDING: \$315,000 legislative grant, \$500,000 WTB grant/loan (\$300,000 grant) and \$300,000 DWSRLF loan

Phase 2 of the Pressure Zone Optimization Project (PZO-2) — 2017 ~ 2019

PZO-2 is the second of a three-phase project to design and construct improvements to the District's water system to reduce system high pressure areas. Several of the District's existing lines experience pressure above 100 psi which increases the potential for line breaks and reduces the service life of pipelines, valves, and other fixtures.

TOTAL PROJECT COST: \$460,000
SOURCE OF FUNDING: DWSRLF loan that included 25% (\$115,000) loan forgiveness

Tank 1A Recoating — 2020

As recommended in the findings of a 2017 inspection performed on each of the District's six above grade steel water storage tanks, the interior of Tank 1A was recoated.

TOTAL PROJECT COST: \$262,000
SOURCE OF FUNDING: Self-funded from revenues

Caballos Trail Pipeline Replacement Project — 2018 ~ 2019

Due to the high frequency of line breaks and repairs of this approximately 1,400 feet of undersized distribution pipeline, the Caballos Trail project was identified in the District's November 2017 Utility Master Plan Update as our highest priority pipeline replacement project.

TOTAL PROJECT COST: \$158,000
SOURCE OF FUNDING: DWSRLF loan that included 25% (\$40,000) loan forgiveness

Phase 3 of the Pressure Zone Optimization (PZO-3) Project — 2019 ~ 2022

PZO-3 was the third and final phase of a project to design and construct improvements to the District's water system to reduce system high pressure areas. Several of the District's existing lines experience pressure above 100 psi which increases the potential for line breaks and reduces the service life of pipelines, valves, and other fixtures.

TOTAL PROJECT COST: \$1,050,000
SOURCES OF FUNDING: \$800,000 DWSRLF loan that included 25% loan forgiveness (\$115,000) and \$250,000, self-funded from revenues

Phase 1 Improvements to the District's Admin. Office — 2018 ~ 2019

As part of a settlement agreement, the District purchased the property in June 2018. The initial phase of much-needed improvements to the building included a new roof, stucco, and HVAC system.

TOTAL COST FOR PURCHASE AND RENOVATION OF BUILDING: \$585,000
SOURCE OF FUNDING: PPRF loan

Verano & Conchas Loop Pipeline Replacements — 2020 ~ 2023

The Verano — Conchas Loop Pipeline Replacement project included replacement of approximately 6,000 feet of old and failing waterlines using trenchless Horizontal Directional Drilling (HDD) technology, and more than 200 old and failing service lines that serve each of the residents in this area. Due to the high number of service lateral and line breaks in the area, the project was identified as the District's second highest priority pipeline replacement project in the District's November 2017 Water Utility Master Plan update. In the years to come, the project will significantly reduce the number of service outages and water loss, thereby significantly improving the reliability of service to the area.

TOTAL PROJECT COST: \$1,700,000
SOURCES OF FUNDING: \$500,000 legislative grant, \$500,000 Water Trust Board grant/loan (\$300,000 grant), a \$500,000 DWSRLF loan, and an additional \$200,000 in DWSRLF loan that includes 25% loan forgiveness (\$50,000)

Phase 2 Improvements to the District's Administrative Office — 2019 ~ 2020

Phase 2 included interior modifications to the building to create a new customer service and billing center to greatly improve the functionality of the space and our ability to serve customers.

TOTAL PROJECT COST: \$45,000
SOURCE OF FUNDING: Self-funded from Revenues

Santa Fe County Pipeline Extension — 2019 ~ 2023

Completed the Santa Fe County Pipeline Extension and Booster Pump Station (BPS) project which is the second of two District projects required as part of the SFC Joint Water Delivery Project. Elements of the project include a new two-pump BPS, and chlorination facilities at the District's Well 2A/2B site, and approximately 15,900 feet of new 8-inch transmission pipeline from the Well 2A/2B site east on Alcalde Road south on Avenida De Compadres and east on Avenida Vista Grande to Tank 4. An air stripping system to remove disinfection byproducts was also installed in Tank 4.

TOTAL PROJECT COST: \$3,400,000
SOURCES OF FUNDING: Two legislative grants totaling \$812,000, a \$1,000,000 WTB grant/loan (\$900,000 grant) and a \$1,588,000 DWSRLF that includes 25% loan forgiveness (\$397,000)

Field Workshop & Garage — 2018 ~ 2023

The District's new Field Workshop is a much-needed 3,300 square foot multipurpose facility that will provide a building for operations/maintenance activities and for storage of equipment and materials. It is located on the Tank 2 site at the intersection of Highway 285 and Avenida Eldorado. The approximately 2.9 acre easement was granted to the District by the Eldorado Community Improvement Association (ECIA). Progress to date on the \$1.1M project includes: A) Installation of stormwater protection facilities; B) Relocation of existing trees and additional planting of new trees; C) Extensive site preparation including import and placement of significant quantities of import soil as required by the structural engineer; D) Installation of four 1,500 gallon above ground cisterns for water capture. The project is expected to be completed on or before the end of December 2023.

TOTAL PROJECT COST: \$1,500,000
SOURCES OF FUNDING: \$500,000 legislative grant, \$1,000,000 State Public Project Revolving Fund (PPRF) loan



TANK 3 ROAD IMPROVEMENTS



TANK 4 TO 1 BOOSTER PUMP STATION & TRANSMISSION LINE



ALCALDE BPS @ WELL 2A-2B SITE



AIR STRIPPING SYSTEM @ TANK 4



DISTRICT'S ADMINISTRATIVE OFFICE IMPROVEMENTS



FIELD WORKSHOP & GARAGE

