

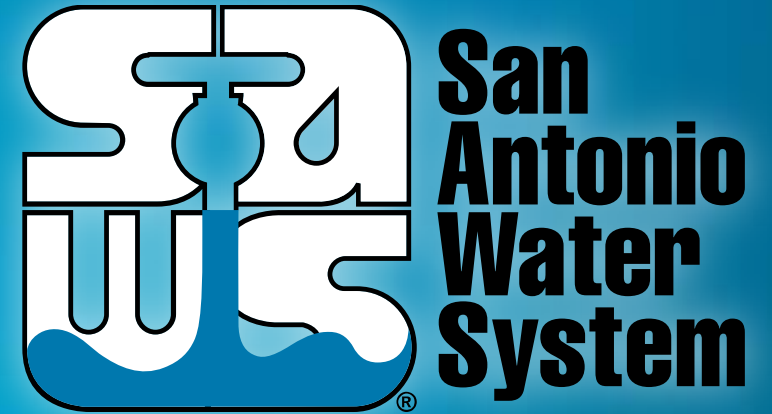
Vista Ridge Regional Water Supply Project

Robert R. Puente

President/CEO

City Council Briefing

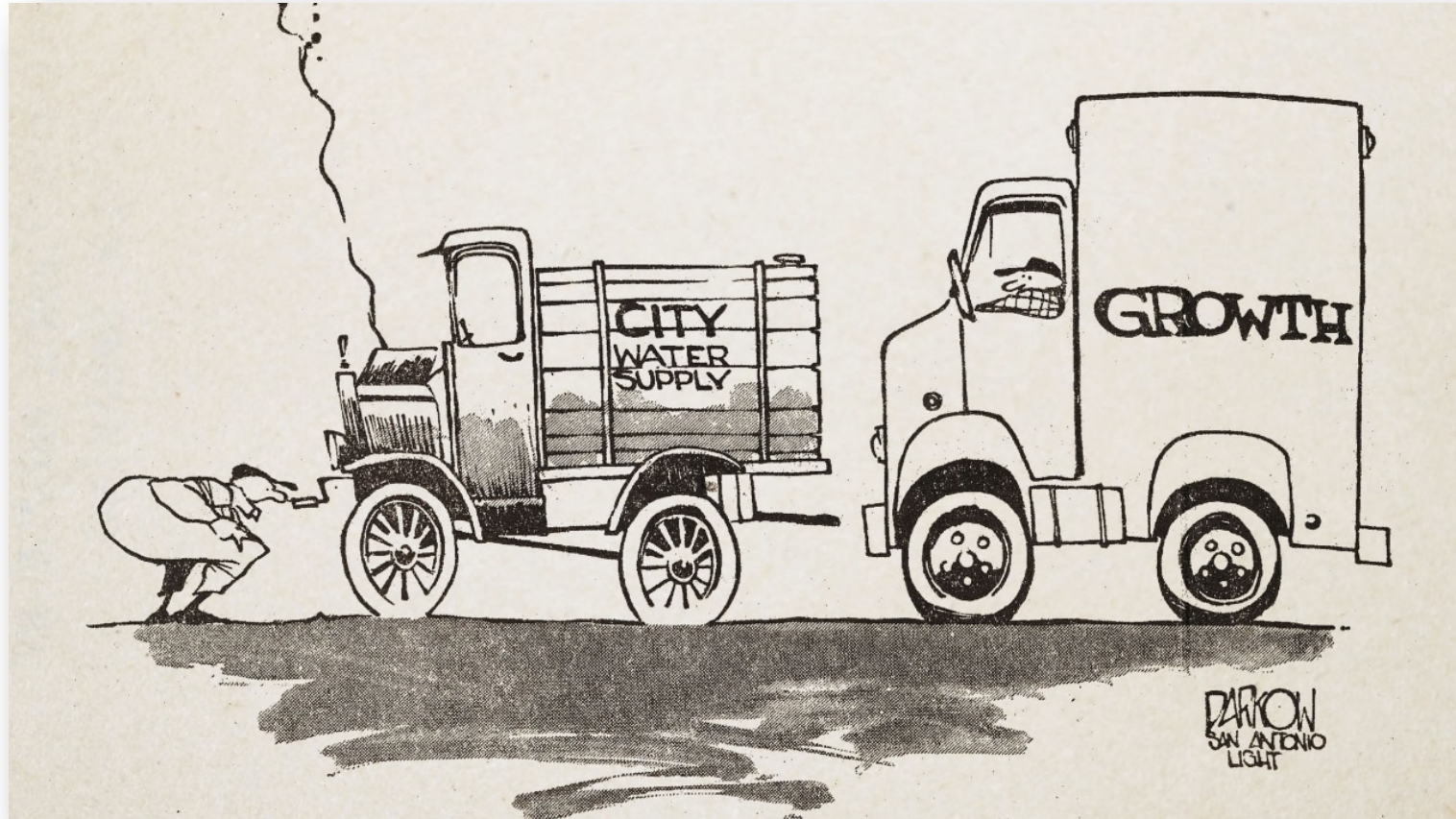
February 8, 2018



MAKING SAN ANTONIO
WATERFUL



Endless Editorial Jokes and Lack of Confidence in Water Future



San Antonio Light, July 14, 1984

Vista Ridge Regional Water Supply Project

Federal and State Mandates

San Antonio Express-News

Serving South Texas since 1865

SATURDAY, August 24, 1996

★ Final Edition 50c

Bunton orders pumping limits

City leaders react angrily, plan to file appeal Monday

By KEN DELANIAN
EXPRESS-NEWS STAFF WRITER

Flanked by local leaders at a dramatic City Hall news conference, Mayor Bill Thornton vowed Friday to appeal a federal judge's order that he decried as favoring animals over people.

"Today I think it's time we draw a line in the sand to fight for consideration of humans and human rights," Thornton said. "Quite frankly, the court is jacking us around."

Thornton's sentiments were echoed by a variety of city officials who protested an order by Senior U.S. District Judge Lucius D. Bunton III that may require San Antonio

to stop watering their lawns in an effort to save five federally protected species at Comal and San Marcos springs.

After years of warnings, threats and voluntary plans, Bunton finally imposed a legally binding court order in response to allegations from the non-profit Sierra Club that San Antonio's Edwards Aquifer water use is violating the Endangered Species Act.

Governments at all levels have failed to properly preserve the Edwards, Bunton wrote, and that failure is killing species in violation

■ See THORNTON/8A



"Today I think it's time we draw a line in the sand to fight for consideration of humans and human rights. Quite frankly, the court is jacking us around."

— Mayor Bill Thornton

"The Edwards Aquifer region has finally reached the point where the aquifer is unable to provide for the needs of all those who depend upon it during dry years."

— Senior U.S. District Judge Lucius D. Bunton III

"



SAWS chief foresees ban on lawn watering by Oct. 1

By JERRY NEEDHAM
EXPRESS-NEWS STAFF WRITER

A federal judge ordered restrictions on pumping from the Edwards Aquifer by the city of San Antonio and other defendants Friday, in an endangered species lawsuit filed by the Sierra Club.

Mayor Bill Thornton and City Council members vowed an appeal.

The order by Senior U.S. District Judge Lucius D. Bunton III does not take effect until Oct. 1. Depending on how much rain falls by then, the San Antonio Water System and other large users of aquifer water could be limited to no



The water debate is about a lot more than blind critters.

Carlos Guerra/1B

more than 12 times their winter average pumpage.

Joe Aceves, SAWS president, said that to meet that limit, the city probably would have to ban any outdoor water use by residen

■ See FEDERAL/8A

Response to Legislative Pumping Limits



- Best in the nation Water Conservation Programs
- Largest Recycled Water System in the nation
- Developed Aquifer Storage & Recovery System – now largest groundwater based ASR in the U.S.

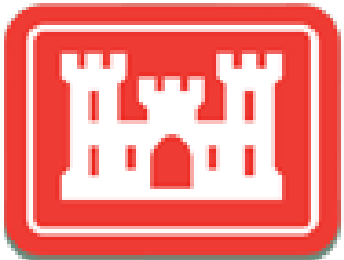
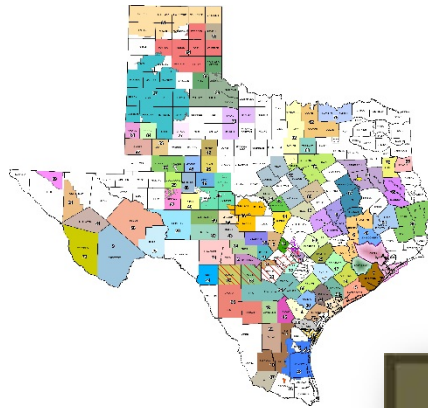
Vista Ridge Regional Water Supply Project

Planned Projects Come Up Dry

Project Name	Year Planned	Planned Yield (AF)	Dollars Expended	Yield
Applewhite Reservoir I	1980s	48,000	\$40 M	0
Applewhite Reservoir II	1990s	60,000		0
Simsboro Groundwater	1998	55,000	\$4 M	0
Lower Guadalupe Project	2001	94,500	\$6 M	0
LCRA – SAWWS Water Project	2002	150,000	\$42 M	0

Vista Ridge Regional Water Supply Project

Political, Legal and Regulatory



Successful Diversification

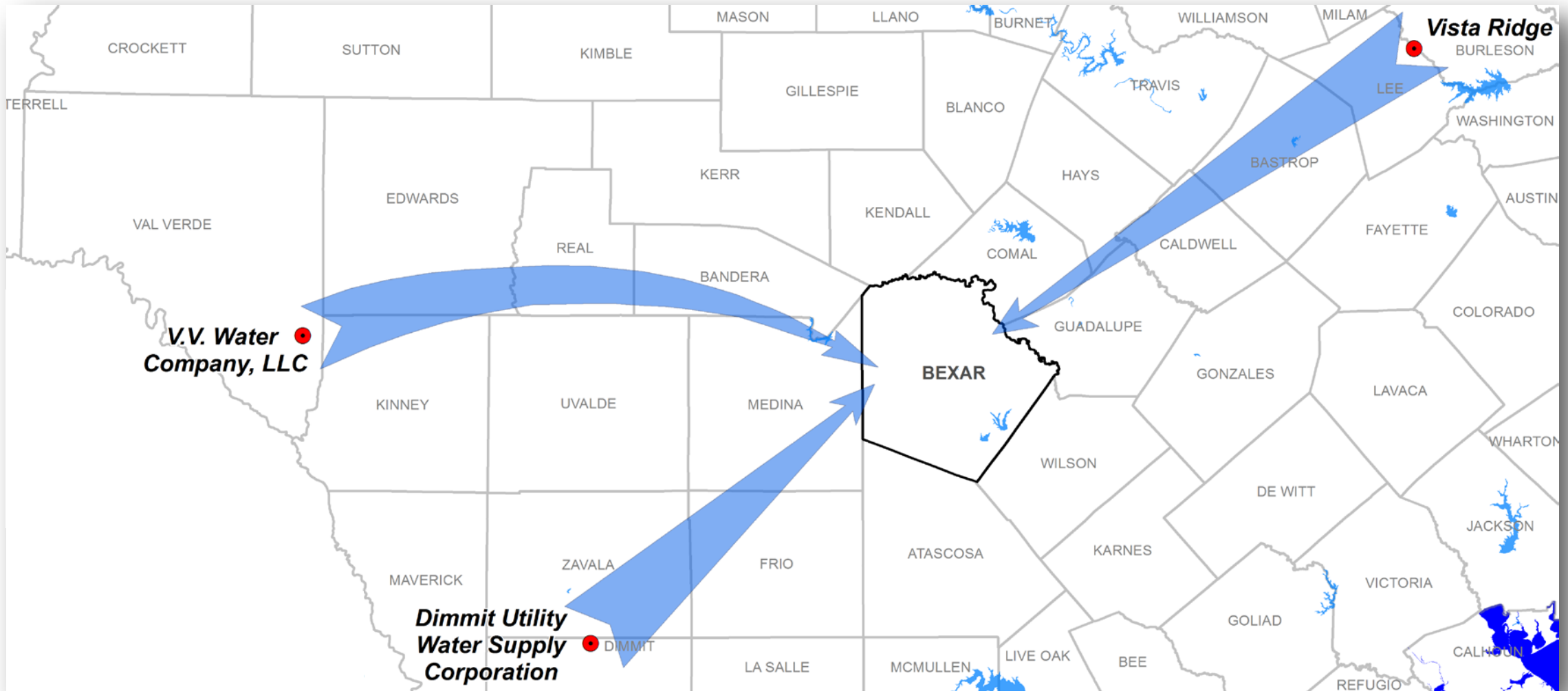
Project	Year Planned	Year Completed	Planned Yield (AF)	Yield
Regional Carrizo Project	2000	2013	56,000	11,687
Brackish Desalination Project	2004	2017	*29,000	13,000



* 2008 RW Beck projection

Vista Ridge Regional Water Supply Project

Securing Our Water Future with Vista Ridge



Vista Ridge Regional Water Supply Project

Risks and Delays

- Project Development

- Interest Rates / Securing financing
- Financial timing and return on investment
- Permits
- Water Quality

- Construction

- Right-Of-Way
- Endangered Species
- Shallow groundwater
- Availability of labor, equipment and supplies
- Pumps/Wells

- Continuing Project Risks

- Production Permits and Transport Permits
- Regulatory efforts impacting production
- Hydrologic production of the Aquifer
- Water Quality compliance
- Infrastructure Debt

Consortium Partners:**ABENGOA****Technical Team Members:**

R.W. Harden and Associates
Pape-Dawson Engineers
CP&Y

Garney Construction Company
The Terrill Firm
Freeman and Corbett
Weeks and Company



Fundamental Tenets of Project

- Shift Risk away from SAWS Customers
- Diversification from the Edwards Aquifer
- SAWS to Continue Nationwide Leadership in Conservation
- Respect Local Groundwater Management

Public-Private Partnership

- Publically negotiated P3 Contract signed November 2014
- 50,000 acre-feet Water Supply; SAWS only pays for water delivered
- 30 year term / additional second 30 year term
- Transfer of facilities: wells, pumps, pipeline, etc.
- Fixed price; No price increases

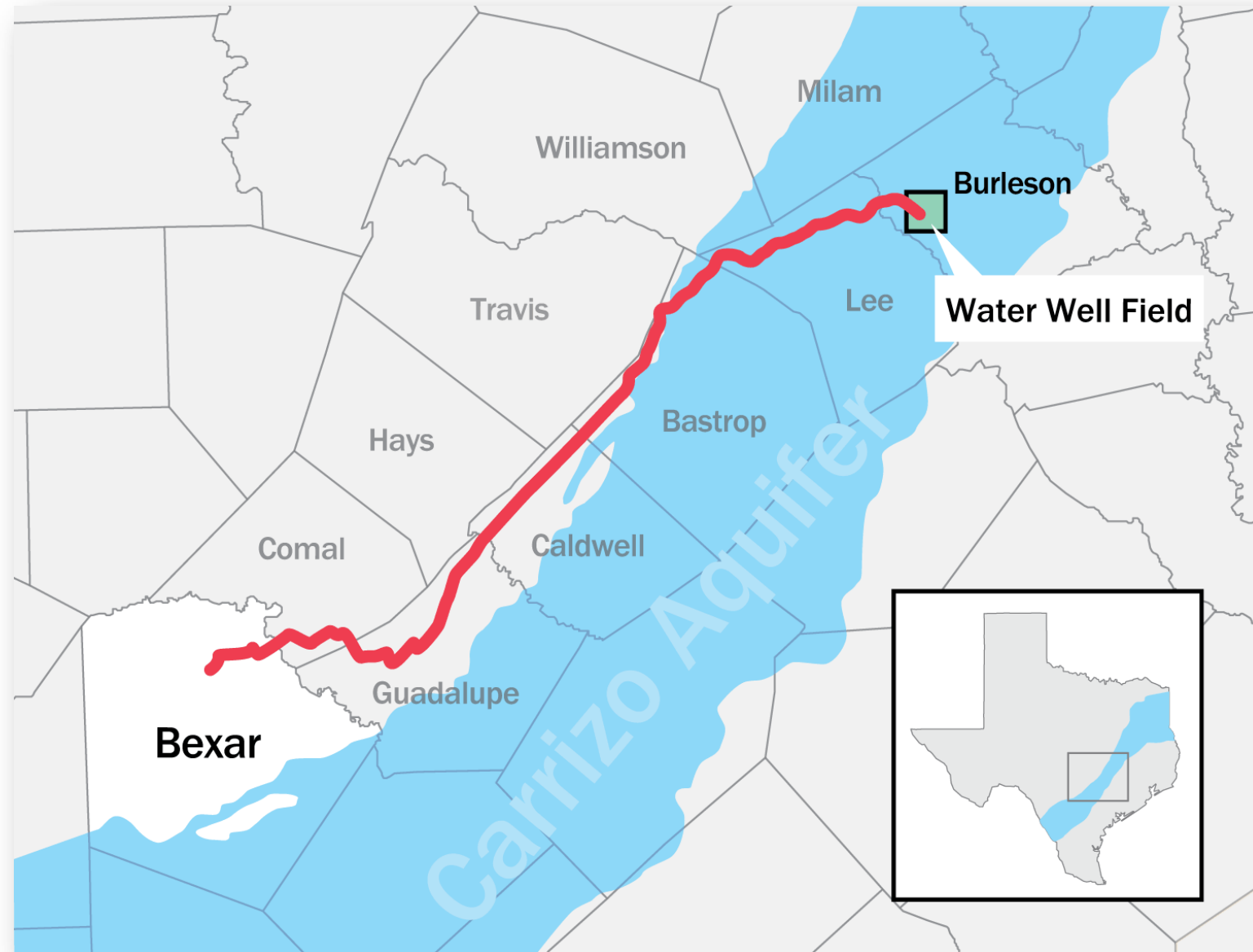
Contractual Protections

- SAWS negotiated the right to have approval of changes in majority partners
- Project continuity and successful SAWS track record
- Higher standards for materials, equipment, construction
- Operating Service Provider in 2018
 - RFQ issued
 - Subject to SAWS consent

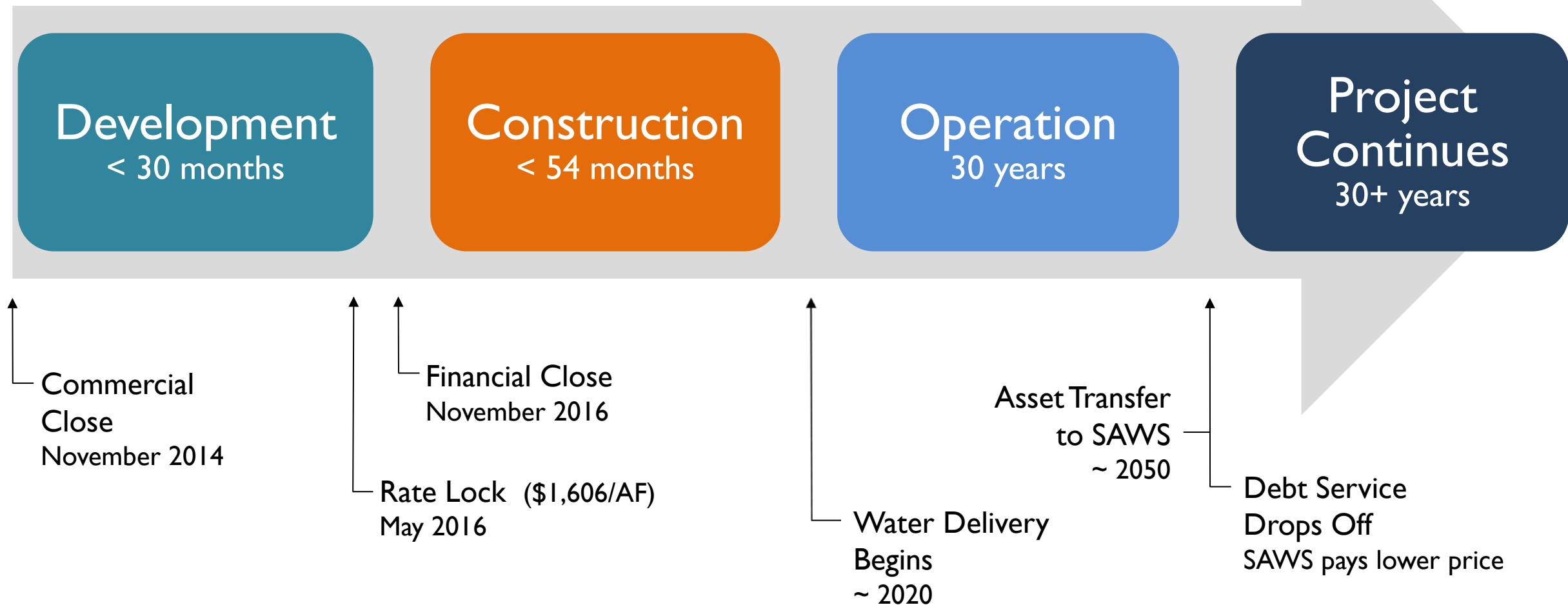


VR Infrastructure

- 19 Wells
- 142 Miles
- 3 Pump Stations
- 10 MG terminal storage
- \$927 M projected private investment



Project Timeline

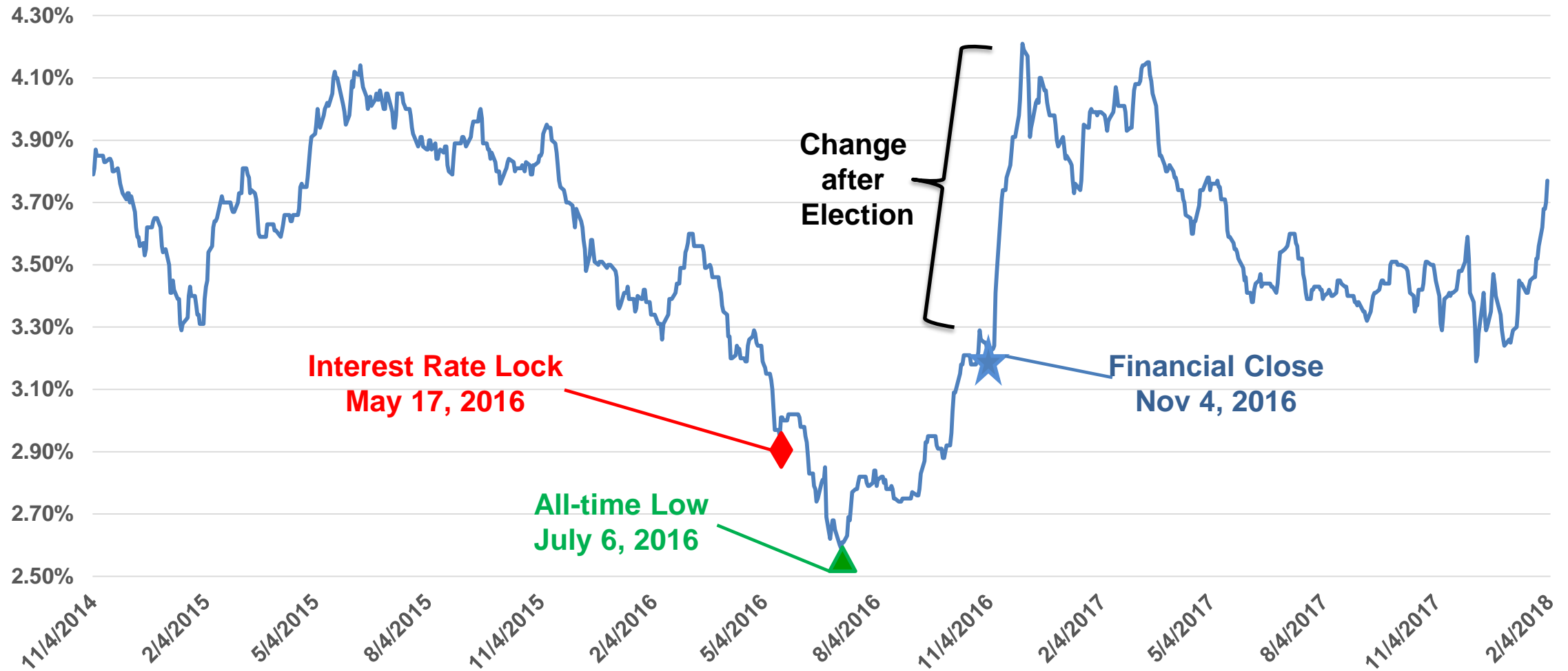


30 Year Fixed Price for Water & Infrastructure

Historically Low Interest Rates

- Negotiated ability to lock in Interest Rates
- Negotiated a cap in fixed cost at \$1,959 per acre-foot
- Final Cost - \$1,606 per acre-foot fixed cost for 30 years
- Lower Rates saved SAWWS customers \$529 M
- O&M and Electrical Costs separate – subject to escalation

Tax-Exempt Interest Rate: Nov. 2014 – Dec. 2016



Vista Ridge Construction Progress

- Pipeline Installation Commenced in all 7 Counties
- Well Field Development Underway
- Facilities Under Construction

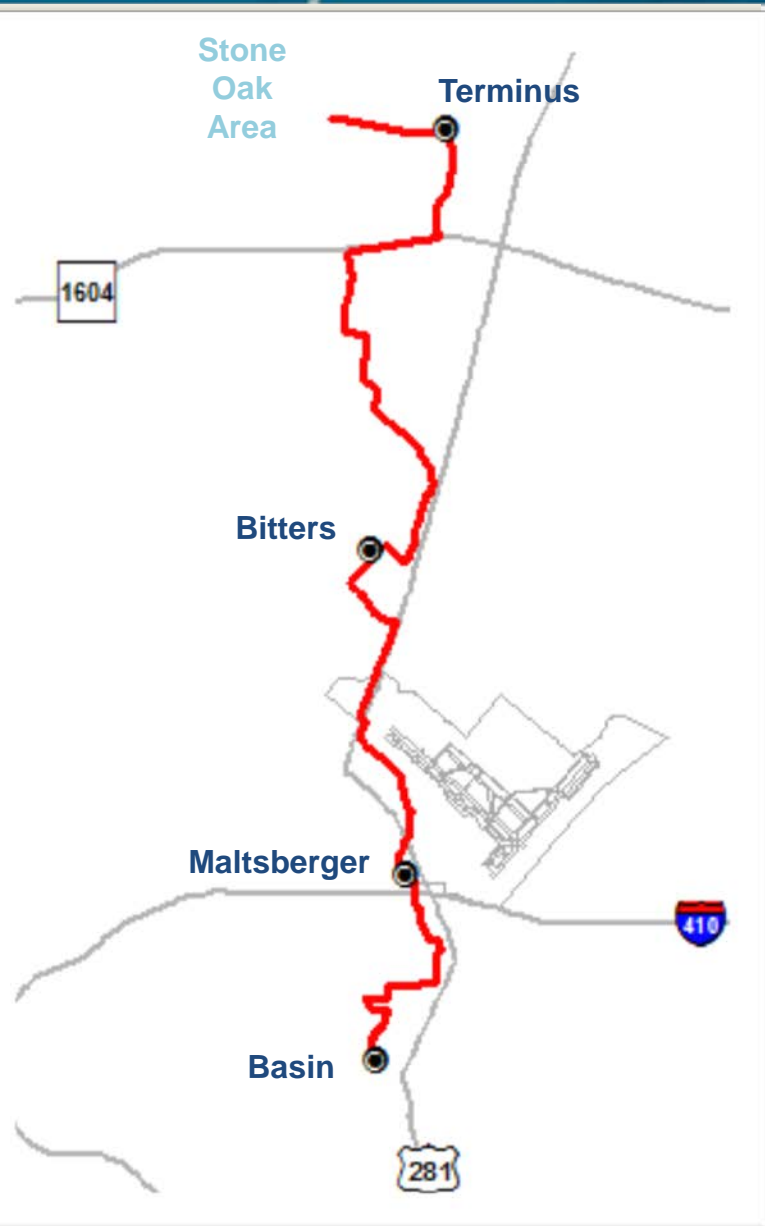


SAWS Contractual Responsibilities

- Purchase water delivered to San Antonio
- Establish electric power service
- Monitor project execution
- Integration infrastructure within San Antonio



Vista Ridge Regional Water Supply Project



Integration of Vista Ridge Water

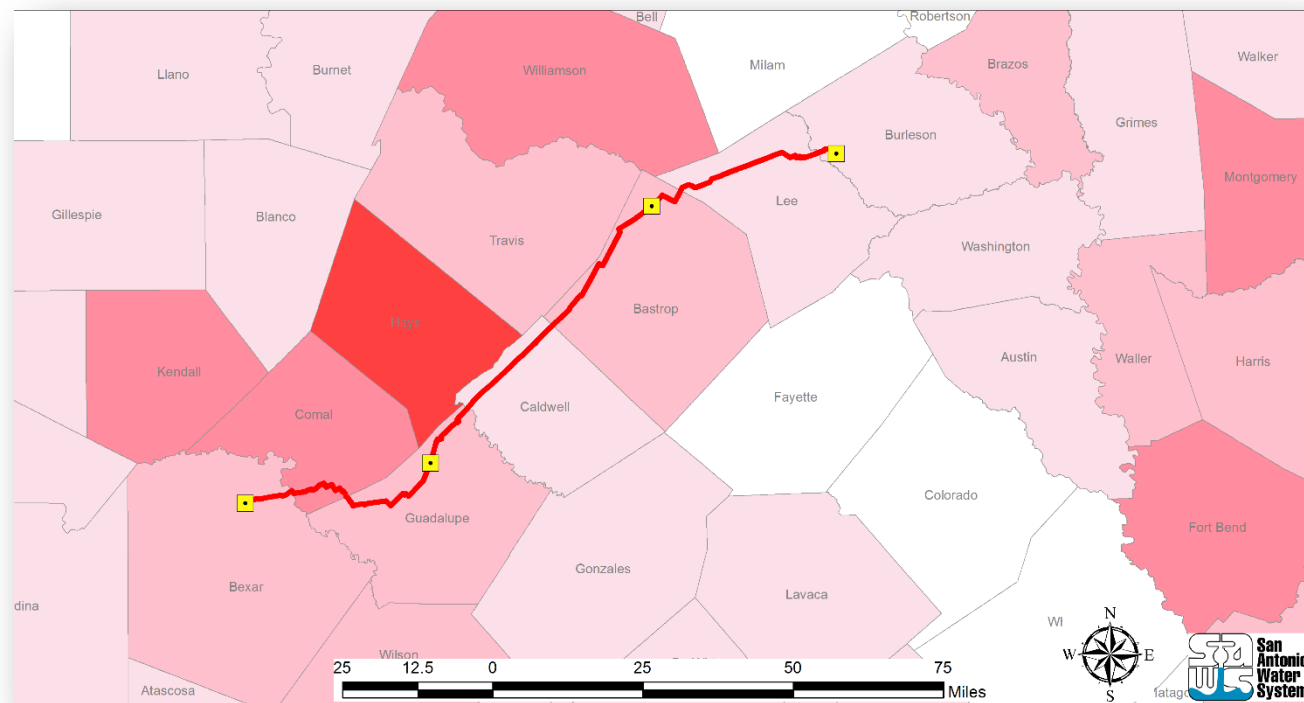
- Treatment Facilities
- New Pump Station
- Ground Storage Tanks
- Valves, Pumps, Controls
- Pipelines – rehab/replace



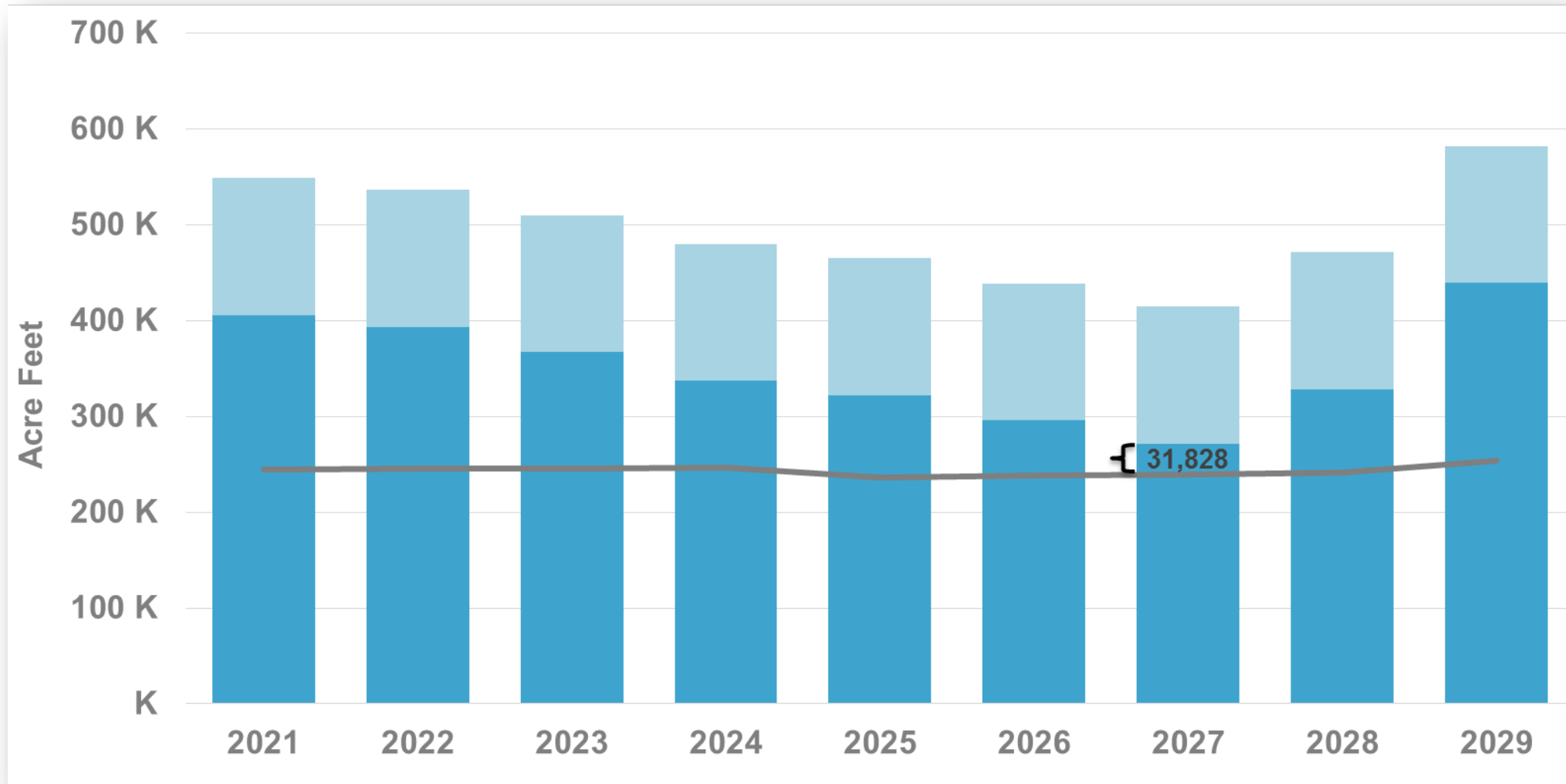
Potential Wholesale Water to a Growing Region

Regional Partnerships

- Assist regional communities with an additional source of supply
- Vista Ridge pipeline crosses multiple water service areas
- Cost Reduction benefits to SAWWS customers



Total Supplies and Surplus - Drought Conditions



Major Policy Decisions

- Threshold – To Sell or Not To Sell
- Length of Term
- Quantity of Water
- Share source water cutbacks
- Price
- SAWS Role in Growth

Benefits of Vista Ridge Project

- Tomorrow's water at today's fixed price
- Long-term water to sustain economy of one of U.S. fastest growing regions
- Transfer of regulatory and construction risks away from SAWWS customers
- Environmental benefits relieve pressure on sensitive Edwards Aquifer
- Potential regional partnerships



**North American Water
Deal of the Year**

Vista Ridge Regional Water Supply Project

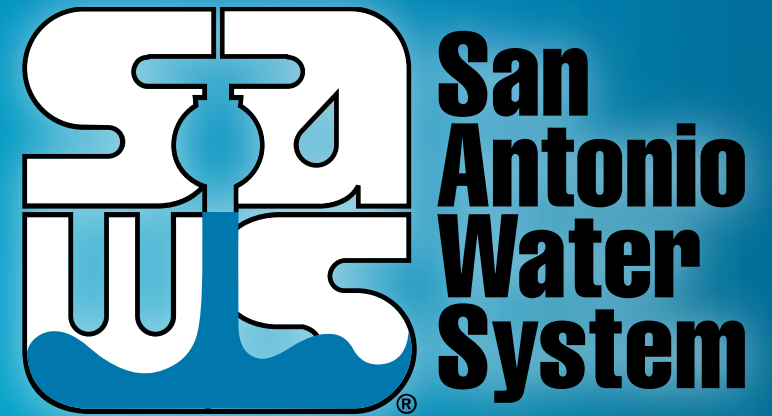
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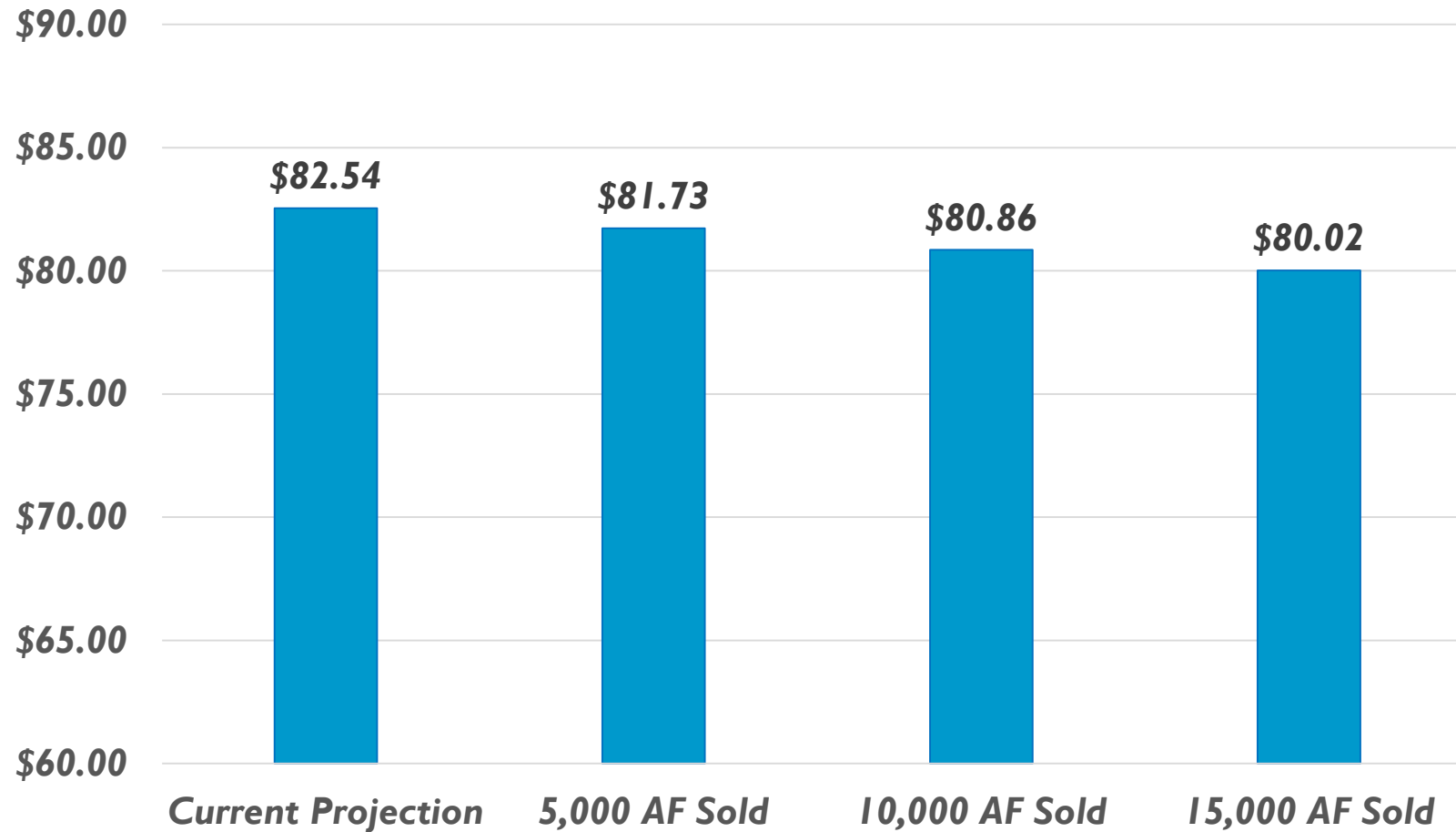


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Customer Savings from Wholesale

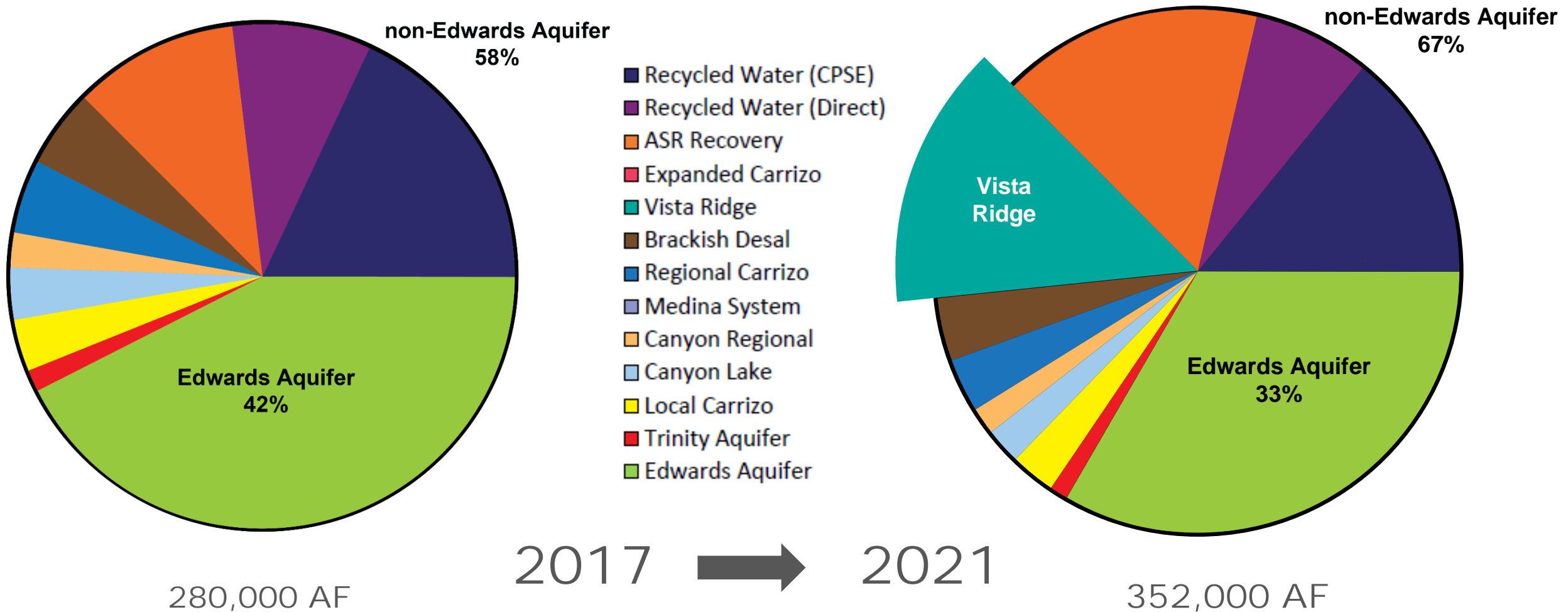
2021 Average Bill - Reductions from Proposed Rates



Groundwater District (GCD) Permitting

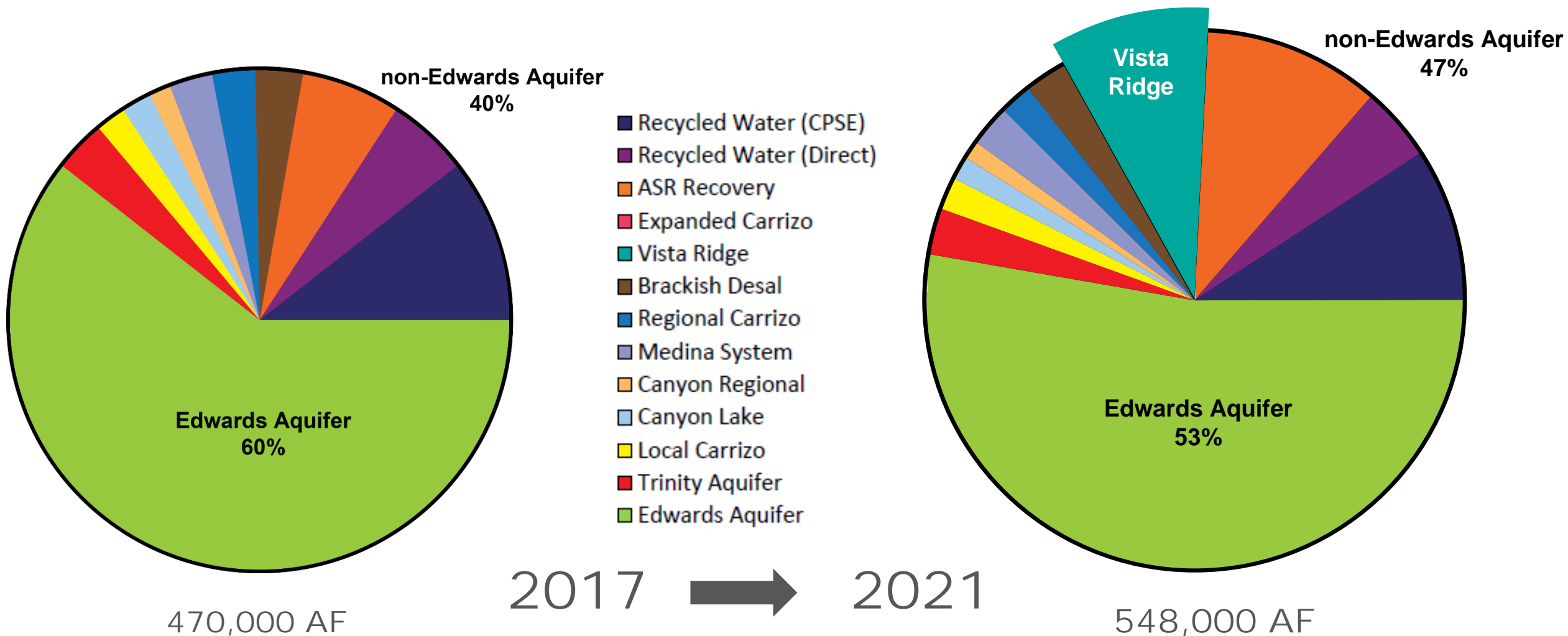
- Production Permits – 40 years
 - 2044 with Automatic Renewals in Statute
- Transport Permit – 30 years
 - 2034 – Law unclear about renewals
 - GCD attorney advised that renewal is automatic
- Water Industry spearheaded legislative efforts
- SAWWS negotiated contract protections
 - Financial water credits to SAWWS if transport permit if not renewed by 2031

Supply Portfolio Diversification (drought year)



Vista Ridge Regional Water Supply Project

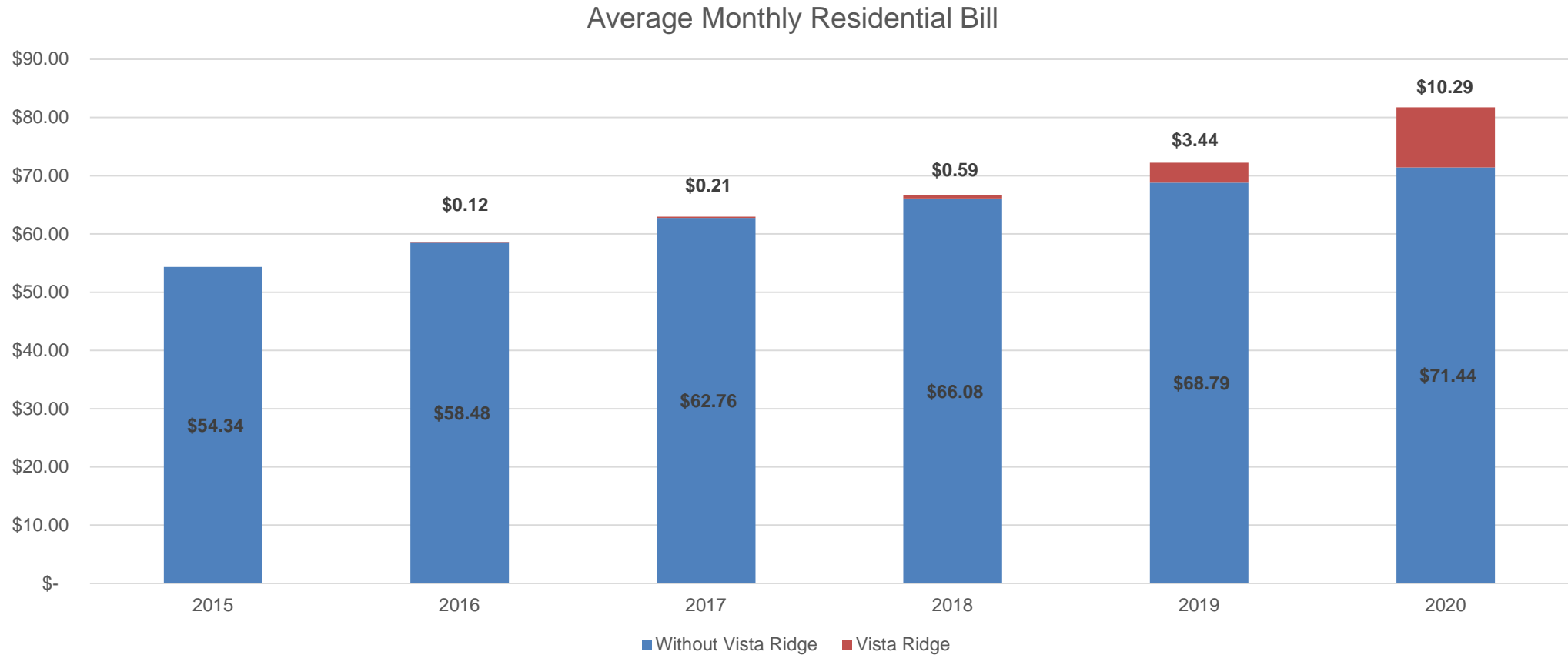
Supply Portfolio Diversification (average year)



Vista Ridge Regional Water Supply Project

Impact of Vista Ridge – Original Projections

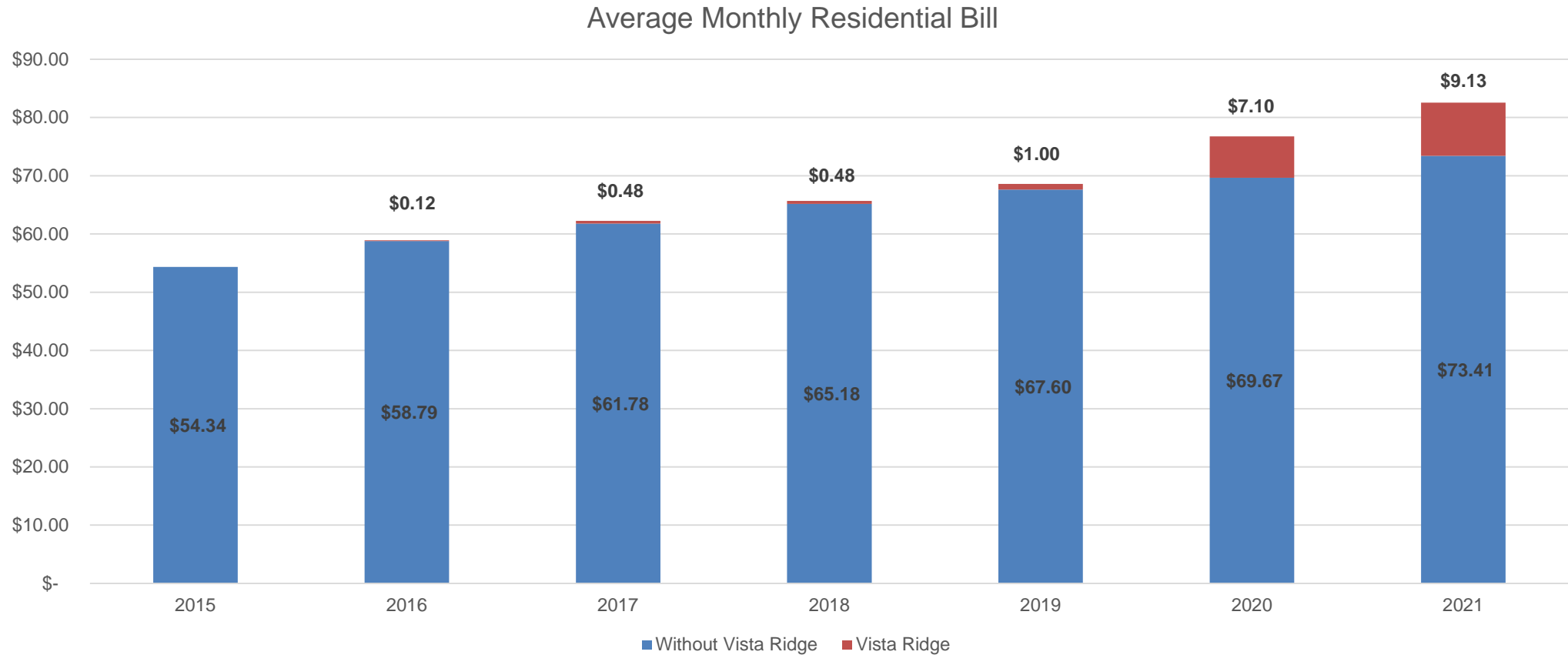
2020 Average Bill will be 14.4% higher with Vista Ridge



Vista Ridge Regional Water Supply Project

Impact of Vista Ridge – Current Projections

2021 Average Bill will be 12.4% higher with Vista Ridge



Vista Ridge Regional Water Supply Project

Termination Payment

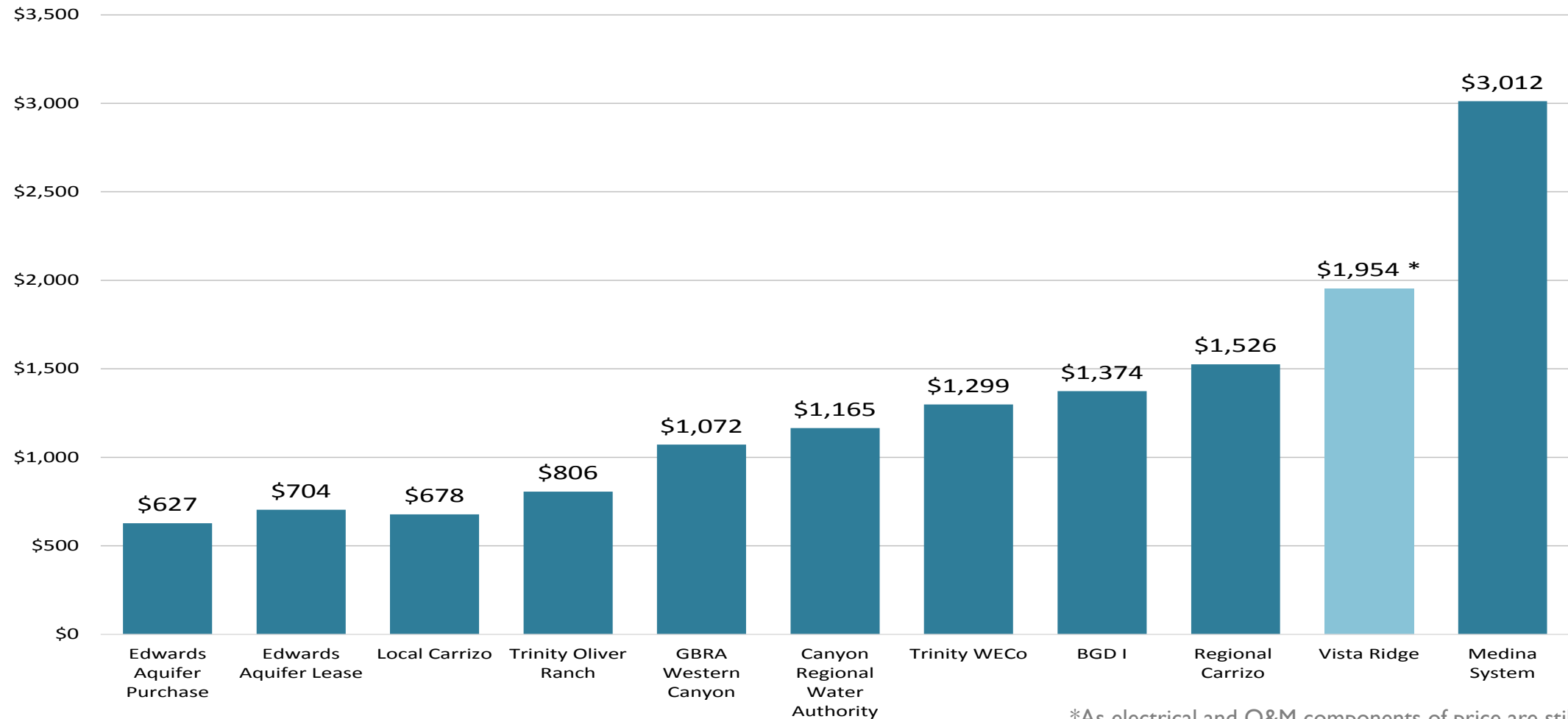
- Post Financial Close – SAWWS can purchase the Project Assets and terminate the WTPA for its convenience
- Project Assets Purchase Price

Description	Amount 12/31/2017
Senior Debt Outstanding	\$481,548,927
Swap Termination Fees	(\$39,463,050)
Employee Payments	?
Operating Service Provider Breakage Costs	N/A
PV of Target Equity Return per Financial Model	\$98,273,853
Approximate Total	\$540,359,730

Pricing History

- 2012 Water Management Plan
 - RFCSP range between \$1,154 - \$2,654 per acre-foot
- 10-2-12 RFCSP Board Update
 - \$2,530 per acre-foot
- 9-29-14 Board Approval of WTPA
 - Range between \$2,200 - \$2,307 per acre-foot

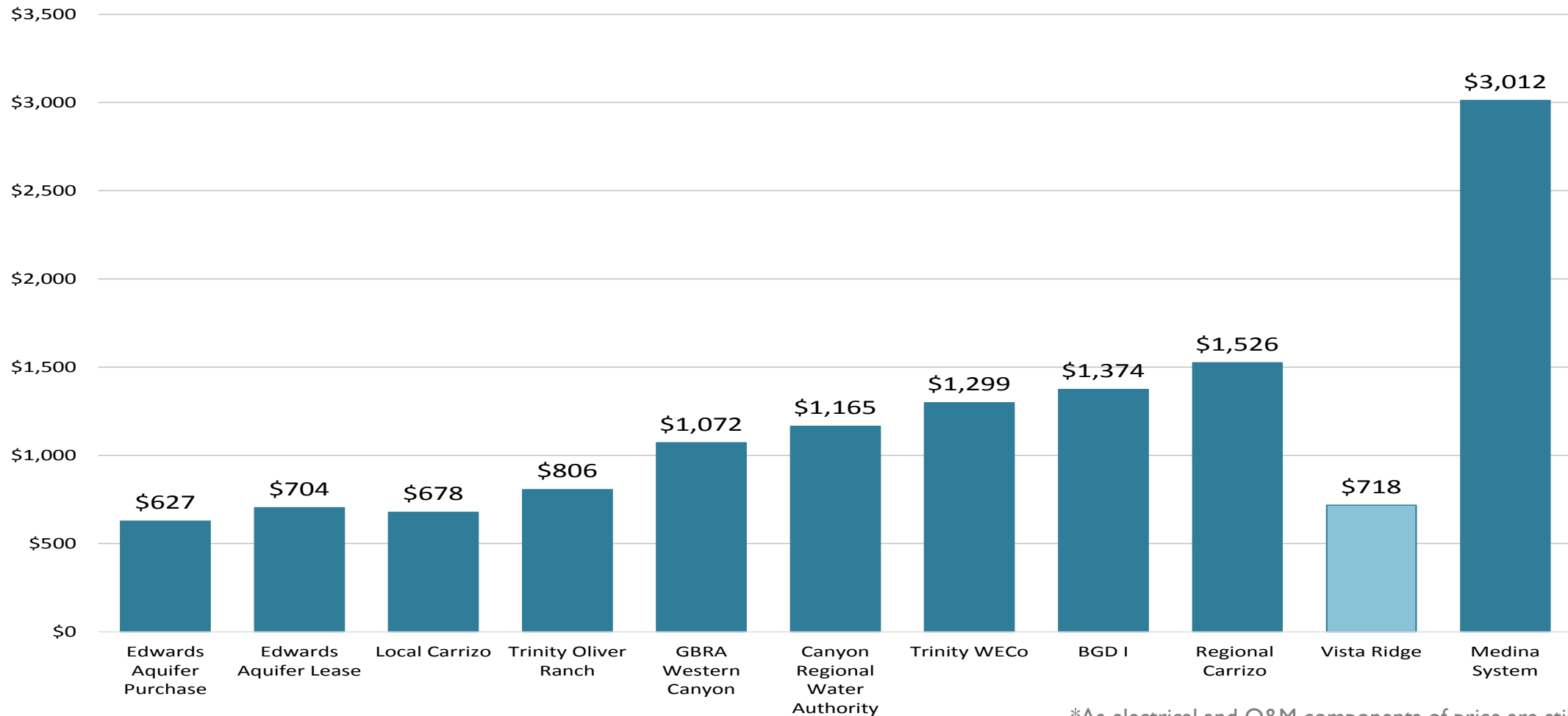
Project Costs per Acre-Foot



*As electrical and O&M components of price are still being finalized, amount is an estimate and subject to change

Vista Ridge Regional Water Supply Project

Project Costs per Acre-Foot

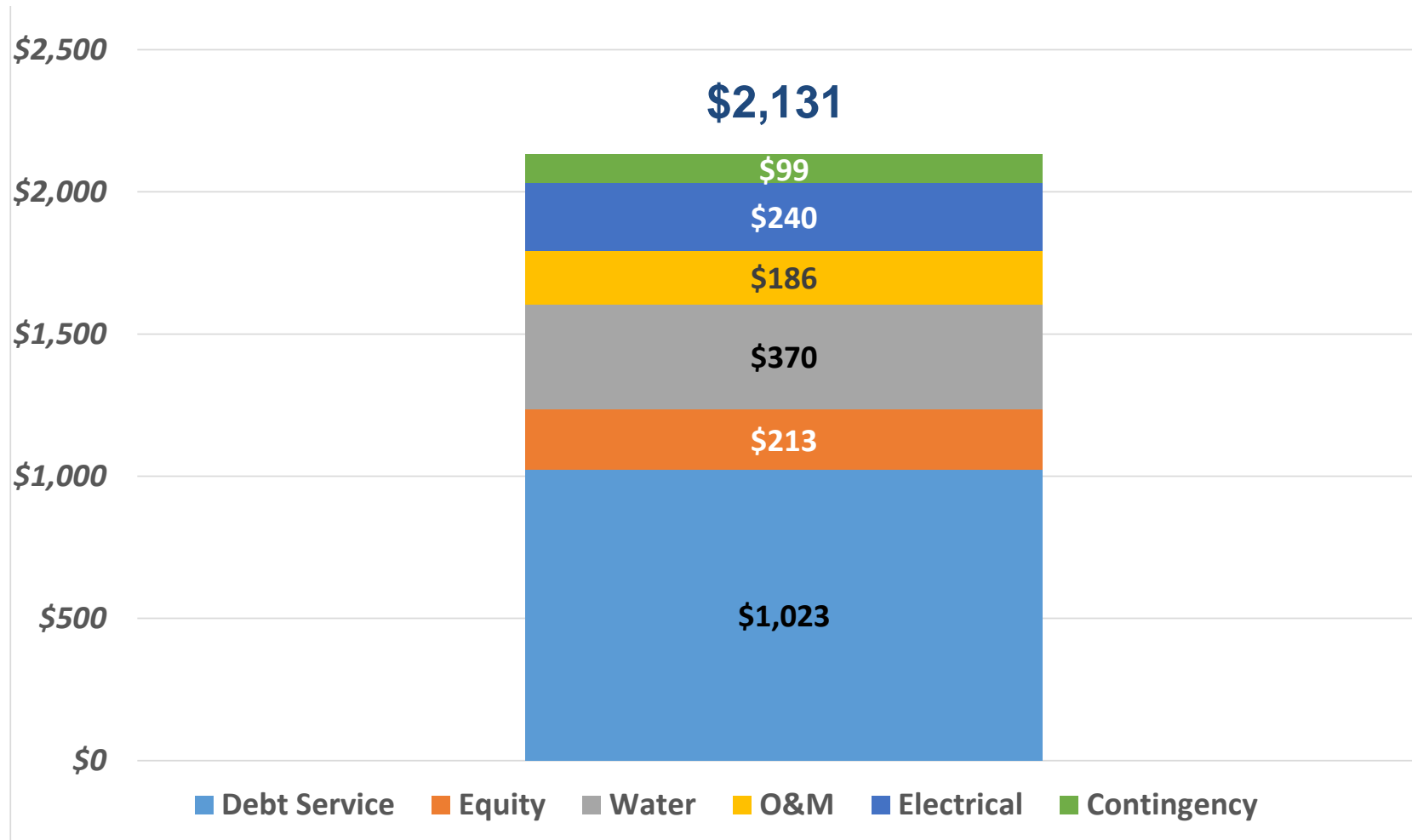


*As electrical and O&M components of price are still being finalized, amount is an estimate and subject to change

Vista Ridge Regional Water Supply Project

Vista Ridge Costs per Acre-Foot

Initial 30 Year Term

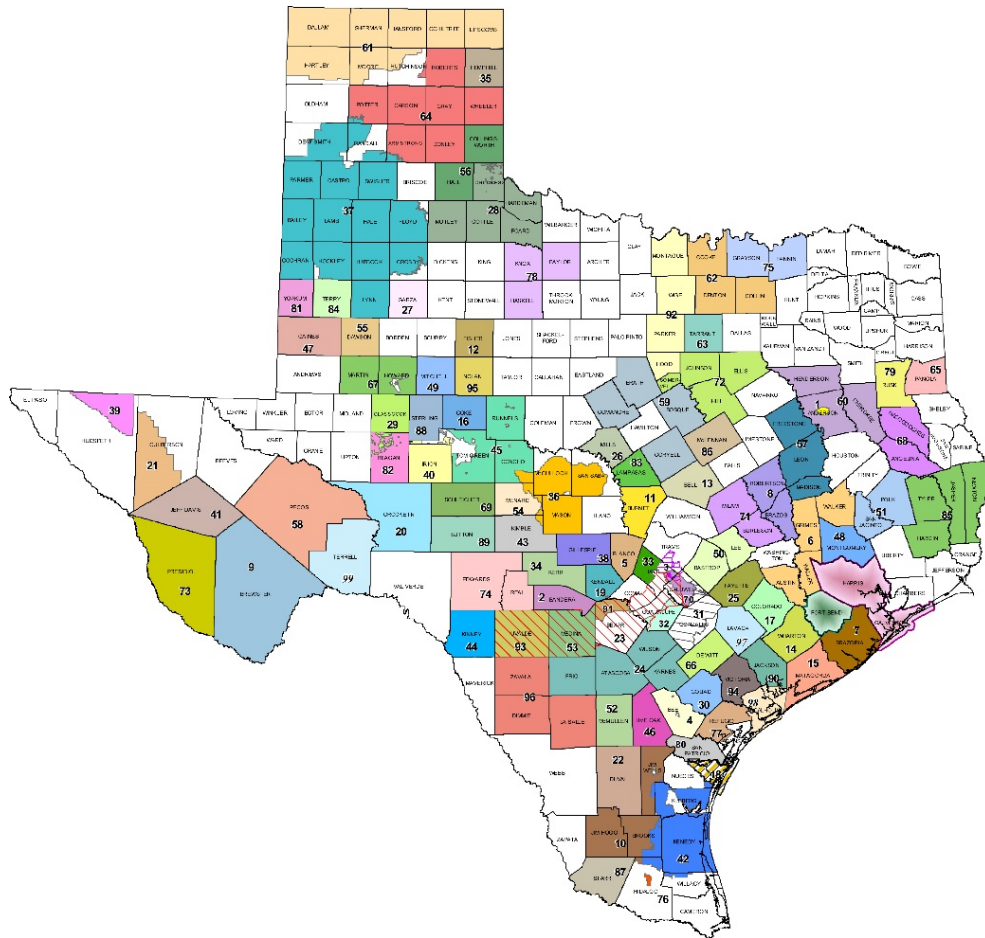


Vista Ridge Regional Water Supply Project

Political, Legal and Regulatory

100 Groundwater Districts / 9 Major Aquifers

- County by County
- Can be more drought tolerant
- Permits generally 1- 5 years
- GCD may reduce or eliminate production at any time
- Lack of Checks and Balances
- Lack of Certainty & Stability



Change in Direction Away from Proposals

- Feb. 2014 – Recommendation to Reject all bids
 - Project finalists risks were too great
- Continued negotiations with Vista Ridge
- Vista Ridge agreed to take on risks and eliminate cost escalation proposal