

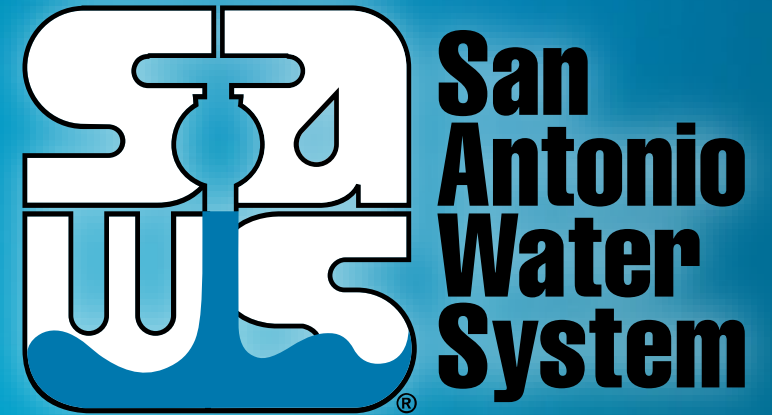
2024 Water Management Plan

Steven Siebert

Manager, Water Resources

Capital Improvements Advisory Committee

January 17, 2024



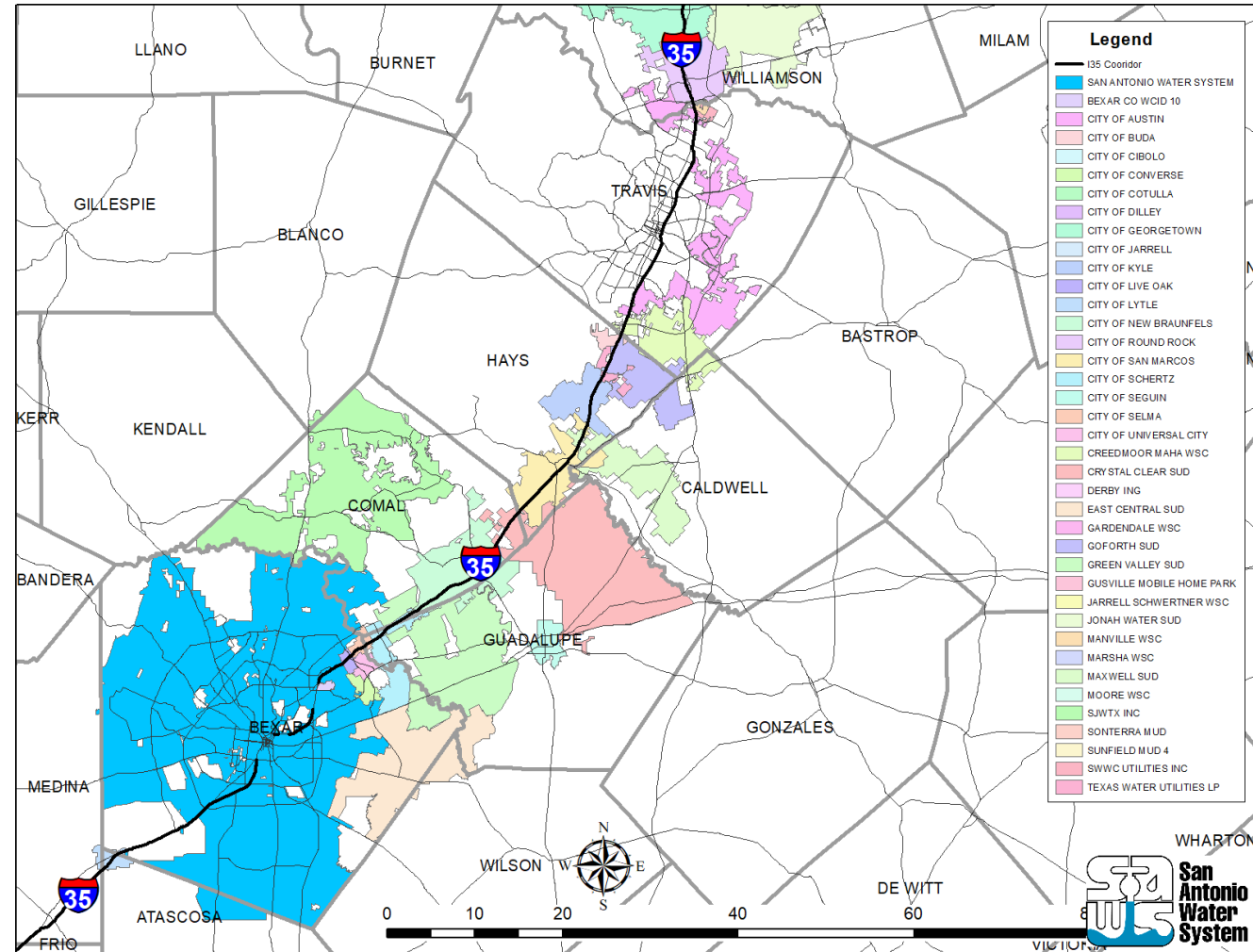
MAKING SAN ANTONIO
WATERFUL



One of Fastest Growing Regions in Nation

I-35 / SH 130 Corridor

5 Million Neighbors



Long Term Water Planning

Securing Our Water Future

Together

WATER

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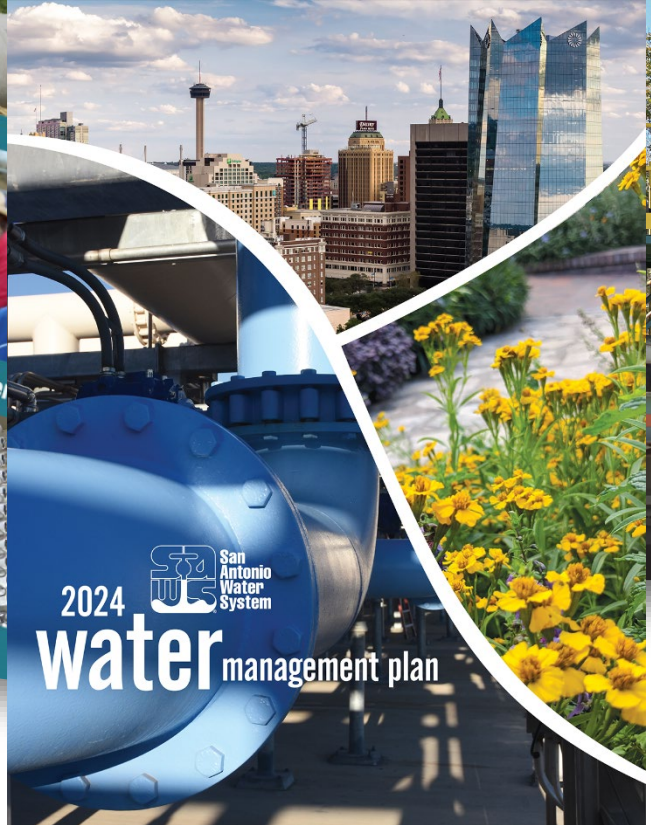
2009 Water Management



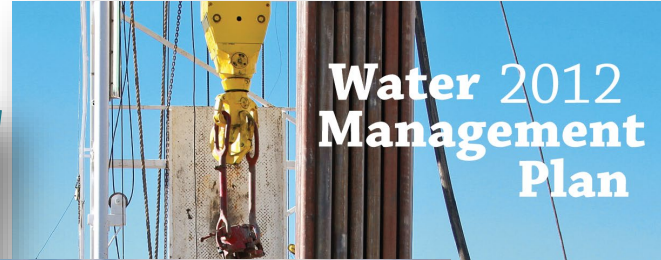
2017 Water Management



2024 water management plan



Water 2012 Management Plan



San Antonio Water System

2024 WMP



Community Engagement


Community Input

*“The most important part of ensuring reliable, safe sources of water for future generations is **Conservation**...”*

*“**Climate change** impacts must be the highest priority. We will face water crises in near future so let’s work on it while we have enough supply and time.”*

*“**SAWS is doing a GREAT job** supplying the fresh water needs of San Antonio. Your foresight to diversify our water sources has positioned San Antonio for decades of reliable water supply.”*

*“**Vista Ridge is looking like a genius move** with the current drought. Congrats on the foresight.”*







WATER CITY SA

Be a part of the water conversation.
Participate online and learn more about the 2022 Water Management Plan.

MEETING INFO

**Tuesday
April 26
10 - 10:30 AM**
Webinar/Online Meeting
[WATERCITYSA.COM](https://www.watercitysa.com)

Learn more at [WaterCitySA.com](https://www.WaterCitySA.com)

 #WaterCitySA22   

What Changed - 2017 to 2024 Plan

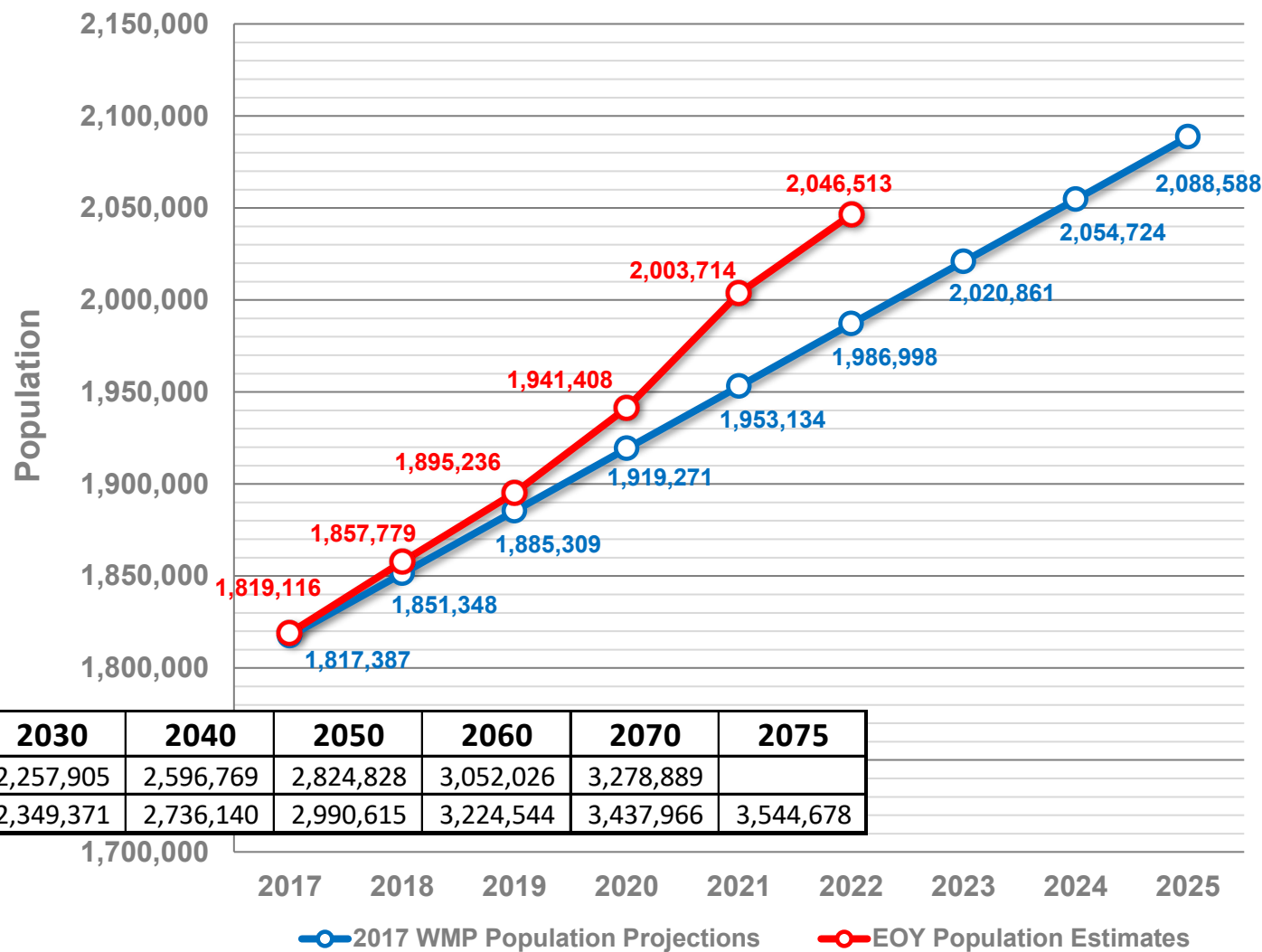
1. Population Growth
2. Demand Management
3. Nonrevenue Water
4. Supply Yields



What Changed - Population Projections

SAWS Revised Growth

- SA Fastest growing city in the nation 2020-2021
- 617,000 more by 2040
- 1.4 million more by 2075 (67% increase)



Plan Population Projections	2024	2030	2040	2050	2060	2070	2075
2017 WMP Population Projections	2,054,724	2,257,905	2,596,769	2,824,828	3,052,026	3,278,889	
2024 WMP Population Projections	2,118,933	2,349,371	2,736,140	2,990,615	3,224,544	3,437,966	3,544,678

What Changed - Drought Demand Management

2017 Model Inputs

Drought Management Strategy

- Years 1-4 Stage 1 (5.88%)
- Years 5-8 Stage 2 (11.76%)
- Year 9 Stage 1 (5.88%)



2024 Model Inputs

Drought Management Strategy

- Years 1-9 (9.6%)
- Utilize Enhanced Conservation Program



What Changed? Nonrevenue Water

2024 WMP Goals

- Increases seen in drought years
- Major Focus on Change
- SAWS-Wide Organizational Dedication
 - Proactive Leak Detection
 - Distribution and Collections
 - Leverage AMI Data
 - Water Main Replacement





What Changed - Firm Yields

2024 WMP Firm Yields

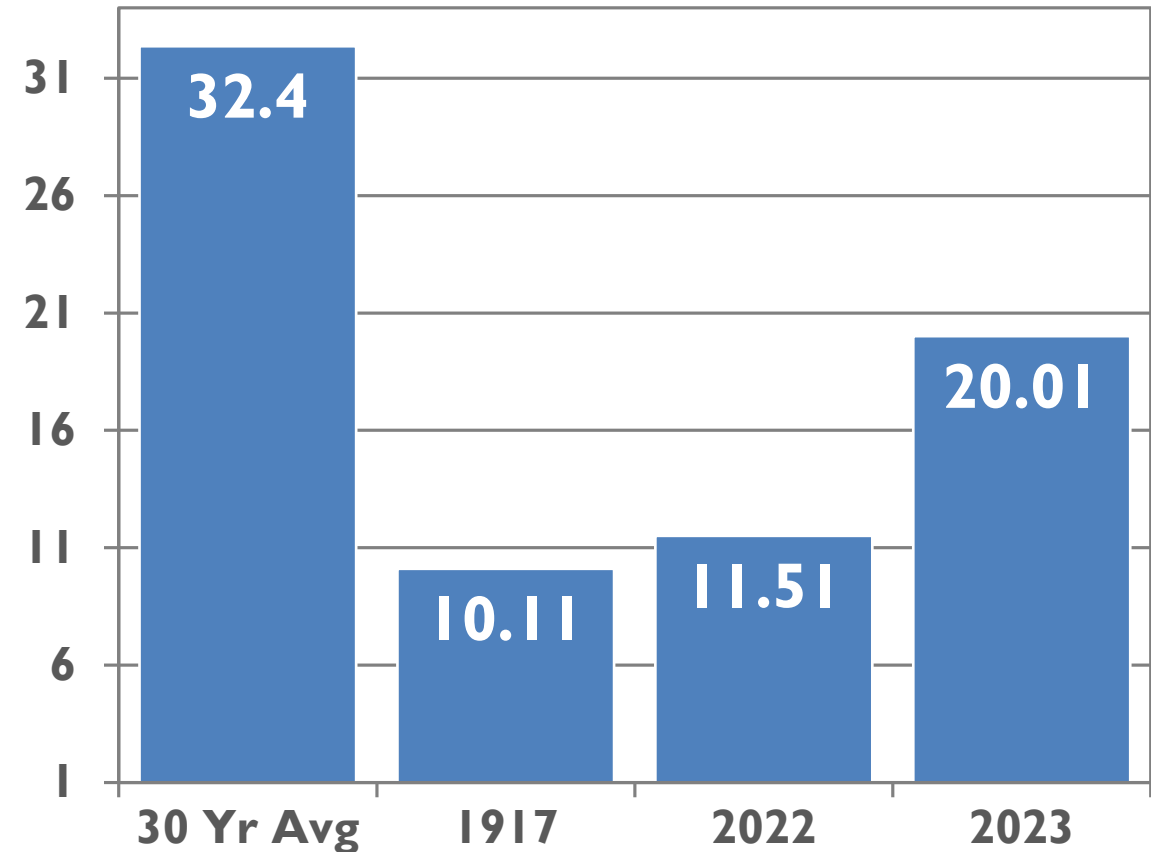
- Firm Yields – Non-Edwards Supplies
 - Contractual termination dates
 - Drought experience
 - Supply availability

Climate Change

Multi-year drought impacts to supply and demand

- 2022 second driest year on record
- 2023 hottest summer on record
 - 88.7° average temperature
 - 75 days of 100°+ - new record
 - 23 consecutive days 100°+
 - 17 days of 105°+
 - Summer nights 2.4° warmer due to climate change and La Niña (dry weather pattern)
 - Rainfall deficit

Precipitation



Water Management Planning

Extreme Weather



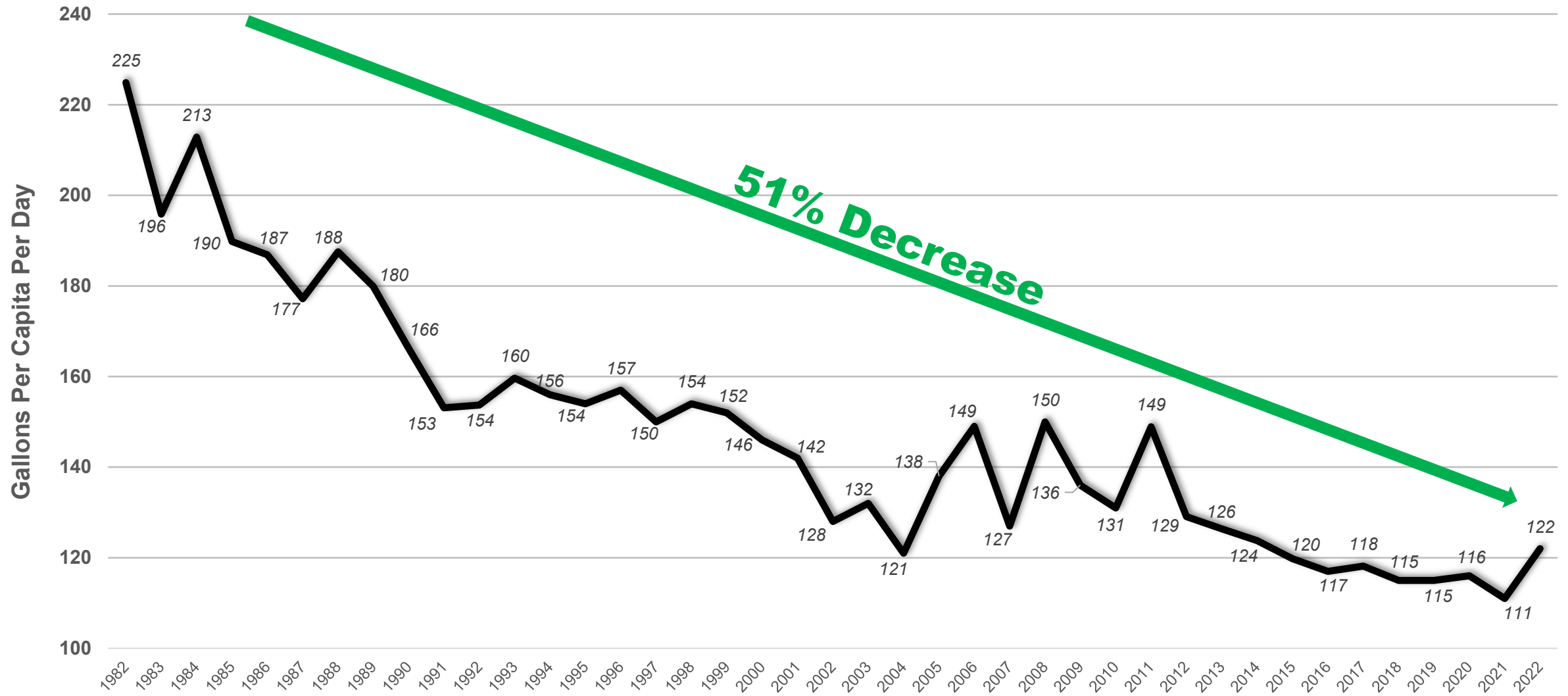
Drought Planning

9-Year Drought

- Current hybrid drought
 - Duration 1950s
 - 108-month drought (SAWS)
 - 77-month drought (State Water Plan ~6.5 years)
 - Intensity of 2011-2014
- Ensured resiliency

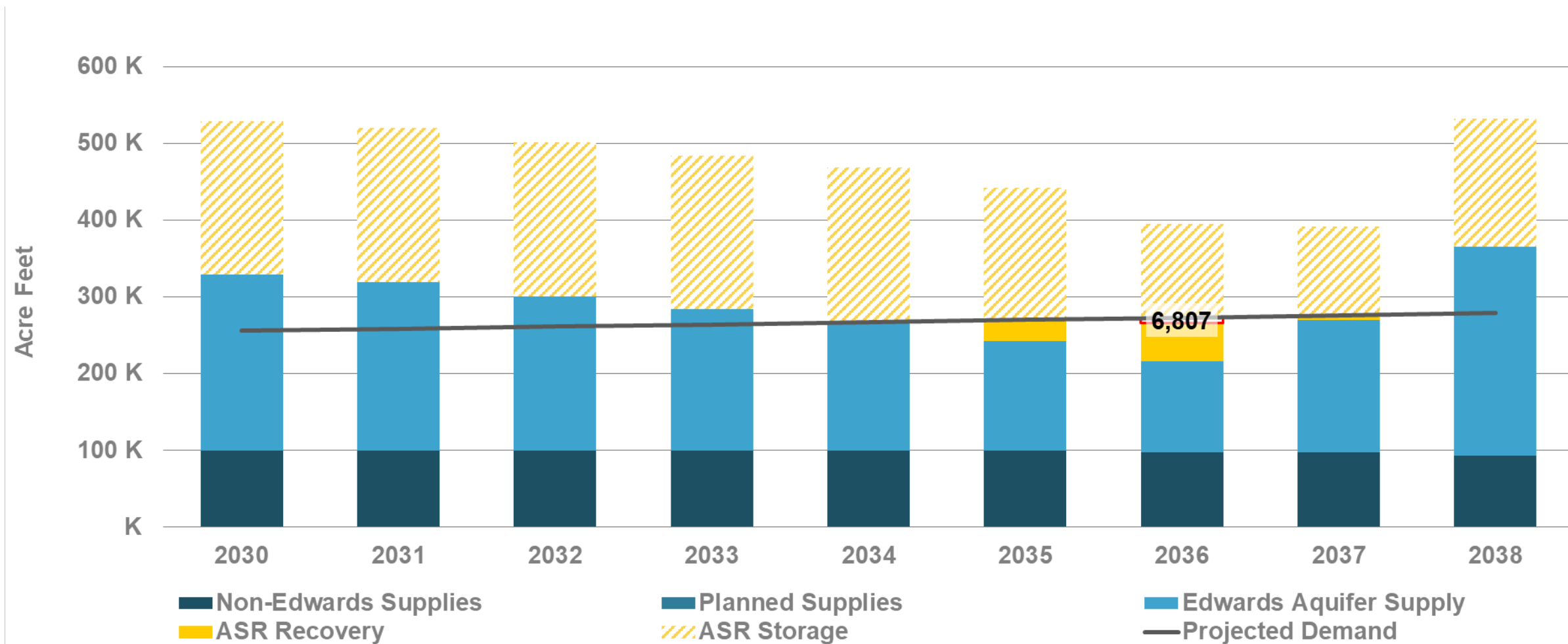


Conservation – First New Source



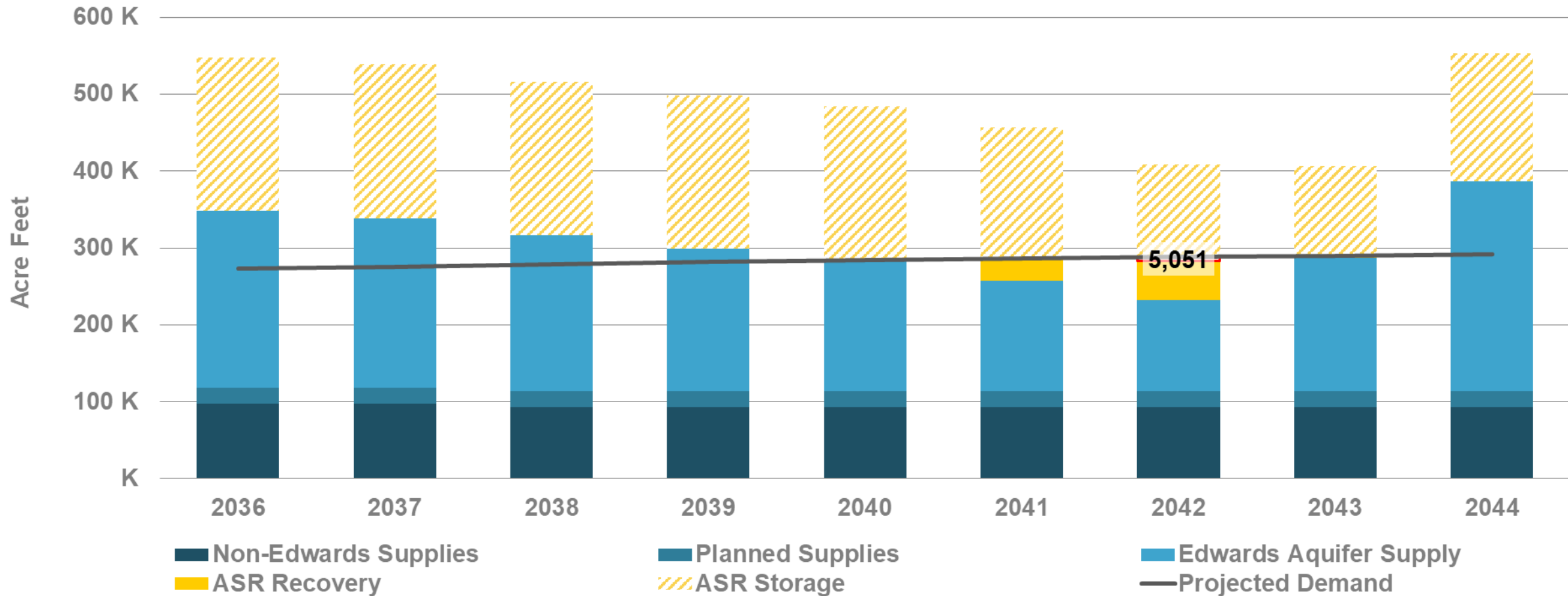
Supply & Demand Model

2036 – 1st Supply Gap – Filled by Expanded Local Carrizo



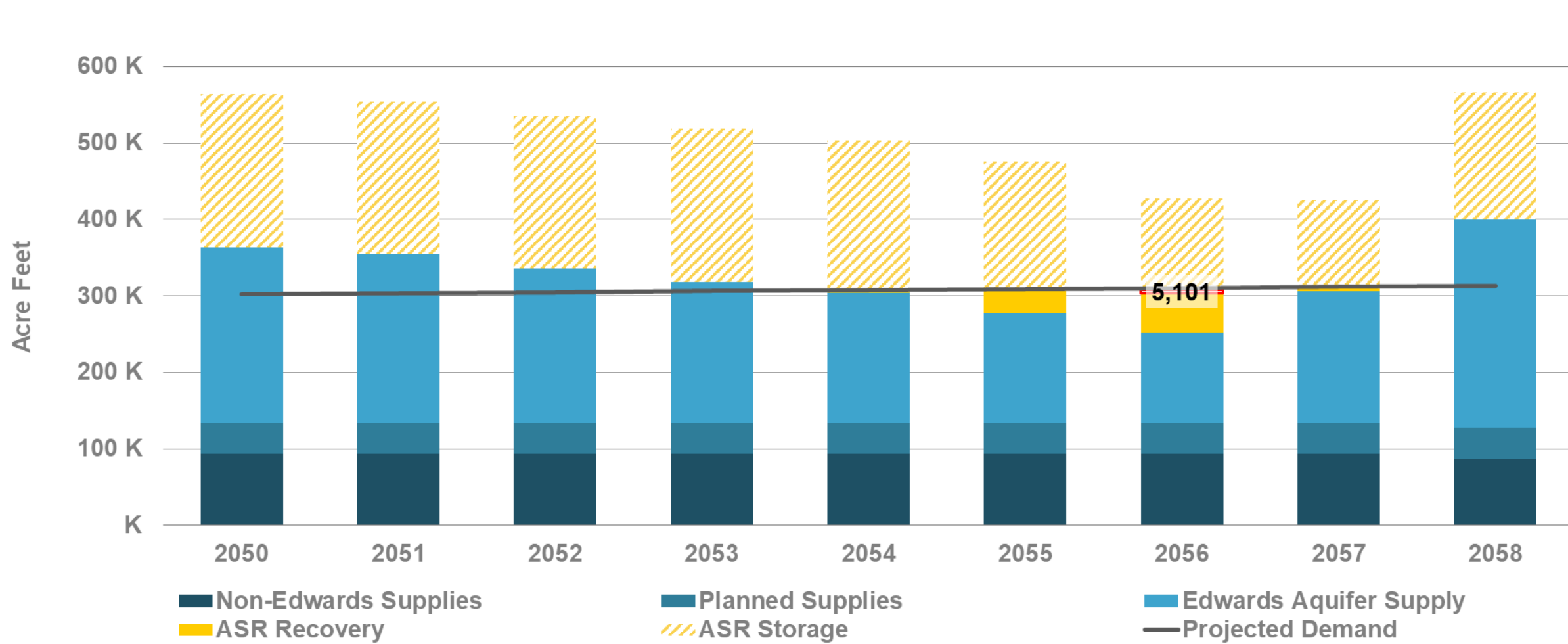
Supply & Demand Model

2042 – 2nd Supply Gap – Filled by Brackish Phases 2 & 3



Supply & Demand Model

2056 – 3rd Supply Gap – Filled by Regional Wilcox Brackish



Increasing Supply Diversification

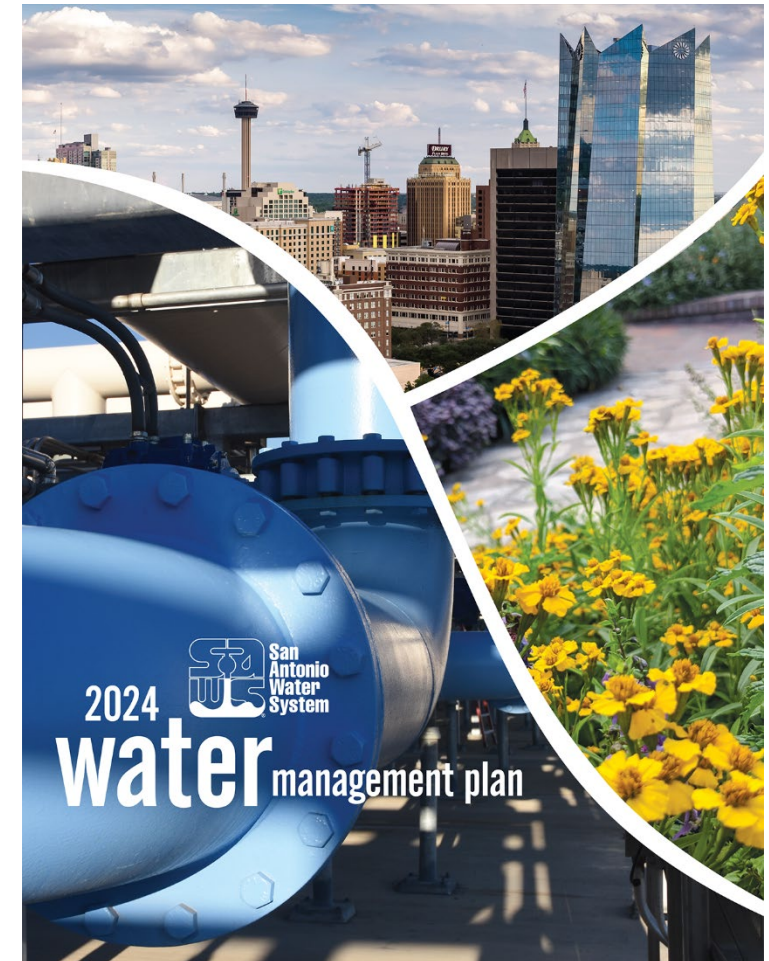
- Newest Supply
 - Vista Ridge April 2020
 - 2021 48,949 acft
 - 2022 48,524 acft
 - 2023 51,526 acft



2024 Water Management Plan

Planned Projects to Meet Demand

Near-Term 2024 – 2033	Mid-Term 2034 – 2049	Long-Term 2050 2075
Conservation	Conservation	Conservation
Ex. Local Carrizo	BGD Phases 2 & 3	Regional Wilcox
ASR Treat Ex	RFCSP	RFCSP
Regional Projects	Reduce NRW	Reduce NRW
Reduce NRW	--	--



2024 Water Management Plan

Near-Term 2024 - 2033

- Future water supplies
 - ASR Treatment Plant Expansion
 - Expanded Local Carrizo
 - Purchase 4,000 AF Edwards
 - Maximize current contracts



2024 Impact Fees

- CIAC Discussion
- Adding Capacity
 - ASR Treatment Plant Expansion
- Adding Supplies
 - 4,000 AFY Edwards Purchase
 - Expanded Local Carrizo



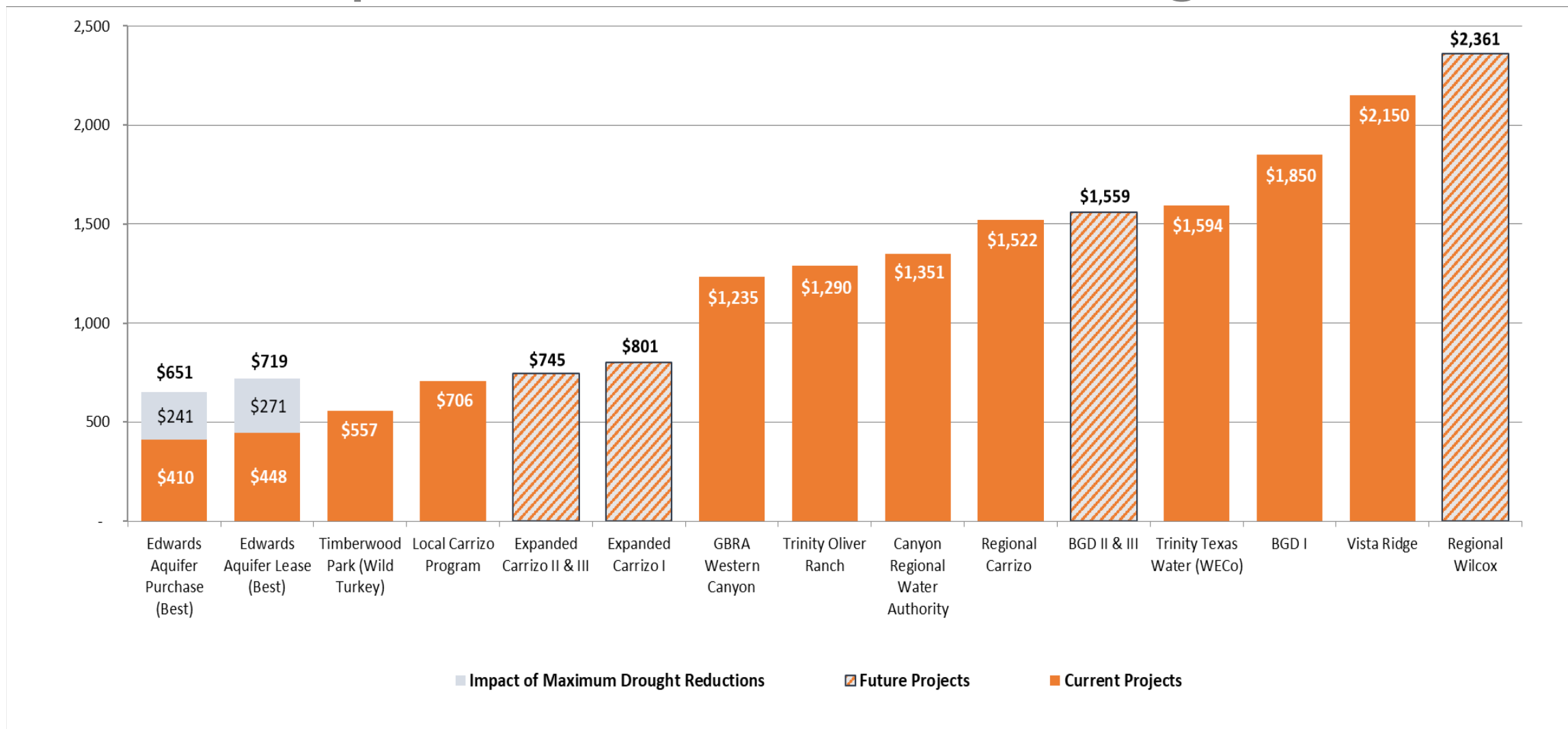


2024 Water Management Plan

Mid-Term and Long-Term

- Future water supplies
 - Expanded Local Carrizo
 - Additional phases of Brackish Groundwater Desalination
 - Regional Project
 - Renegotiate current contracts
- Challenges
 - Electricity
 - Distance
 - Regulatory

2024 Cost per Acre-Foot Without Integration



Next Steps

- Continuous Community Engagement
- SAWS Board & City Council Briefings
- Draft Plan March 1st
- SAWS Board Approval June

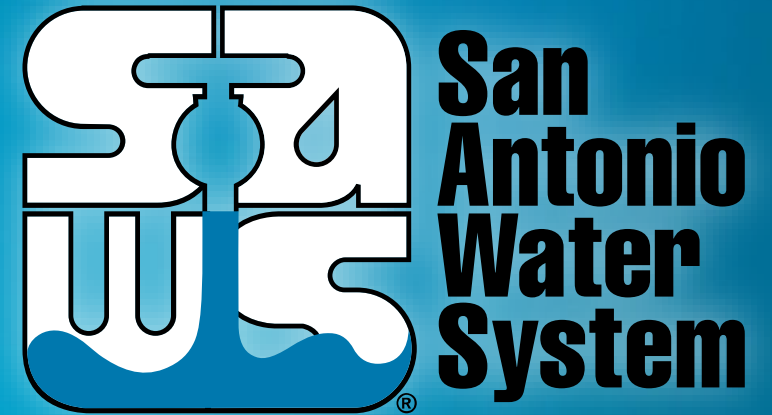
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