

Proposed 2014 Water Supply Impact Fee

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December 5, 2013

Capital Improvements Advisory Committee



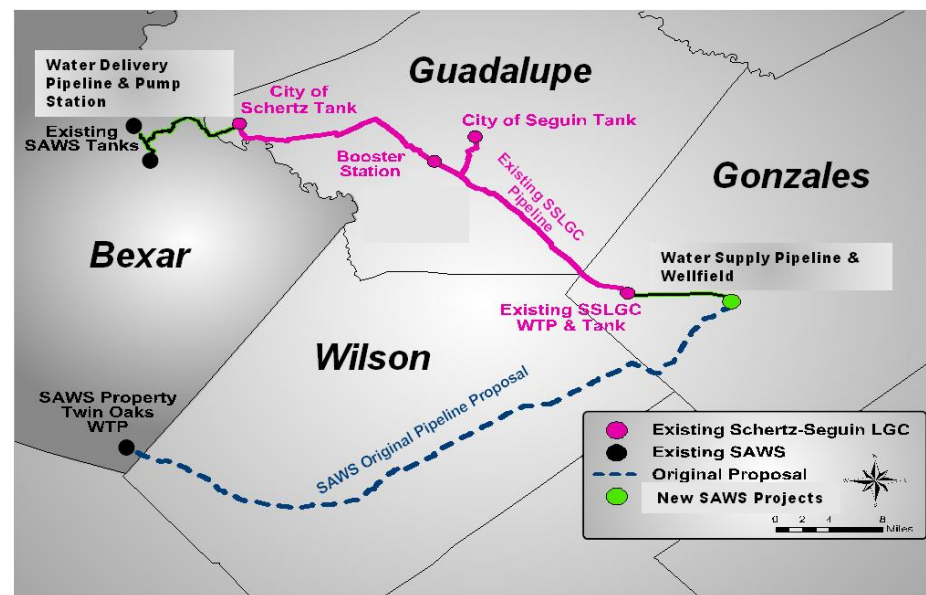
Outline

- SAWS Planned Water Resources
- Impact Fee Calculation
- Disclaimers

SAWS Planned Water Resources

Regional Carrizo

- Regional Partnership with Schertz-Seguin Local Government Corporation (SSLGC)
- SAWS Permit 11,688 AFY
- Excess from SSLGC and Gonzales Water Supply Corporation 5,512 AFY
- Total **17,200 AFY** (up to amount)
- Delivery began November 12



SAWS Planned Water Resources

Regional Carrizo

- Mutual Regional Water Supply Contract
 - Gives SAWS ability to purchase SSLGC surplus water
 - Provides SSLGC an emergency supply
 - **Reduces cost** for all parties
- **\$124.1 million** estimated pre-2023 CIP
 - \$124.1 million pre-2014 CIP
 - \$0 2014-2023 CIP
- 13,138 AFY supply in 2023, or **37,443 EDUs**
- Capital Cost = \$3,316 per EDU

Planned Supplies

Brackish Groundwater Desalination

- Three-Phase Program
 - Phase 1: 13,440 ac-ft/yr (2016)
 - Phase 2: 13,440 ac-ft/yr (2021)
 - Phase 3: 6,720 ac-ft/yr (2026)
 - Total: 33,600 ac-ft/yr
- **\$280.5 million** estimated pre-2023 CIP
 - \$188.4 million pre-2014 CIP
 - \$92.1 million 2014-2023 CIP
- 24,420 AFY supply in 2023, or **69,597 EDUs**
- Capital Cost = \$4,031 per EDU



SAWS Planned Water Resources

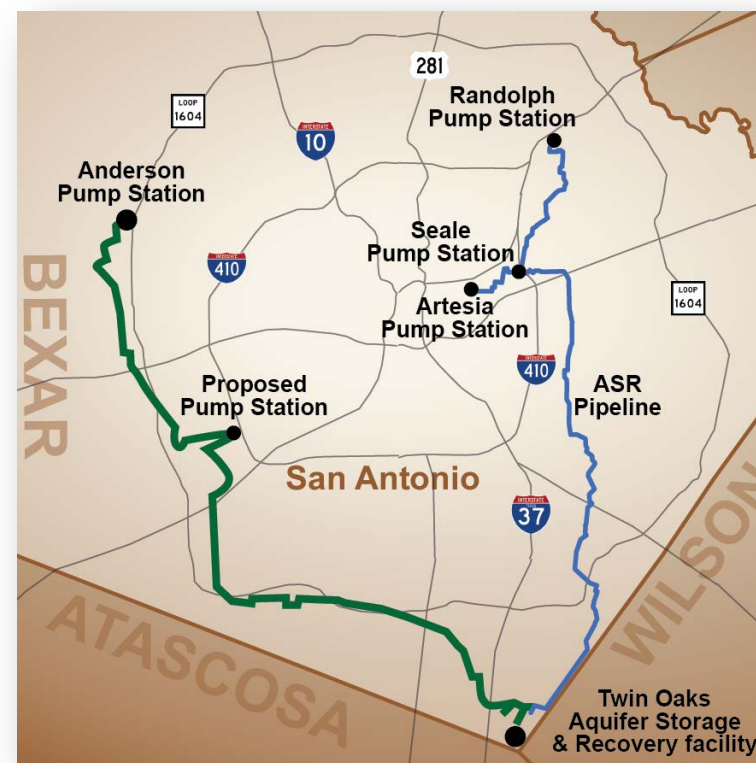
Expanded Carrizo

- Works in cooperation with the ASR Local Carrizo off-site wells
- Will utilize property owned by SAWS
- **\$29.4 million** estimated pre-2023 CIP
 - \$0 million pre-2014 CIP
 - \$29.4 million 2014-2023 CIP
- 14,000 AFY supply in 2023, or **39,900 EDUs**
- Capital Cost = \$737 per EDU

SAWS Planned Water Resources

Water Resources Integration Pipeline (WRIP)

- 45-mile integration pipeline
 - Phase I complete by 2016
 - Phase II complete by 2022
- **\$235.7 million** estimated pre-2023 CIP
 - \$29.2 million pre-2014 CIP
 - \$206.5 million 2014-2023 CIP
- Provides flexibility for transport of existing and future Twin Oaks supplies
- Cost prorated between ASR, desalination, local & expanded Carrizo



Water Supply Impact Fee Calculation

2014 to 2023 WATER SUPPLY IMPACT FEE STUDY

	CAPITAL COST			Total Capacity			Existing			2014-2023			Post 2023		
	Pre-2014	2014-2023	Total	Acre Feet	MGD	Total EDUs	Total EDUs	% Capacity	Cost Share	Total EDUs	% Capacity	Cost Share	EDUs	% Capacity	Cost Share
Existing Projects															
Average Existing Edwards	\$ 234,035,444		\$ 234,035,444	215,477	192.4	614,109	598,949	97.5%	\$ 228,257,902	15,160	2.5%	\$ 5,777,543		0%	\$ -
Local Carrizo	\$ 14,823,566	\$ -	\$ 14,823,566	7,400	6.6	21,090	20,569	97.5%	\$ 14,457,623	521	2.5%	\$ 365,944		0%	\$ -
Trinity-WECO, Oliver Ranch, BSR	\$ 12,488,536	\$ -	\$ 12,488,536	6,760	6.0	19,266	18,790	97.5%	\$ 12,180,236	476	2.5%	\$ 308,300		0%	\$ -
GBRA-Western Canyon	\$ 14,179,261	\$ -	\$ 14,179,261	9,470	8.5	26,991	26,324	97.5%	\$ 13,829,223	666	2.5%	\$ 350,038		0%	\$ -
CRWA	\$ -	\$ -	\$ -	6,550	5.8	18,668	18,207	97.5%	\$ -	461	2.5%	\$ -		0%	\$ -
Medina System Surface Water	\$ 18,700,000	\$ -	\$ 18,700,000	5,350	4.8	15,248	14,871	97.5%	\$ 18,238,360	376	2.5%	\$ 461,640		0%	\$ -
Total Existing Projects	\$ 294,226,807	\$ -	\$ 294,226,807	251,007	224.1	715,371	697,711	97.5%	\$ 286,963,344	17,660	2.5%	\$ 7,263,464	-	0%	\$ -
2014 to 2023 Projects															
Average New Edwards		\$ 44,121,763	\$ 44,121,763	7,106	6.3	20,253	-	0%	\$ -	10,773	53.2%	\$ 23,468,175	9,481	46.8%	\$ 20,653,588
Regional Carrizo/SSLGC Delivery	\$ 124,146,817		\$ 124,146,817	13,138	11.7	37,443	-	0%	\$ -	19,916	53.2%	\$ 66,033,155	17,527	46.8%	\$ 58,113,662
Desalination 2015 & 2021	\$ 188,433,050	\$ 92,102,641	\$ 280,535,691	24,420	21.8	69,597	-	0%	\$ -	37,018	53.2%	\$ 149,215,720	32,579	46.8%	\$ 131,319,970
Expanded Carrizo 2017 & 2022	\$ -	\$ 29,392,069	\$ 29,392,069	14,000	12.5	39,900	-	0%	\$ -	21,223	53.2%	\$ 15,633,514	18,677	46.8%	\$ 13,758,555
Integration Pipeline	\$ 29,236,925	\$ 206,458,843	\$ 235,695,768		0.0	-	-	39%	\$ 91,155,477		24.9%	\$ 58,711,936	0	36.4%	\$ 85,828,354
Total 2014 to 2023 Projects	\$ 341,816,791	\$ 372,075,316	\$ 713,892,107	51,558	46	146,940	-	0%	\$ 91,155,477	78,157	53.2%	\$ 313,062,501	68,783	46.8%	\$ 309,674,129
TOTALS	\$ 636,043,598	\$ 372,075,316	\$ 1,008,118,914	302,565	270	862,311	697,711		\$ 378,118,821	95,817		\$ 320,325,965	68,783		\$ 309,674,129

Assumptions:

1. 1 EDU = 313 gallons/day (gpd)
2. Conservation programming @ 135 gpcd * 2.3 people/EDU = 310.5 gpd/edu
3. 1 acre foot = 2.85 EDUs
4. Integration pipeline 75MGD capacity allocated as: ASR, desalination, local & expanded carrizo.
The total pipeline cost is prorated based on 22.4 MGD Edwards(ASR), 6.6 MGD Local Carrizo, 21.8 MGD Desalination, 12.5 MGD expanded Carrizo.
plus 11.7 MGD for remaining phases of desalination & expanded Carrizo for post 2023 customers.
5. Existing supplies based on average estimated from 2014 to 2023 assuming drought of record during period.

Water Supply Impact Fee Calculation

Disclaimers

- Capital figures presented here represent all capital costs prior to 2023. Some projects have capital costs after 2023, which is why capital figures might be different from previous water supply presentations, which included total capital costs for entire project.

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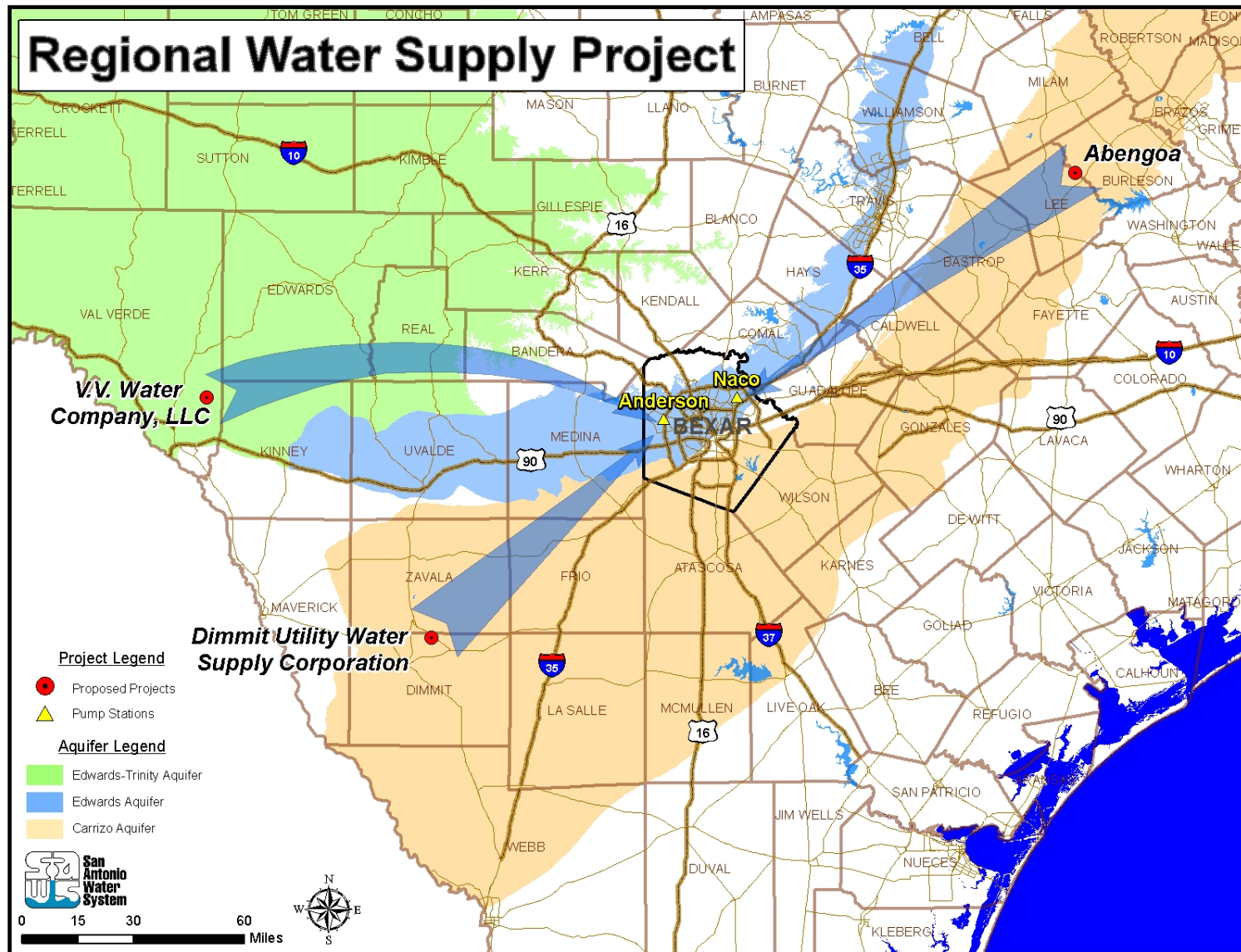
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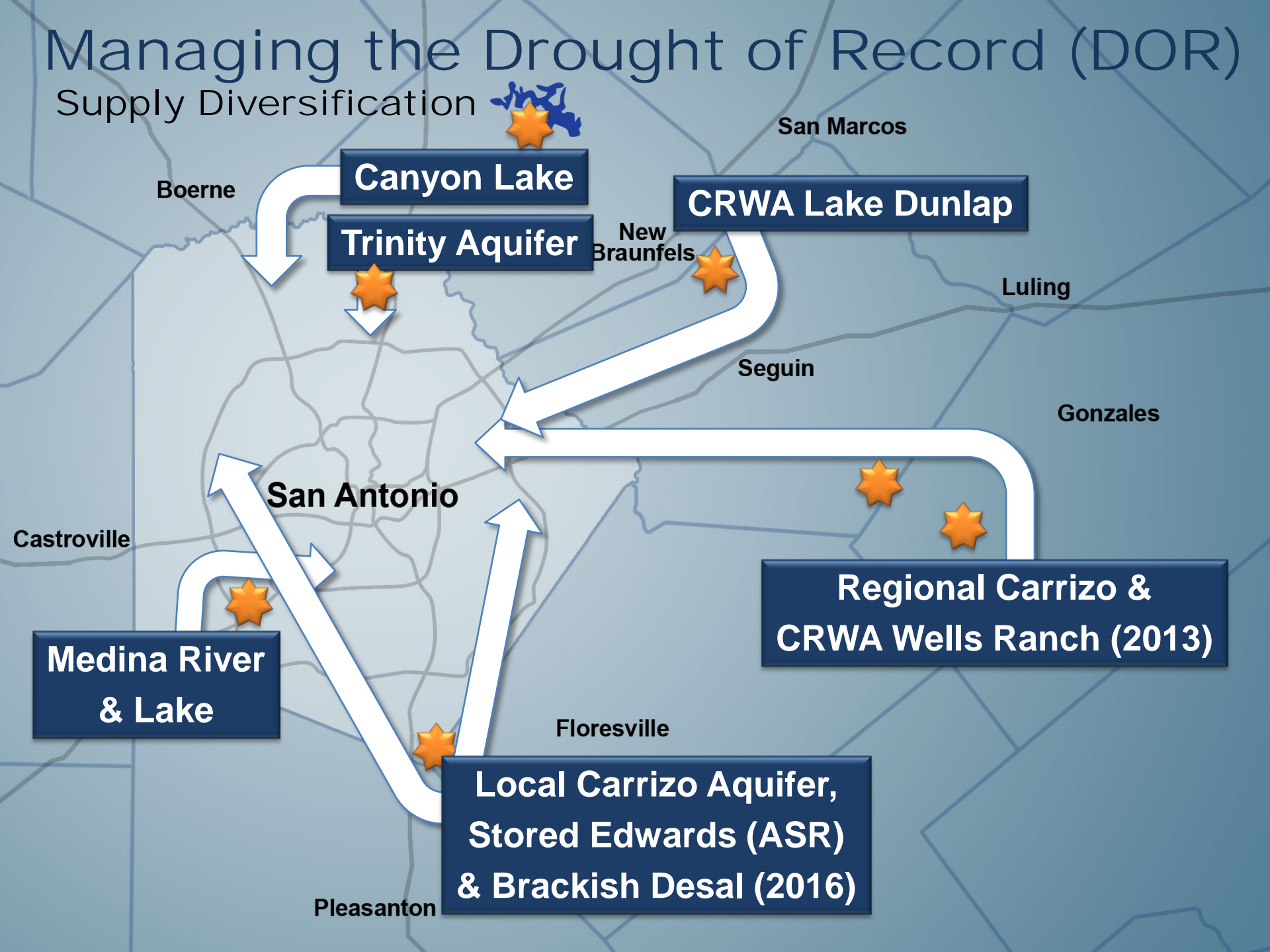
Capital Improvements Advisory Committee





Managing the Drought of Record (DOR)

Supply Diversification



Canyon Lake

Trinity Aquifer

CRWA Lake Dunlap

San Marcos

Boerne

New Braunfels

Luling

Seguin

Gonzales

San Antonio

Castroville

**Medina River
& Lake**

**Regional Carrizo &
CRWA Wells Ranch (2013)**

Floresville

**Local Carrizo Aquifer,
Stored Edwards (ASR)
& Brackish Desal (2016)**

Pleasanton

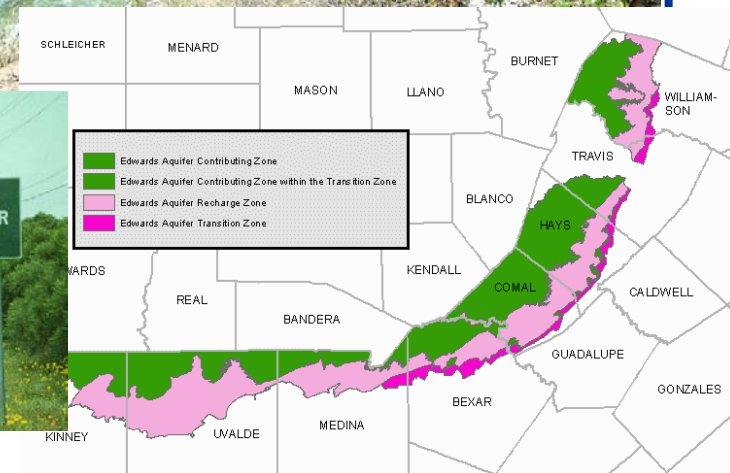
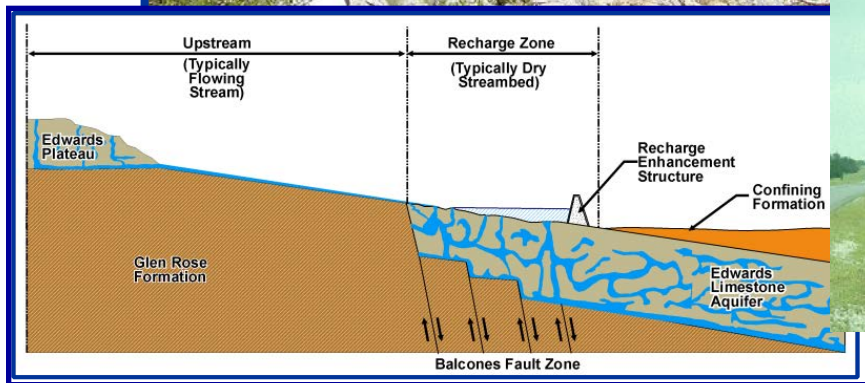
Regional Water Supply Project

Integration

- Map
- Calculations

SAWS Current Water Resources

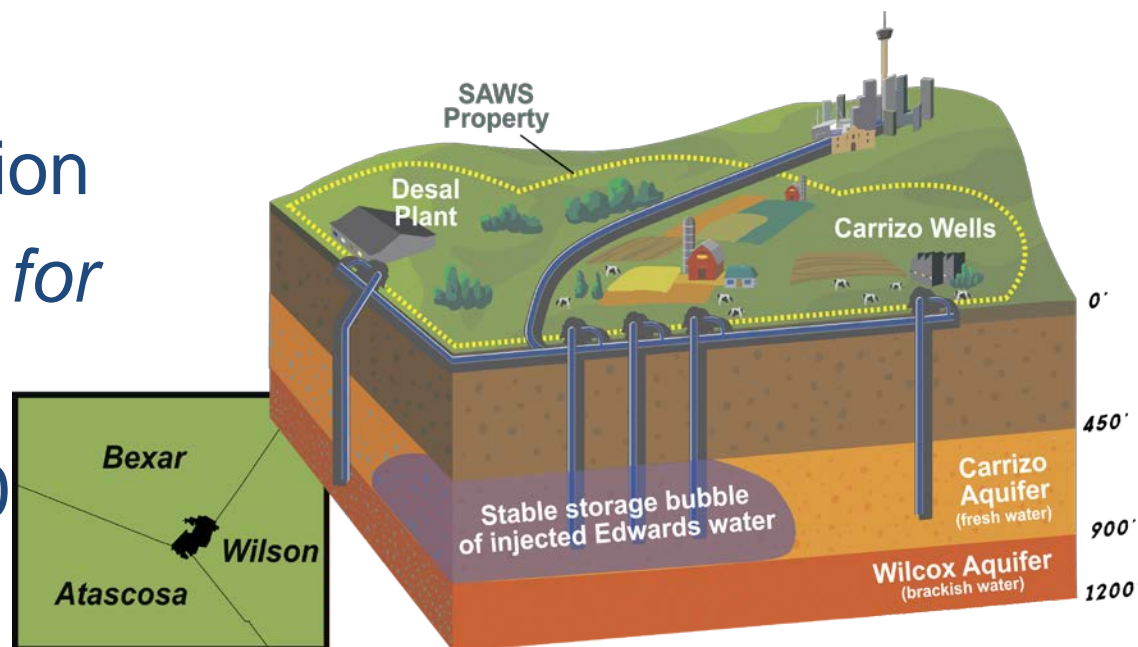
Edwards Aquifer



SAWS Current Water Resources

Twin Oaks Facility

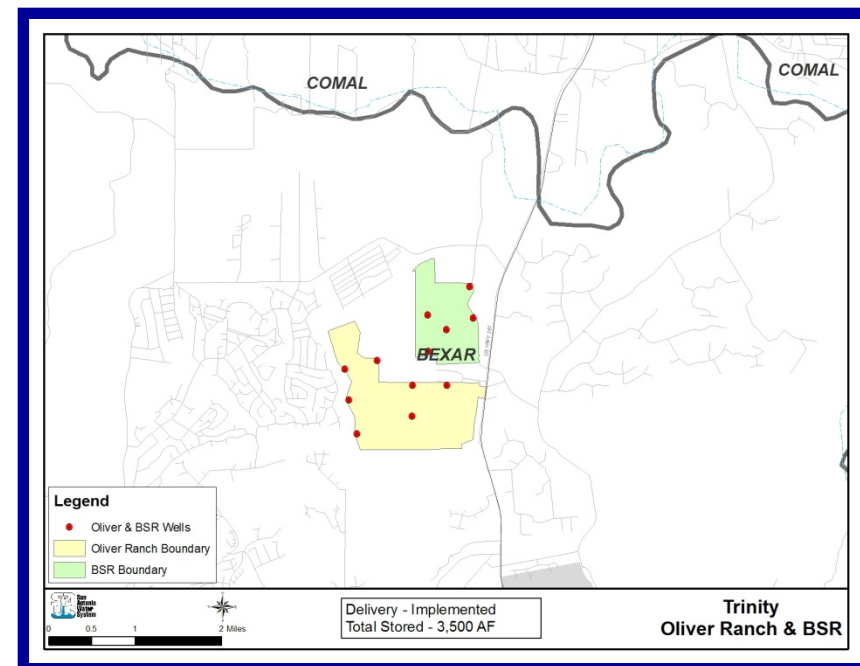
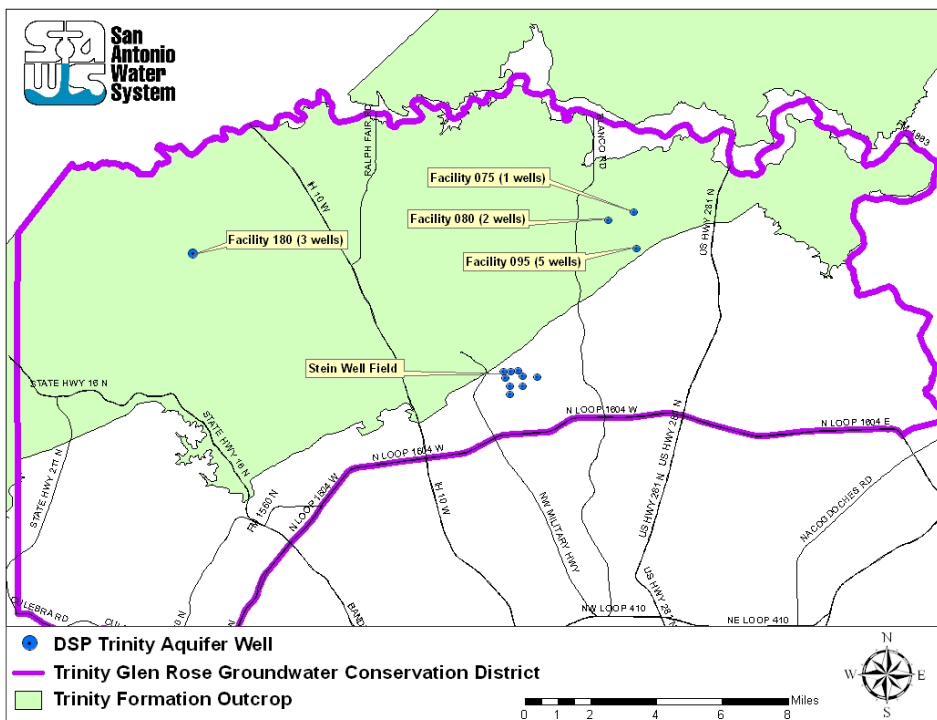
- ASR
 - 3rd-Largest in Nation
 - “Savings account for a sunny day”
 - Currently ~80,000 acre-feet (AF) in storage, or six months of supply
- Local Carrizo
 - Additional 7,400 acre-feet per year (AFY)



SAWS Current Water Resources

Trinity Aquifer

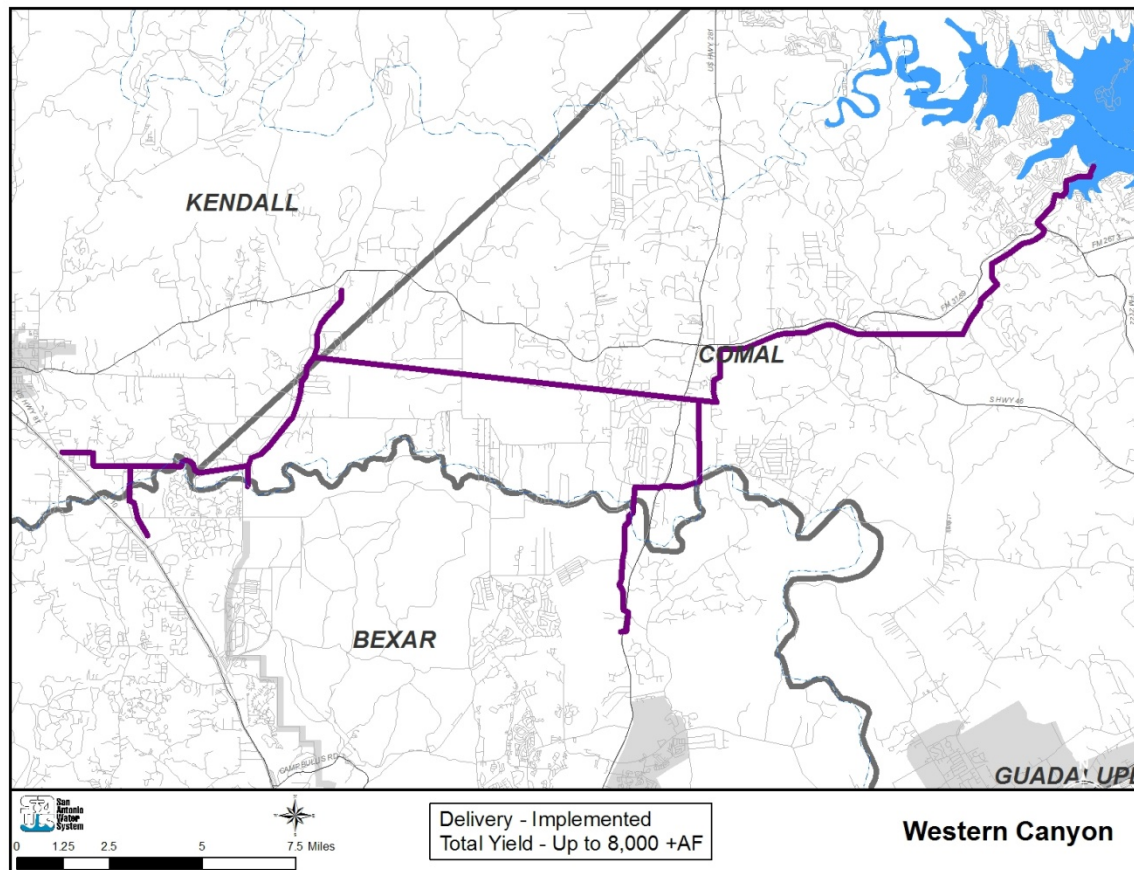
- WECO Stein Tract/Rogers Tract
- DSP Trinity Aquifer wells



- Oliver Ranch: ~3,000 AFY
- BSR: ~500 AFY
- First Non-Edwards Supply for SAWS

SAWS Current Water Resources

Western Canyon



- Base 4,000 AFY (up to 11,000 AFY)
- 2005 – 2007
- First surface-water supply for SAWS
- Supplies north San Antonio
- Contract currently expires in 2037

SAWS Current Water Resources

Canyon Regional Water Authority (CRWA)

- Lake Dunlap – 4,000 AFY*
- Wells Ranch – 2,800 AFY (Carrizo)
- Total – 6,800 AFY*
- Supply Assumptions
 - *500 AFY lease to Cibolo through 2018
 - Lake Dunlap supply may go away in 2024 as per agreement with Guadalupe-Blanco River Authority
 - Agreement with Canyon Regional Water Authority concerning Wells Ranch expires in 2047, extendable

SAWS Current Water Resources

Medina Lake

- Inherited from Bexar Met
- SAWS Lease from BMA = 19,974 AFY
- SAWS Run-of-River Rights = ~9,000 AFY
- SAWS Treatment Capacity = ~13,000 AFY



photo courtesy of Gregg Eckhardt



Photo courtesy of Jim O'Connor

