



City of Seguin Water Supply Alternatives Analysis

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1/20/2026



Project Overview

Objective

- Identify and analyze new water supply alternative opportunities to supplement existing supplies

Primary Task

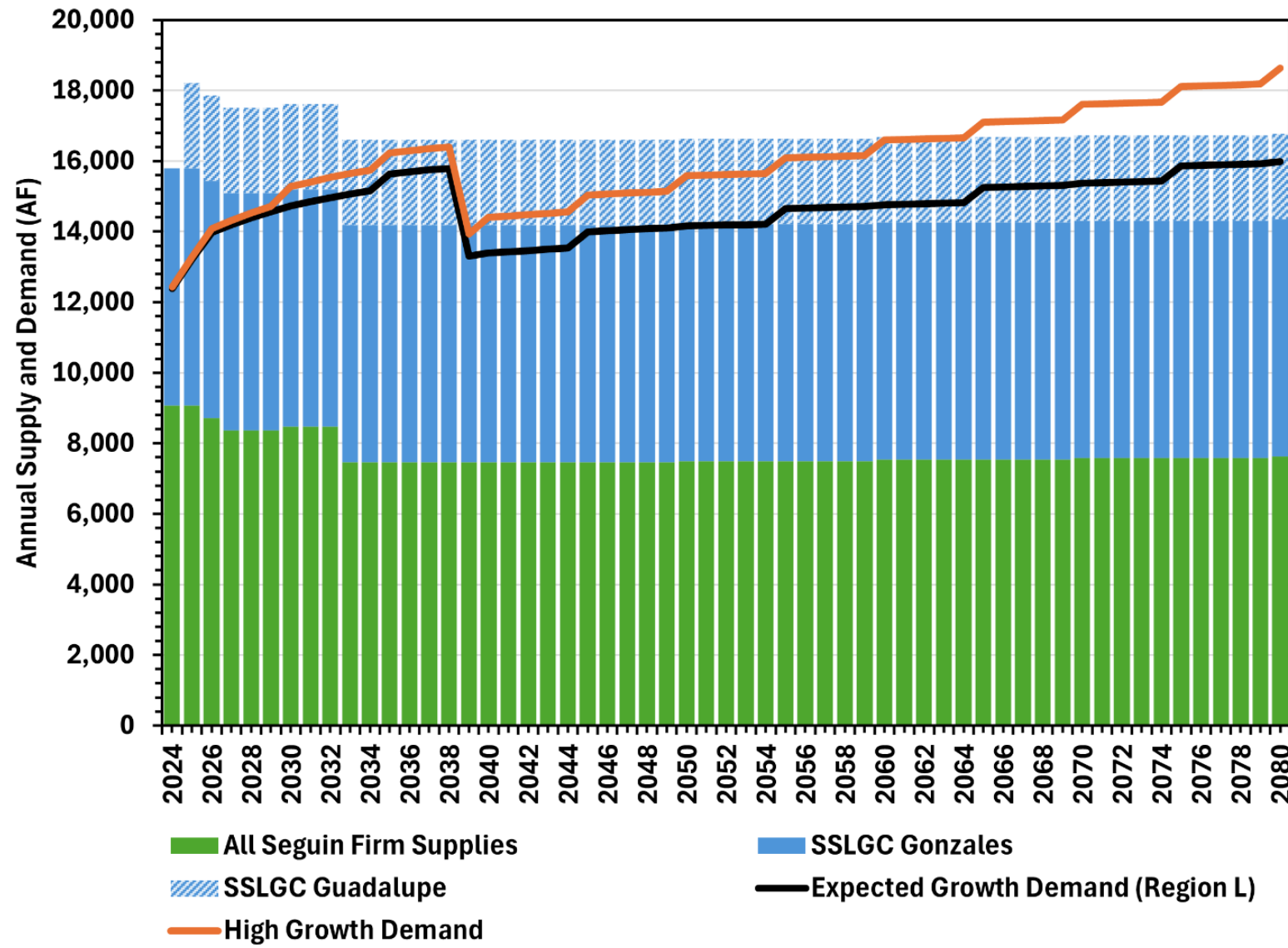
- Identify water management strategies
 - Estimate firm yield
 - Develop planning level cost
 - Document conceptual layout of each strategy

Current Water Supplies

- Owned and Contracted
 - Surface water rights
 - Effluent
 - SSLGC developed groundwater supplies

Water Supply Source	Permitted Volume (AFY)	Long Term Firm Yield (AFY)
Seguin Surface Water Rights	7,200	7,200
GBRA Raw Water Agreement	1,000	0
Bed and Banks Permit	Up to 9,200	267-430
Reclaimed Water	700	0
Gonzales County	8,336	6,720
Guadalupe County	3,150	2,420
Yield	29,586	16,607 – 16,770

Current Supplies and Projected Demand



Water Supply Alternatives

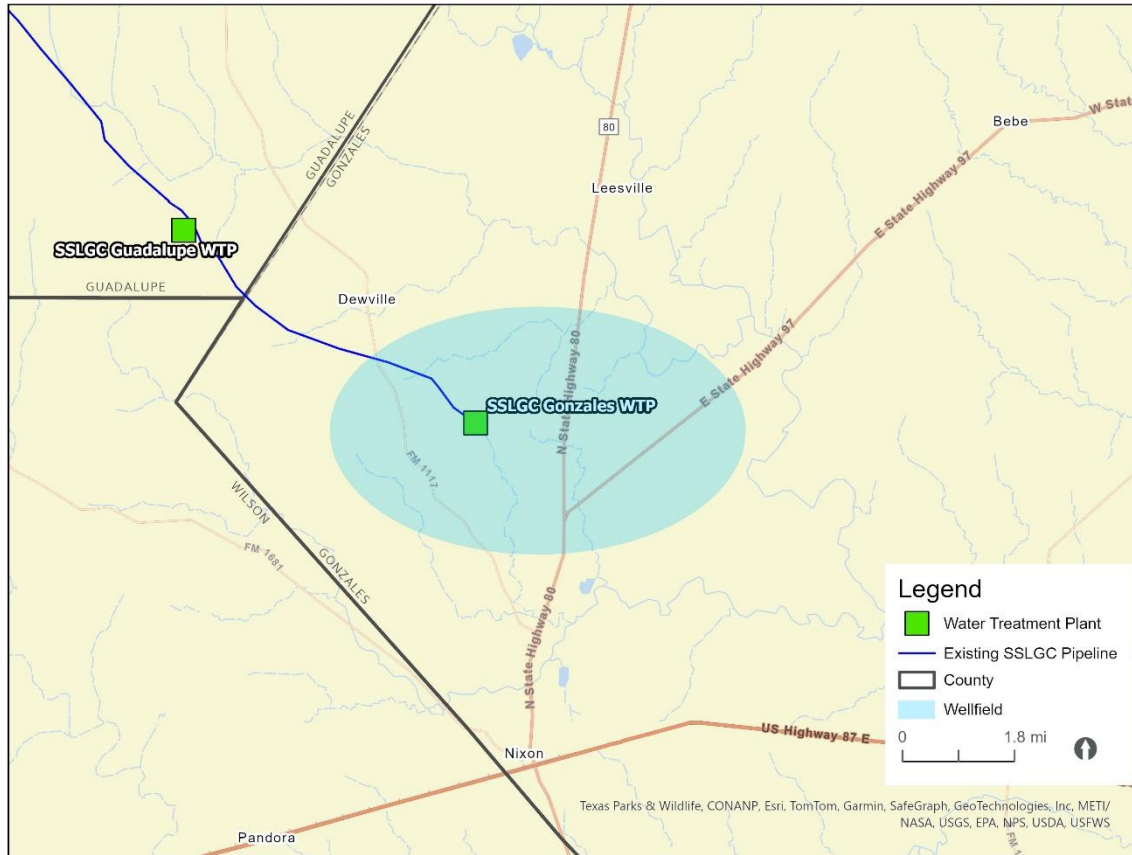
1. **1,616 AFY** – SSLGC – Gonzales County
2. **730 AFY** – SSLGC – Guadalupe County
3. **2,500 AFY** – SSLGC – Gonzales County Wilcox Aquifer Project
4. **5,000 AFY** – SSLGC – Wilson County Carrizo Aquifer Project
5. **5,000 AFY** – GBRA – WaterSECURE Project
6. **3,363 AFY** – Seguin – Direct Potable Reuse Project
7. **1,000 AFY** – Seguin – Direct Reuse System
8. **8,900 AF** – Seguin – Aquifer Storage and Recovery
9. **500 AFY** – Seguin – Post Oak Well

Alternatives Evaluation

- Performed a planning level review
 - **Nine** water management strategies
 - Comparison summarizing the cost differences
- Estimated costs are planning-level, determined using the Texas Water Development Board's Uniform Costing Model
 - Costs are reported in April 2025 dollars

Alternatives Evaluation

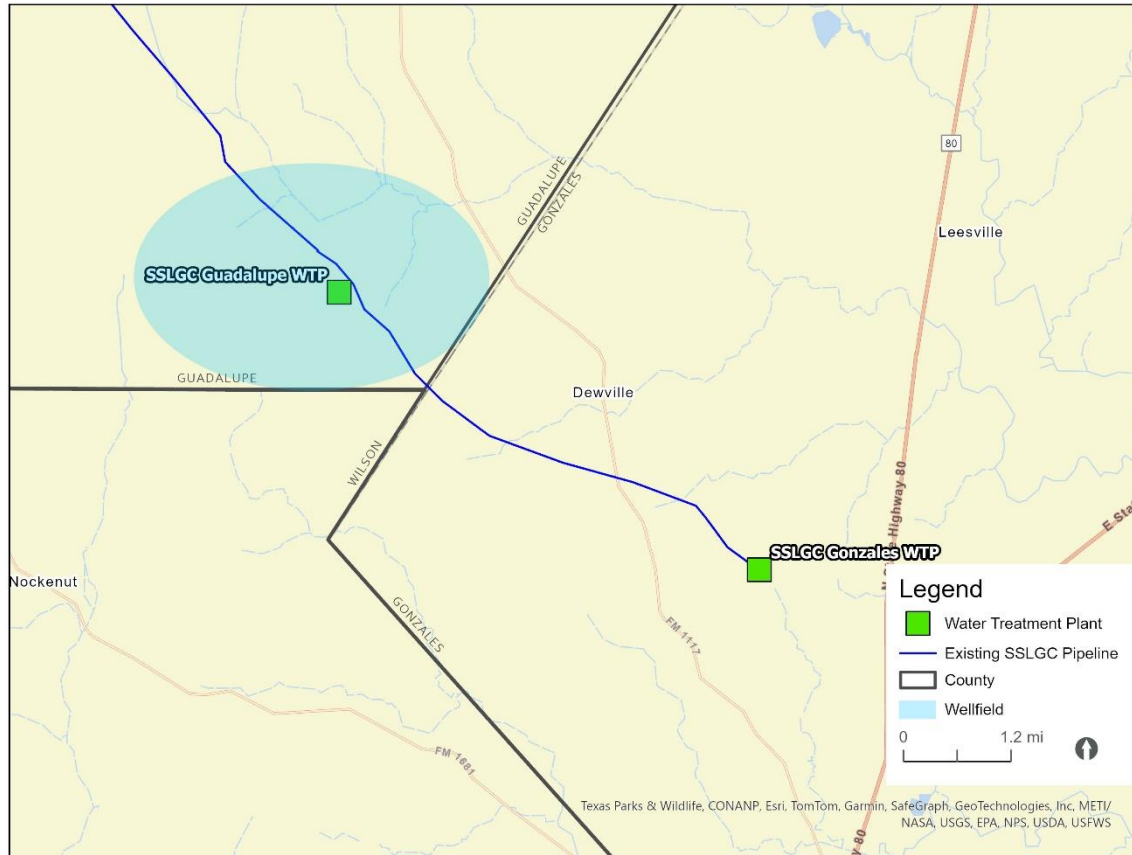
SSLGC – Gonzales County Project – 1,616 AFY



- Description:
 - Aggregate well production permit
 - Drill two additional Carrizo wells to produce full permit
- Costs:
 - Total Project Yield – 3,232 AFY
 - Seguin's Project Yield – **1,616 AFY**
 - Total Project Cost – \$9,968,000
 - Seguin's Project Cost – **\$4,984,000**
 - Annual Unit Cost – **\$282/AF**

Alternatives Evaluation

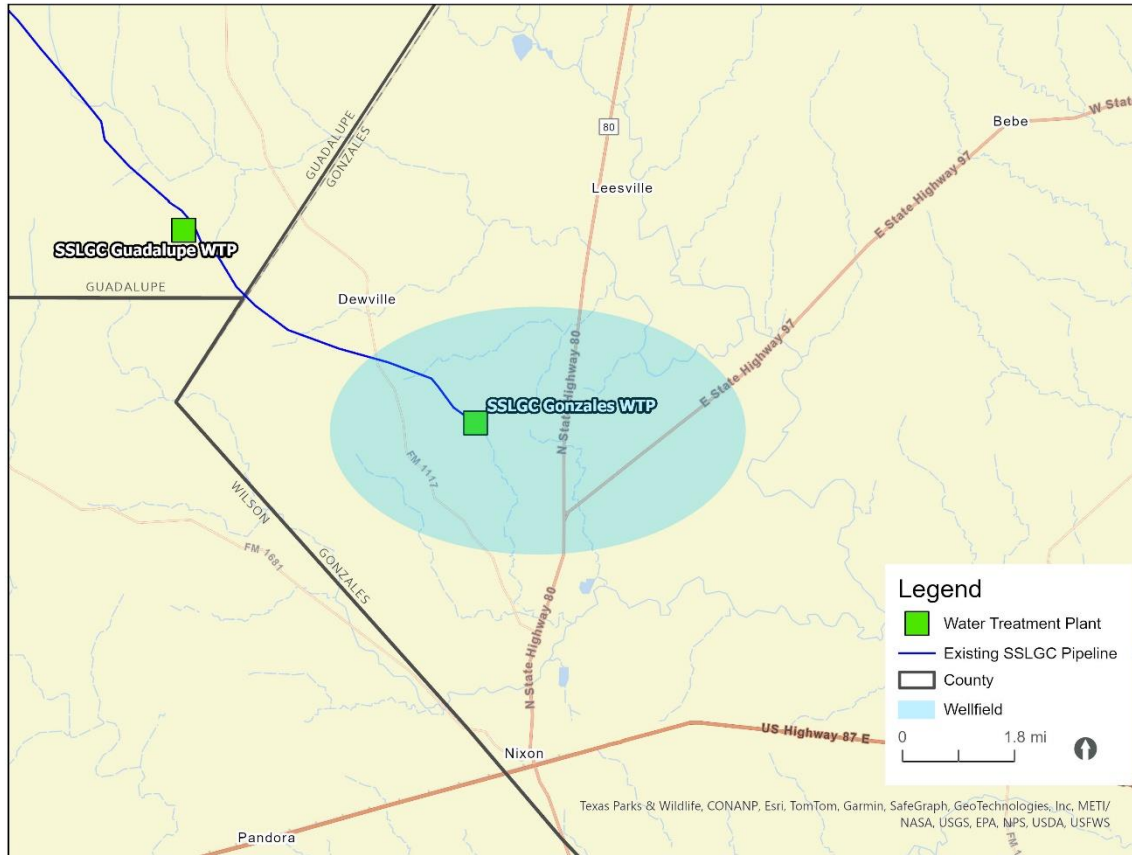
SSLGC – Guadalupe County Project – 730 AFY



- Description:
 - Drill additional Carrizo well to produce full permit
 - Drill additional Wilcox well for redundancy
- Costs:
 - Total Project Yield – 1,460 AFY
 - Seguin's Project Yield – **730 AFY**
 - Total Project Cost – \$13,500,000
 - Seguin's Project Cost – **\$6,750,000**
 - Annual Unit Cost – **\$748**

Alternatives Evaluation

SSLGC – Gonzales County Wilcox Project – 2,500 AFY



- Description:
 - 7 additional brackish Wilcox Aquifer wells
 - Obtain production permits
 - 5 MGD expansion of existing WTP
- Costs:
 - Total Project Yield – 5,000 AFY
 - Seguin's Project Yield – **2,500 AFY**
 - Total Project Cost – \$61,116,000
 - Seguin's Project Cost – **\$30,558,000**
 - Annual Unit Cost – **\$1,197**

Alternatives Evaluation

SSLGC – Wilson County Carrizo Aquifer Project – 5,000 AFY



- Description:
 - Wilson County wellfield
 - Wellfield includes 8 wells, includes well redundancy
 - 12 MGD expansion of the existing SSLGC Guadalupe WTP
- Costs:
 - Total Project Yield – 10,000 AFY
 - Seguin's Project Yield – **5,000 AFY**
 - Total Project Cost – \$126,266,000
 - Seguin's Project Cost – **\$63,133,000**
 - Annual Unit Cost – **\$1,251**

Alternatives Evaluation

SSLGC Water Supply Alternatives

Strategy	Supply Yield (AFY)	Total Project Cost	Annual Cost	Annual Unit Cost (\$/AF)
SSLGC – Gonzales County	1,616 (3,232) ¹	\$4,984,000 (\$9,968,000) ²	\$455,000 (\$910,000) ³	\$282
SSLGC – Guadalupe County – Carrizo + Wilcox Aquifers	730 (1,460) ¹	\$6,750,000 (\$13,500,000) ²	\$546,500 (1,093,000) ³	\$748
SSLGC – Gonzales County Wilcox Aquifer Project	2,500 (5,000) ¹	\$30,558,000 (\$61,116,000) ²	\$2,993,500 (\$5,987,000) ³	\$1,197
SSLGC – Wilson County Carrizo Aquifer Project	5,000 (10,000) ¹	\$63,133,000 (\$126,266,000) ²	\$6,255,500 (\$12,511,000) ³	\$1,251
Total for SSLGC Projects	9,846 (19,692)¹	\$105,425,000 (\$210,850,000)²	\$10,250,500 (\$20,501,000)³	\$1,041

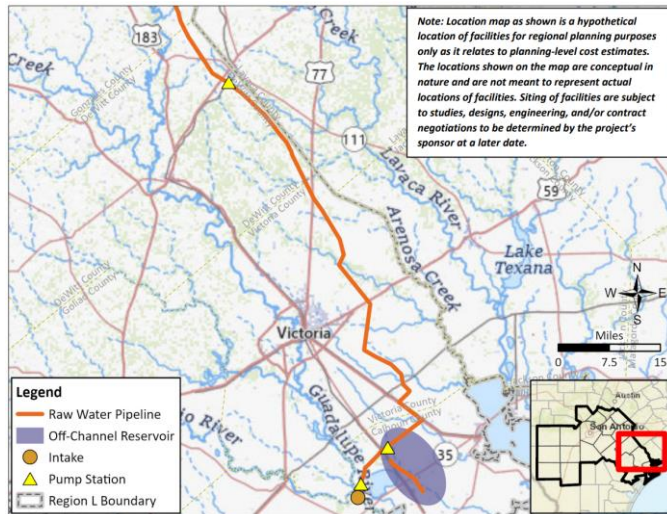
¹ Total supply yield available to SSLGC.

² Total project costs that will be covered by both the City of Seguin and the City of Schertz.

³ Total annual cost that will be covered by both the City of Seguin and the City of Schertz.

Alternatives Evaluation

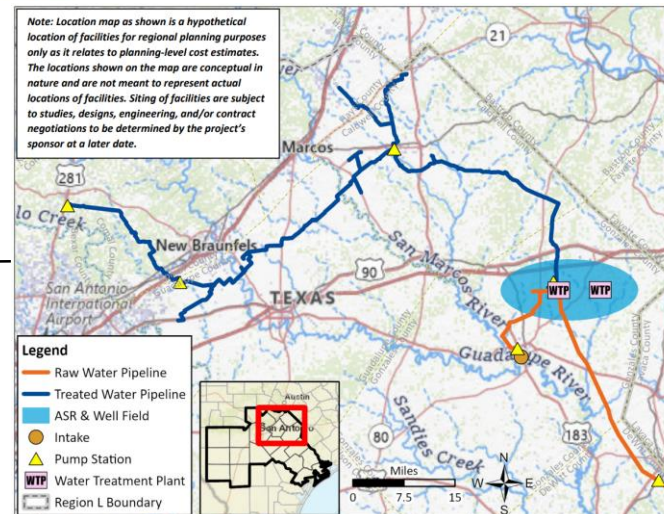
GBRA – WaterSECURE Project – 5,000 AFY



Lower Basin Portion

(Map sourced from TWDB, 2025, 2026 South Central Texas (Region L) Regional Water Plan, Initially Prepared Plan)

Mid-Basin Portion

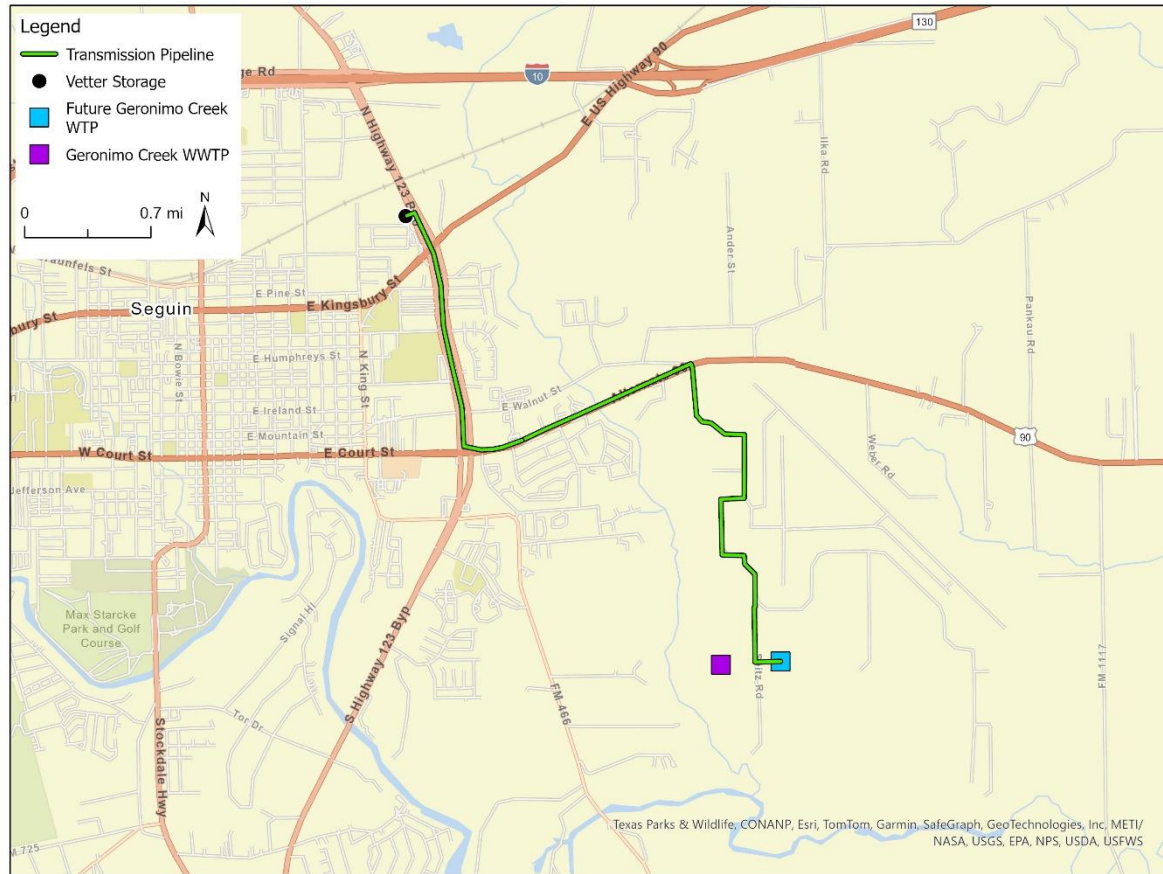


(Map sourced from TWDB, 2025, 2026 South Central Texas (Region L) Regional Water Plan, Initially Prepared Plan)

- Description:
 - Combined raw and treated water project using existing GBRA owned supplies
 - City entered into a MOU with GBRA in May 2025 that identifies 5,000 AFY of treated water for Seguin
 - Costs for WaterSECURE were provided to Seguin by GBRA.
- Costs:
 - Project Yield – 5,000 AFY
 - Total Project Cost – \$6,144,024,610
 - Annual Unit Cost – **\$3,780 – \$5,228**
 - Does not include O&M cost

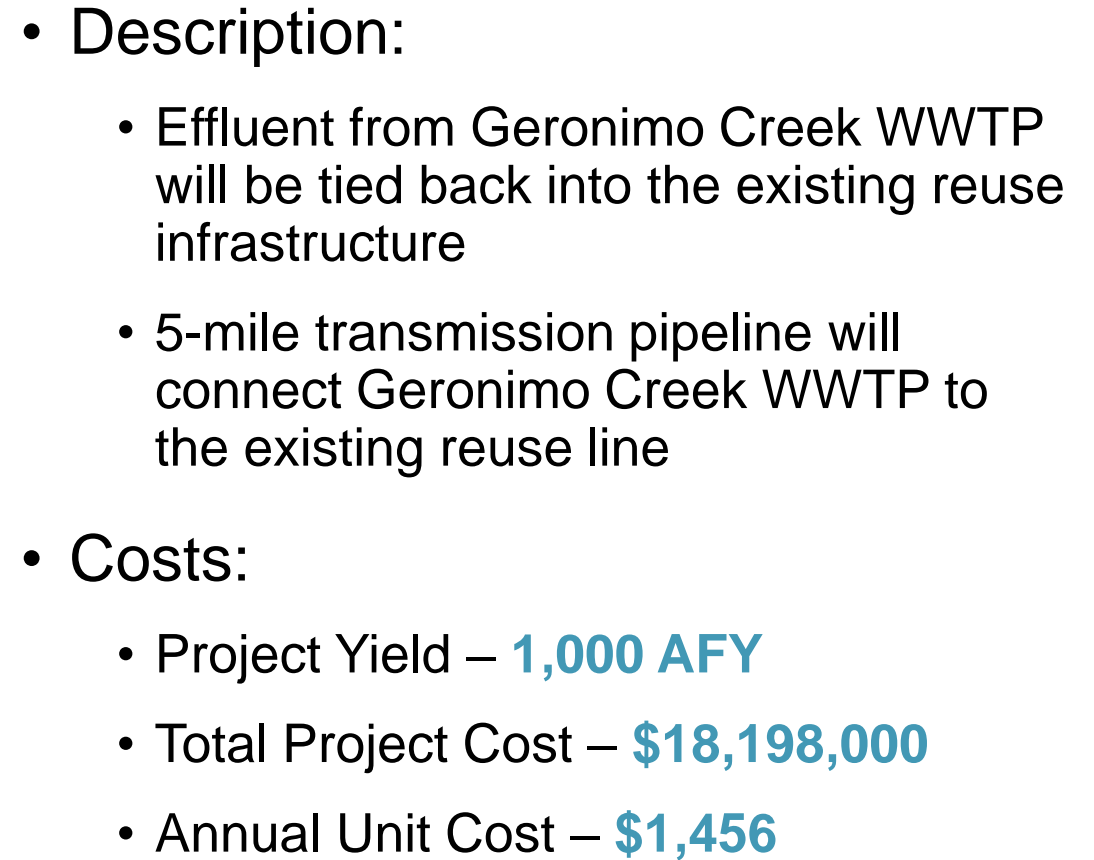
Alternatives Evaluation

Direct Potable Reuse Project – 3,363 AFY



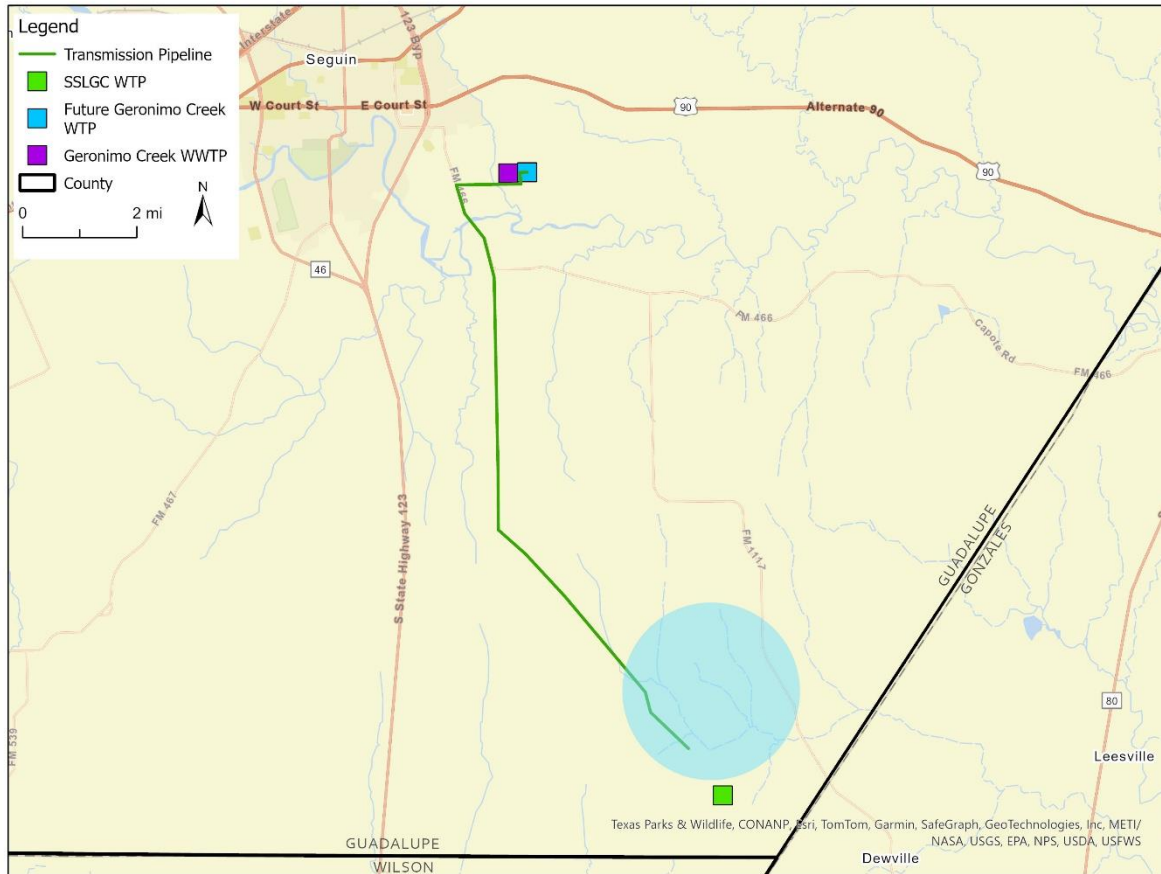
- Description:
 - Build DPR treatment facility near Geronimo Creek WWTP
 - Deliver treated effluent to the Vetter ground storage tank to blend with existing supplies
 - Carbon-based treatment at DPR facility
- Costs:
 - Project Yield – **3,363 AFY**
 - Total Project Cost – **\$73,735,000**
 - Annual Unit Cost – **\$2,527**

Direct Reuse System – 1,000 AFY



Alternatives Evaluation

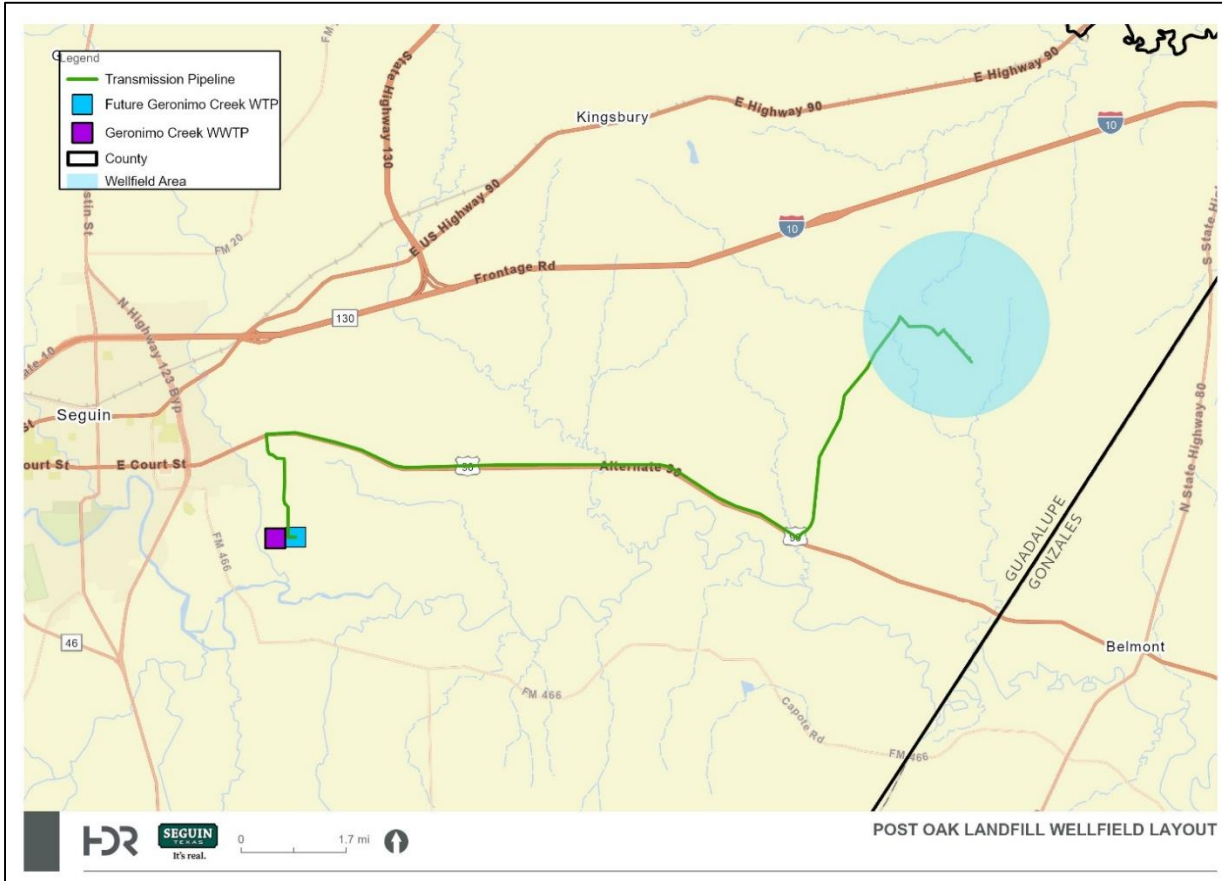
Aquifer Storage and Recovery



- Description:
 - Water from new DPR facility will be delivered to ASR wellfield located upgradient of the SSLGC Guadalupe Wellfield
 - Recovered ASR water treated at the SSLGC Guadalupe WTP
 - Delivered back to DPR facility, and introduced into the distribution system
 - Wellfield includes 12 ASR Carrizo wells
 - Project includes expansion of SSLGC Guadalupe WTP
- Costs:
 - Project Storage Yield – **8,900 AF**
 - Planned Annual Yields –
 - Injection – **2,240 AF**
 - Recovery – **2,020 AF**
 - Annual Total Project Cost – **\$128,780,000**

Alternatives Evaluation

Post Oak Well – 500 AFY



- Description:

- Drill 5 Wilcox wells at the Post Oak Landfill, each with an average capacity of 80 gpm
- Deliver water produced at wellfield to a new Geronimo Creek WTP via a 16-mile transmission pipeline

- Costs:

- Project Yield – **500 AFY**
- Total Project Cost – **\$39,071,000**
- Annual Unit Cost – **\$6,792**

Alternatives Overview

Strategy	Supply Yield (AFY)	Total Project Cost	Annual Cost	Annual Unit Cost (\$/AF)
SSLGC – Gonzales County	1,616 (3,232) ¹	\$4,984,000 (\$9,968,000) ²	\$455,000 (\$910,000) ³	\$282
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Total for SSLGC Projects	9,846 (19,692)¹	\$105,425,000 (\$210,850,000)²	\$10,250,500 (\$20,501,000)³	\$1,041
GBRA – WaterSECURE Project ⁴	5,000	\$6,144,024,610	\$21,173,635- \$29,293,835	\$3,780 – \$5,228 ⁵
Seguin – Direct Potable Reuse Project	3,363	\$73,735,000	\$8,498,000	\$2,527
Seguin – Direct Reuse System	1,000	\$18,198,000	\$1,456,000	\$1,456
Seguin – Aquifer Storage and Recovery	8,900 (Planned Storage Volume)	\$128,780,000	\$11,392,000	-
Seguin – Post Oak Landfill Well	500	\$39,071,000	\$3,396,000	\$6,792

¹ Total supply yield available to SSLGC.

² Total project costs that will be covered by both the City of Seguin and the City of Schertz.

³ Total annual cost that will be covered by both the City of Seguin and the City of Schertz.

⁴ Costs for WaterSECURE were provided to Seguin by GBRA.

⁵ Does not include operation and maintenance costs.

Summary

- 2 non-capital-related improvement projects through SSLGC
 - Permit amendments of existing supplies
- 2 new groundwater projects through SSLGC
- 1 regional project through GBRA
- 3 projects utilizing effluent that Seguin owns and controls
- 1 new groundwater project that Seguin can develop