

City of Rockport

Groundwater Supply Evaluation

City Council Meeting June 23, 2026



Scope of Work Overview

Groundwater Supply Evaluation



Evaluation of Groundwater
Supply Alternatives

Regulatory Requirements



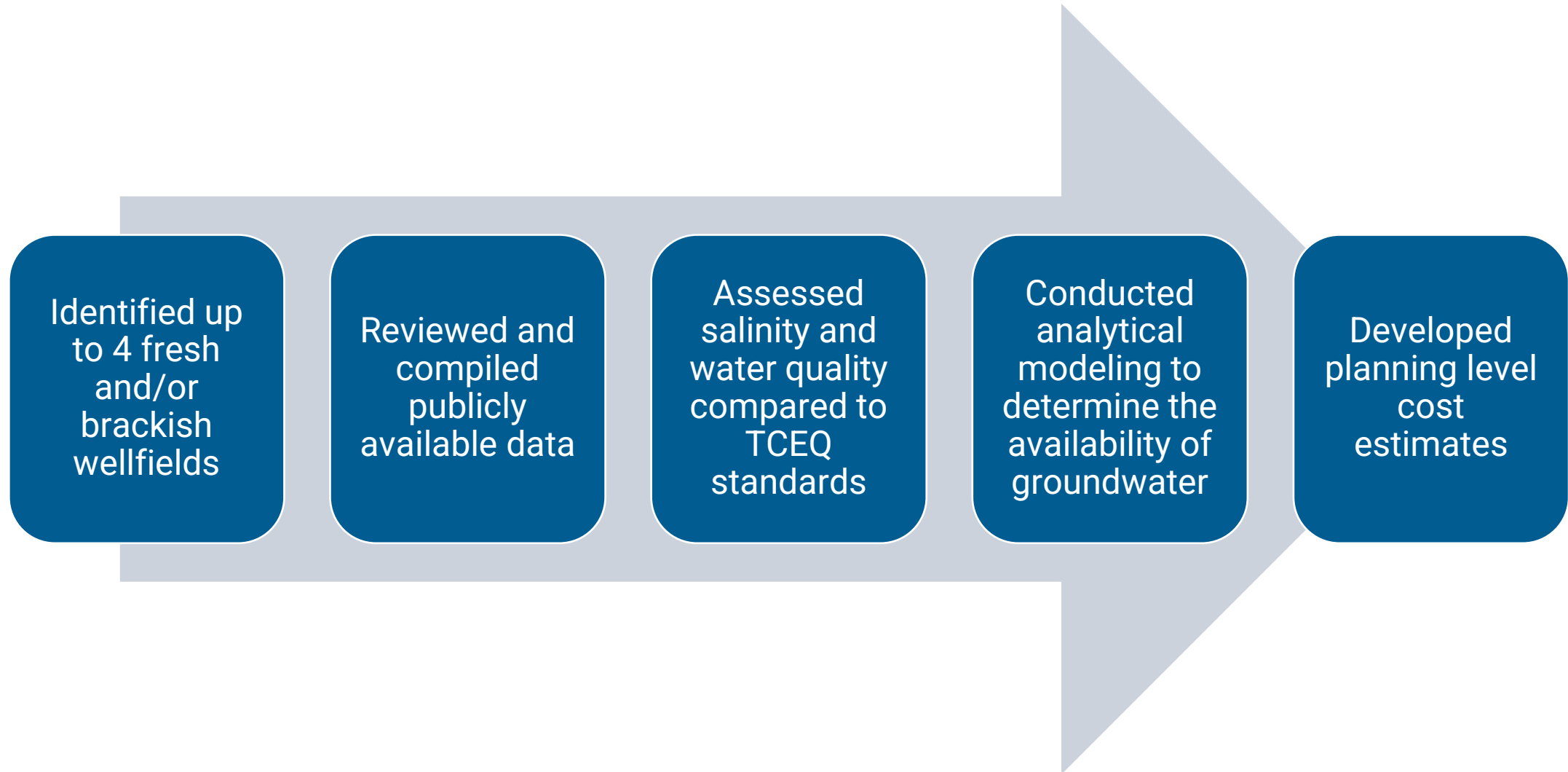
Water Quality Assessment

Planning Level Cost Estimates



Reporting and Discussion

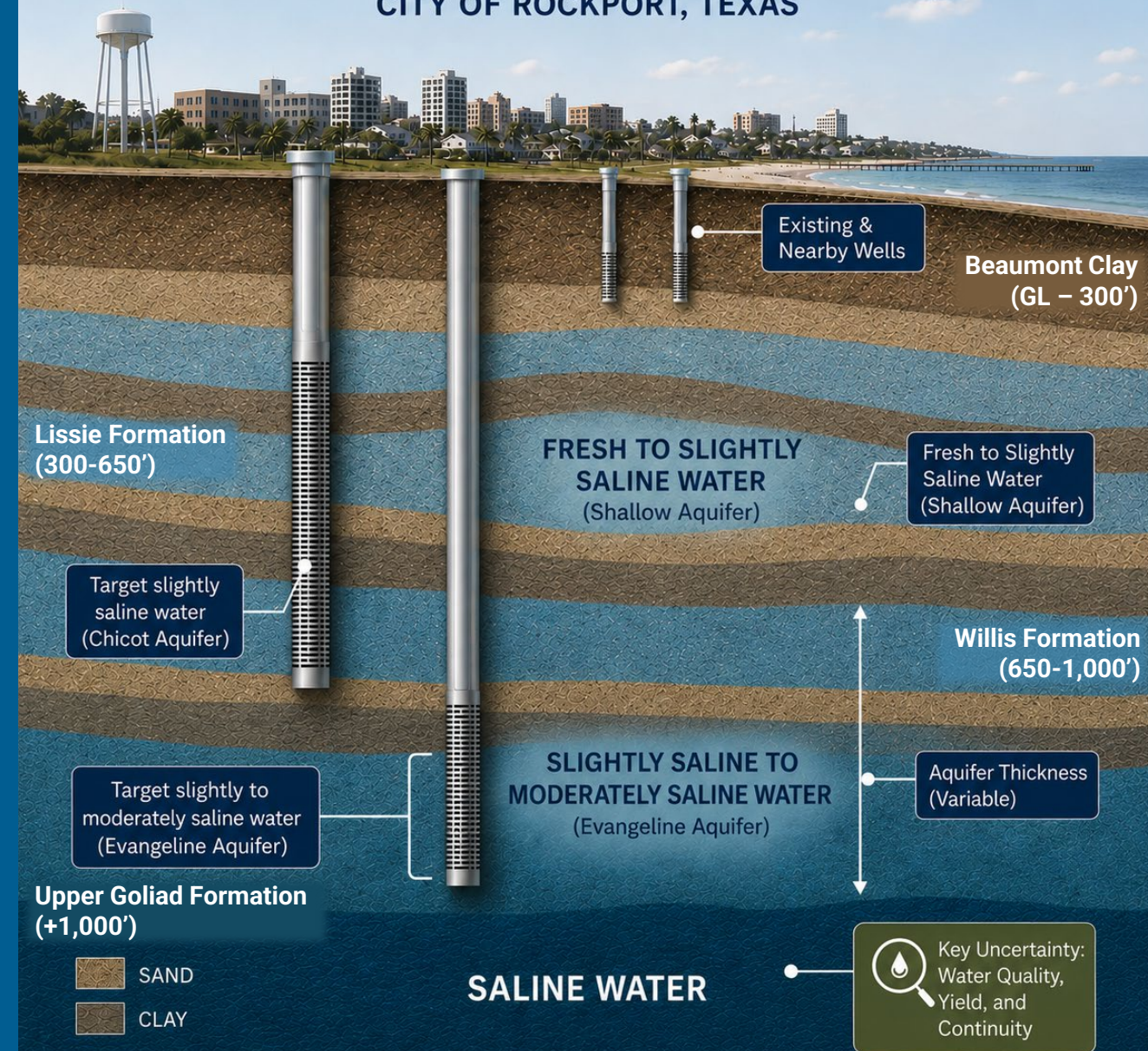
Evaluation of Groundwater Alternatives



Hydrogeologic Assessment

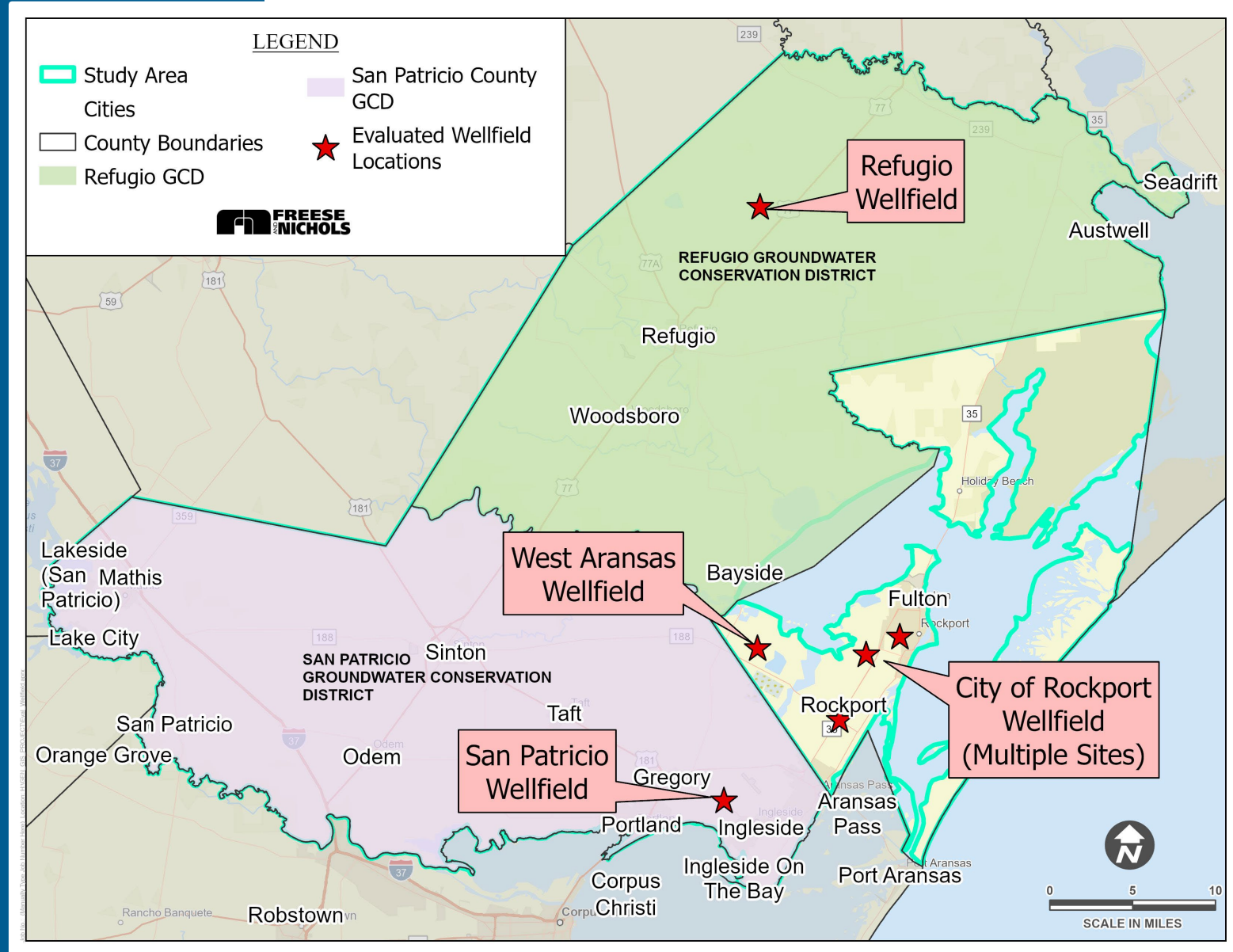
What's Underground?

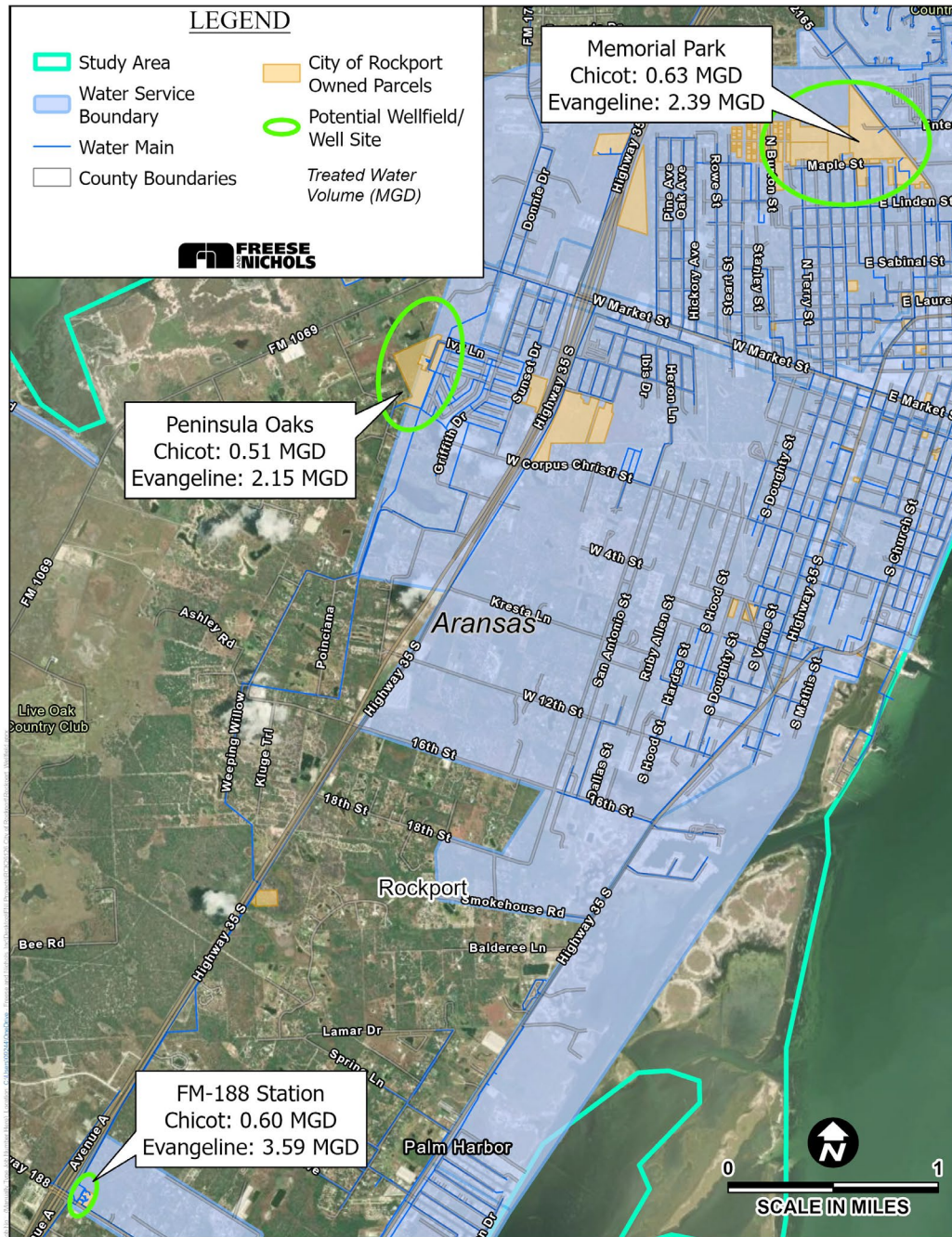
CITY OF ROCKPORT, TEXAS



Evaluated Wellfield Locations

Aransas, San Patricio, Refugio Counties





City of Rockport (Aransas County)

Potential Wellfield Locations:

- Peninsula Oaks Pump Station
- FM-188 Pump Station
- Memorial Park

Chicot Wellfields:

- Treated Water: 0.51-0.63 MGD (2 Wells)
- Well Depths: 550-600 feet
- TDS: 1,000-3,000 mg/L (slightly-saline)

Evangeline Wellfields:

- Treated Water: 2.15-3.59 MGD (2-3 Wells)
- Well Depths: 1,200-1,290 feet
- TDS: 3,000-10,000 mg/L (moderately-saline)

West Aransas (Aransas County)

Potential Wellfield Location:

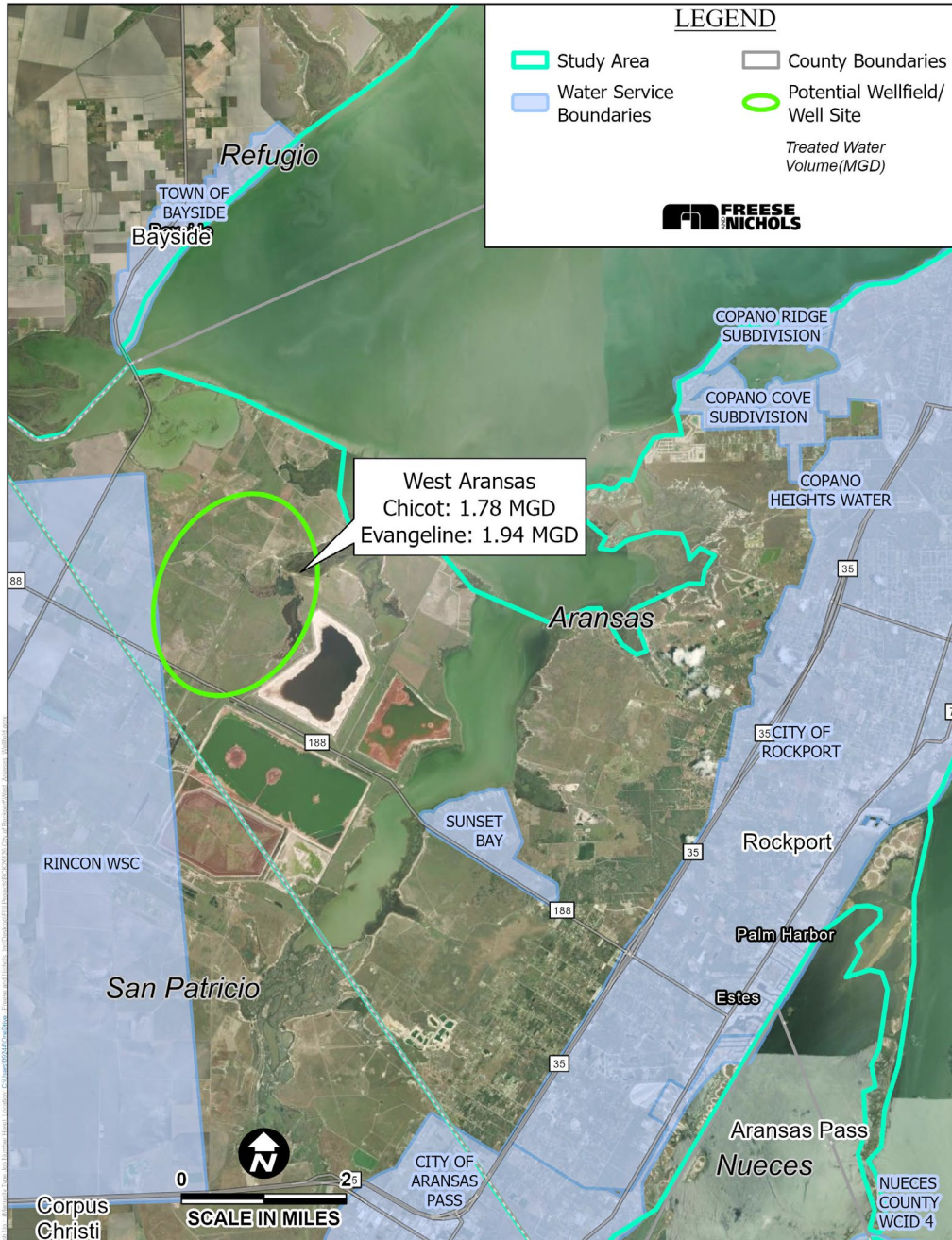
- Located off FM-188 in West Aransas County

Chicot Wellfield:

- Treated Water: 1.78 MGD (4 Wells)
- Well Depths: 375 feet
- TDS: 1,000-3,000 mg/L (slightly-saline)

Evangeline Wellfield:

- Treated Water: 1.94 MGD (2 Wells)
- Well Depths: 1,000 feet
- TDS: 1,000-3,000 mg/L (slightly-saline)



Planning Level Cost Estimates

Chicot Wellfield	Treated Water (MGD)	Capital Cost	Annual \$/1,000 gal (with debt)	Annual \$/1,000 gal (without debt)
Peninsula Oaks	0.53	\$14.97M	\$13.08	\$7.62
Memorial Park	0.66	\$18.19M	\$12.98	\$7.69
FM-188	0.65	\$20.62M	\$15.33	\$9.23
West Aransas	1.86	\$58.9M	\$13.48	\$7.37

Evangeline Wellfield	Treated Water (MGD)	Capital Cost	Annual \$/1,000 gal (with debt)	Annual \$/1,000 gal (without debt)
Peninsula Oaks	2.24	\$57.68M	\$13.59	\$8.64
Memorial Park	2.49	\$60.81M	\$12.89	\$8.19
FM-188	3.74	\$76.26M	\$10.71	\$6.78
West Aransas	2.02	\$68.51M	\$15.16	\$8.61

**Developed using TWDB UCM. Does not include injection well or brine disposal costs*

Conclusions

- Local groundwater resources are available to meet the City's demands of 3 to 5 MGD
- Groundwater is slightly to moderately saline and will require treatment to comply with TCEQ drinking water standards
- Wellfields in San Patricio and Refugio counties are technically feasible, but development may be limited by cost and regulatory permitting challenges



Peninsula Oaks Pump Station

Recommendations and Next Steps



Careful planning to implement groundwater alternatives

Conduct exploratory well drilling and testing program



Perform numerical modeling to estimate regional drawdown and subsidence

Evaluate treatment options and conduct blending study for conjunctive use of groundwater and surface water



Thank you

Adam Conner, PMP, ENV SP | Adam.conner@freese.com

Theresa Budd, PG | Theresa.budd@freese.com

