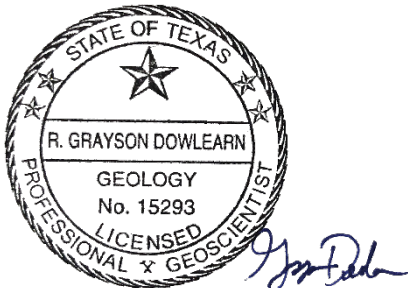
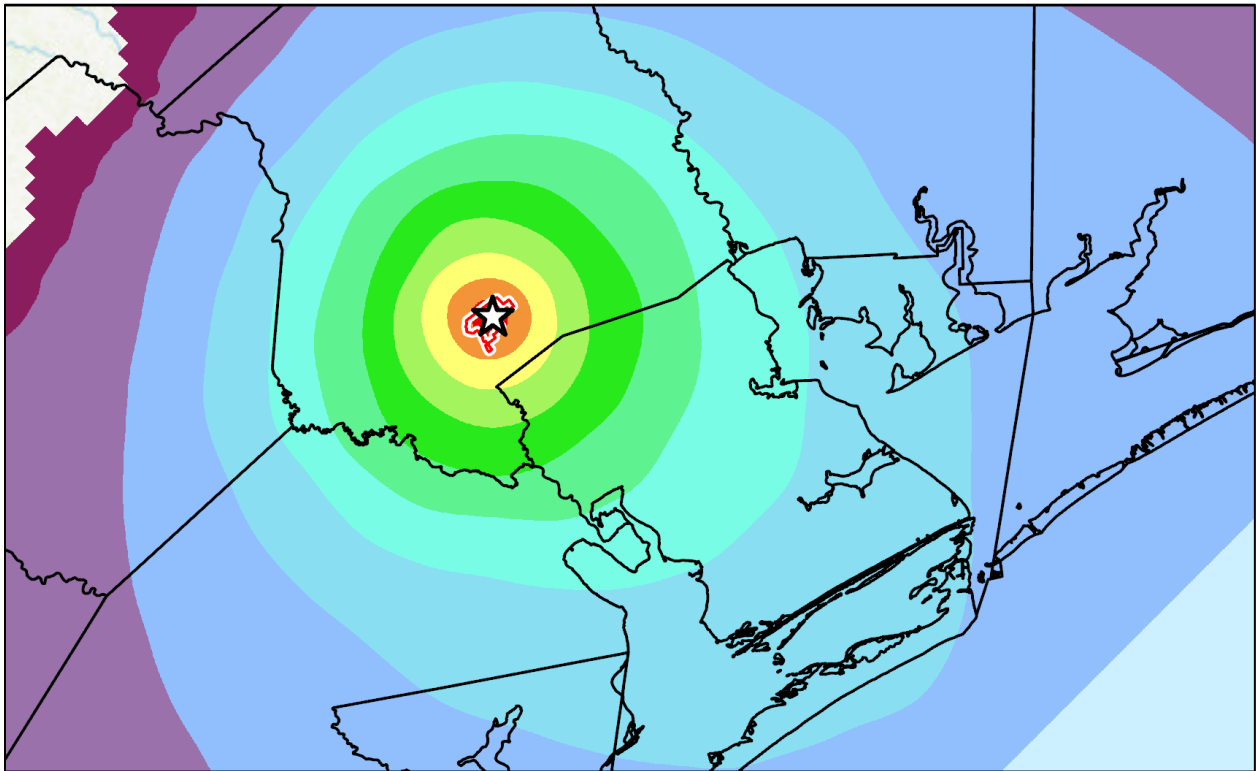


July 13, 2026

Victoria County Groundwater Conservation District
P.O. Box 69
Victoria, TX 77902

Attn: Victoria County Groundwater Conservation District
Tim Andruss
tim.andruss@vcgcd.org
361-579-6863

RE: ADSP-20260402-01 Technical Review
PRJ-20263100.03a



Grayson Dowlearn, P.G.
July 13, 2026

Overview

Victoria County Groundwater Conservation District (VCGCD) requested Collier Consulting (Collier) to 1) review VCGCD's initial assessment of the Victoria County Port Facilities Corporation (POV) application, 2) evaluate estimated groundwater quality at the proposed well site, and 3) model predicted water levels within a proposed production well, neighboring wells, and at the POV property boundary (Site). Collier used the Central Gulf Coast Brackish Groundwater Flow (CGCBGF) model to develop a transient simulation 30 years into the future to evaluate groundwater drawdown resulting from the POV brackish groundwater production permit application pumping.

Initial Assessment

Collier reviewed VCGCD's initial assessment of the POV application and submits the following comments related to the initial assessment:

- Item 1.6 in the application states that the nearest registered well is 5,720 feet from the proposed well site while Collier identified the nearest registered well as VCGCD-GW-000893 at 4,576 feet north of the proposed well on an adjoining property.
- The proposed zone of production between 1,300 and 1,825 feet below ground surface includes both **fresh** and **slightly saline** water as estimated by Yang and others, 2026, discussed in the Estimated Groundwater Quality section below.
- Rule 6.4 limits deep-saline groundwater production to 20,000 acre-feet per year or 10-acre-feet per acre produced between 1,300 and 1,800 feet bgs with an average total dissolved solids concentration greater than 1,500 mg/L.
- Based on the initial assessment of estimated water quality at proposed depths, POV should limit deep saline production to 20,000 acre-feet per year unless:
 - Water quality sampling at multiple intervals between 1,300 and 1,825 feet indicates that moderately saline water or higher concentration exists within the interval, or
 - Proposed zone of production deepens to greater than 1,961 feet bgs to include estimated moderately saline groundwater.
- Though POV owns approximately 3,000 acres of contiguous land, they would be limited to the 20,000 acre-feet per year limit rather than the 10-acre-feet per year per acre limit which could allow for 30,000 acre feet per year.
- Well spacing requirements prohibit a well producing 17,361 gallons per minute from existing on the site since no location exists within the property boundaries that remains 8,680 feet away from all property boundaries.

Estimated Groundwater Quality

Shuo Yang and others with Intera completed the Characterization of Brackish Groundwater Resources for Calhoun, Jackson, Refugio, and Victoria Counties study in March of 2026 for VCGCD. The report and accompanying datasets are made publicly available on VCGCD's website. Collier intersected the proposed well with the base of freshwater (1,000 mg/L), base of slightly saline water (3,000 mg/L), and the base of moderately saline water (10,000 mg/L) raster datasets provided by VCGCD to estimate the depth to each water quality classification. According

to these datasets, the base of freshwater is estimated at 1,462 feet below ground surface (bgs), the base of slightly saline water is estimated at 1,961 feet bgs, and the base of moderately saline water is estimated at 2,496 feet bgs. The proposed zone of production on the POV application is 525 feet thick, from 1,300 to 1,825 feet bgs, which includes approximately 162 feet of freshwater and 363 feet in the slightly saline zone. The proposed well is located within one of the deepest freshwater zones indicated in the Yang and others, 2026 study.

Model

Collier maintained all CGCBGF model properties but modified or created the following packages: Time Discretization (TDIS), Initial Conditions (IC), Output Control (OC), Storage (STO), and Well (WEL) packages. The modified TDIS package includes 30 transient stress periods of one-year in length (365 days or 366 days during leap-years) and a multiplication factor of 1.0 to simulate 30 years of pumping the full production permit application requested volume. Starting heads in the modified IC package were set to the ending heads from the steady-state model run. Output file names in the modified OC package were changed. All stress periods were set to transient in the modified STO package while maintaining the storage properties from the CGCBGF model. The CGCBGF model did not include a WEL package. A new WEL package was created to include the proposed well in the production permit application with the information included in **Table 1**.

Table 1: Production permit application well details

Well Name	Latitude	Longitude	Q (gpm)
Proposed Well	28.65747	-96.932	17,361

The permit application proposes a production zone from 1,300 to 1,825 feet bgs with a thickness of 525 feet within the Goliad Saline Groundwater Zone (GSGZ). VCGCD includes a description and maps of the GSGZ in their rules as the Upper and/or Lower Goliad Formation within the deep-saline special groundwater management zone in Victoria County. The well location intersects with model cell number 10,658. At this location, the described production zone includes CGCBGW model layers 7, 8, 9, and 10. The Upper Goliad Formation includes model layers 5, 6, and 7. The Lower Goliad Formation includes model layers 8, 9, and 10. The proposed production zone most accurately extracts from the base of the Upper Goliad and the top of the Lower Goliad Formations. Collier applied pumping in the predictive model to model layers 7, 8, and 9 to adhere to the permit request. Each entry in the WEL package represents a well from a single layer. Three separate entries were added per stress period to simulate the single proposed well as shown in Table 2. The pumping volume from the three model cells were distributed to each model cell according to the weight of transmissivity between the three cells and sum to 17,361 gallons per minute (gpm)

Table 2: Proposed well represented in the WEL package per stress period.

Layer	Cell ID	Pumping Volume (cubic feet per day)	Pumping Volume (gallons per minute)
7	10,658	-1,881,972	9,776
8	10,658	-759,362	3,944
9	10,658	-700,890	3,641

MODFLOW 6 WEL package allows for automatic pumping reductions through its Autoflow Reduce option. The Autoflow Reduce option was set to 0 feet above the bottom of the model layer to capture the amount of pumping, if any, which the model attempted to extract from below the bottom of a model cell.

Results

Victoria County GCD requested Collier to evaluate the extent of drawdown in the water producing layers at and above the zone of production, the impact to neighboring wells, and drawdown at the Site property boundary. The zone of production includes layers 7, 8, and 9. The CGCBGF model includes 15 layers with variable transmissivity values and rates of water production. Modeled drawdown at the proposed well site and neighboring wells at 5, 10, and 30 years are included in **Tables 3, 4, and 5** respectively. Neighboring wells exist near the Site boundary and approximately represent the drawdown values at the Site boundary. Neighboring wells with known bottom depths only include drawdown to the layer intersected by the bottom of the well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10. Overall, most of the modeled drawdown occurs within the first 5 years of pumping and then stabilizes during the next 25 years of simulated pumping. Drawdown after 5 years at the proposed well site within the zone of production ranges from 427 to 457 feet. Final drawdown after 30 years within the zone of production at the proposed well site ranges from 441 to 483 feet. Drawdown in neighboring wells with known depths reaches a maximum of 1.85 feet after 30 years within model layer 2. Drawdown at neighboring well locations without a known depth reach a maximum drawdown of 289 feet after 30 years within model layer 9.

The depth to the base of freshwater as estimated by Yang and others, 2026, Figure 2-39 within the Characterization of Brackish Groundwater Resources for Calhoun, Jackson, Refugio, and Victoria Counties report, is estimated at 1,462 feet bgs. The location coincides with a local maximum depth as mapped by Yang and others, 2026. Modeled drawdown at the base of the freshwater interface is included in **Table 6**. The base of freshwater crosses multiple layers though primarily resides in model Layer 7 beneath the Site and neighboring wells. The proposed zone of production includes model Layer 7 which could contain freshwater beneath the Site. Drawdown values at the base of freshwater at the proposed well site reach 445 feet after five years and 465 feet after 30 years. Drawdown values at the base of freshwater at the Site boundary and neighboring wells reach over 220 feet within 5 years and up to 276 feet after 30 years.

The drawdown area of influence is greatest in model layers 7, 8, and 9 and decreases moving upward into shallower layers. **Figures 1 through 9** show the area of influence in model layers 1 through 9 respectively. Contour intervals for model layers 7, 8, and 9 were manually selected since the 5-foot contours overwhelmed the image. The entire model area within model layers 3

through 9 experiences drawdown greater than 1 foot except along the northwest model boundary for each layer. Drawdown in model layer 2 (**Figure 2**) represents the maximum modeled drawdown in neighboring wells since all neighboring wells terminate within model layers 1 and 2. Layer 2 does not show a typical cone of depression but does show an area of influence generated by the proposed well. The area with the greatest amount of drawdown occurs at the edge of the Lissie Formation (model Layer 2) outcrop as it pinches out to the northwest. Drawdown is less than 8 feet throughout the Lissie Formation after 30 years.

Cross-sections along Line A-A' in **Figure 10** of water level elevations in CGCBGF model layers 1 through 10 are shown in **Figures 11, 12, and 13**. Examples of hydrograph time series plots of drawdown at the proposed well site and VCGCD well ID Victoria County GCD – GW – 000842 are shown in **Figures 14 and 15** respectively. VCGCD well ID Victoria County GCD – GW – 000842 is mapped in **Figure 10**.

No pumping reductions occurred through the use of the WEL package Autoflow Reduce option, and water levels remained above the base of the model cells throughout the model run.

Conclusions

The proposed location and production volume does not meet VCGCD well spacing requirements. Additionally, review of depth to water quality classifications indicates the proposed zone of production includes fresh and slightly saline water. A deep-saline permit within slightly saline water is limited to 20,000 acre-feet per year which is less than the requested 28,000 acre-feet per year.

Simulated water levels generated from pumping 17,361 gpm in model layers 7, 8, and 9 remain above the base of the zone of production and above the known completion depths of all neighboring wells. Water levels between upper model layers and the GSGZ appear isolated even after 30 years of pumping within the GSGZ. Drawdown values greater than 5 feet within the GSGZ extend across nearly the entire model domain while drawdown in the surficial layers remains minimal after 30 years.

Drawdowns at the base of the freshwater zone increase the vertical gradient between freshwater and deeper brackish and saline water. This high gradient could increase the rate of brackish and saline water upwelling or even freshwater replacement with brackish and saline water from lateral flows.

Shallow model layers (layers 1, 2, and 3) reveal boundary condition impacts from rivers and the general head boundary packages. Collier believes the drawdowns in model layers 7, 8, and 9 are representative of the proposed well pumping. However, drawdowns in shallower layers, particularly the Lissie Formation near the proposed well, may deviate from reality due to excess inflows from boundary conditions.

Additionally, Collier noticed water levels rise nearly 300 feet above land surface in downdip portions of deep model layers near the Gulf Coast in the GCGBGF model steady state results. These water levels may reflect reality, but there are no measurements to confirm or reject these model results. Collier recommends caution with analysis of exact water level elevations in deep model layers near the coastline.

Provisional Statements

The interpretations and conclusions of this study are based on limited data and are considered by Collier to be a reasonable interpretation for this report. The property boundary used for this study is an estimate and may be subject to change.

References

Yang, S., Young, S., Talcott, K., Lamkey, N., Quiroz, J., and Hughes, J., 2026, Characterization of Brackish Groundwater Resources for Calhoun, Jackson, Refugio, and Victoria Counties, 195 p.

TABLES

Table 3: Drawdown in proposed production well and neighboring wells after 5 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10.

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Proposed Well	0	0.1	0.57	4.4	11.79	24.52	51.74	427.15	444.73	457.24	48.45
Victoria County GCD - GW-000405	5,397	0.08	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000408	5,346	0.08	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000413	5,605	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000414	5,620	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000415	5,581	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000416	5,593	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000417	5,330	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000418	5,342	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000419	5,349	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000420	5,057	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000421	5,073	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000422	5,082	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000423	4,916	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000424	4,918	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000425	4,914	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000426	4,915	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000429	5,458	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000430	5,437	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000431	5,471	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000433	4,885	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000434	5,089	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000435	5,090	0.09	--	--	--	--	--	--	--	--	--

Table 3: Drawdown in proposed production well and neighboring wells after 5 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10. (continued)

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Victoria County GCD - GW-000436	5,186	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000437	5,178	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000438	5,435	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000439	5,414	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000440	5,400	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000441	5,681	0.09	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000442	5,667	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000443	5,652	0.09	0.57	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000821	5,203	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000841	5,084	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000842	4,897	0.08	0.49	4.46	11.94	24.8	51.59	240.74	256.23	264.32	49.13
Victoria County GCD - GW-000843	4,893	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000891	4,779	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000892	4,789	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000893	4,675	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000894	4,680	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000895	5,283	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000896	5,504	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000897	5,471	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - GW-000898	5,484	0.09	0.57	4.49	11.91	24.64	51.01	229.65	238.76	251.75	48.48
Victoria County GCD - NW-000996	5,093	0.12	0.57	--	--	--	--	--	--	--	--

Table 4: Drawdown in proposed production well and neighboring wells after 10 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10.

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Proposed Well	0	0.34	1.01	6.13	15.16	29.35	57.8	435.09	456.85	472.12	60.36
Victoria County GCD - GW-000405	5,397	0.3	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000408	5,346	0.3	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000413	5,605	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000414	5,620	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000415	5,581	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000416	5,593	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000417	5,330	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000418	5,342	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000419	5,349	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000420	5,057	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000421	5,073	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000422	5,082	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000423	4,916	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000424	4,918	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000425	4,914	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000426	4,915	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000429	5,458	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000430	5,437	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000431	5,471	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000433	4,885	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000434	5,089	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000435	5,090	0.32	--	--	--	--	--	--	--	--	--

Table 4: Drawdown in proposed production well and neighboring wells after 10 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10. (continued)

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Victoria County GCD - GW-000436	5,186	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000437	5,178	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000438	5,435	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000439	5,414	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000440	5,400	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000441	5,681	0.32	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000442	5,667	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000443	5,652	0.32	1.01	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000821	5,203	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000841	5,084	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000842	4,897	0.3	0.89	6.17	15.26	29.57	57.57	248.58	268.19	278.97	60.98
Victoria County GCD - GW-000843	4,893	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000891	4,779	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000892	4,789	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000893	4,675	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000894	4,680	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000895	5,283	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000896	5,504	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000897	5,471	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - GW-000898	5,484	0.32	1.01	6.2	15.22	29.4	56.98	237.48	250.7	266.4	60.3
Victoria County GCD - NW-000996	5,093	0.39	1	--	--	--	--	--	--	--	--

Table 5: Drawdown in proposed production well and neighboring wells after 30 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10.

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Proposed Well	0	1.41	1.86	8	18.2	33.39	62.69	441.23	465.05	482.53	70.82
Victoria County GCD - GW-000405	5,397	1.31	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000408	5,346	1.31	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000413	5,605	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000414	5,620	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000415	5,581	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000416	5,593	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000417	5,330	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000418	5,342	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000419	5,349	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000420	5,057	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000421	5,073	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000422	5,082	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000423	4,916	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000424	4,918	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000425	4,914	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000426	4,915	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000429	5,458	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000430	5,437	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000431	5,471	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000433	4,885	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000434	5,089	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000435	5,090	1.36	--	--	--	--	--	--	--	--	--

Table 5: Drawdown in proposed production well and neighboring wells after 30 years. Table cells with “--” indicate model layers not accessed by the respective well. Neighboring wells without known bottom depths include drawdowns from layers 1 through 10. (continued)

Well Name	Distance from Proposed Well (ft)	Layer 1	Layer 2	Layer 3	Layer 4	Layer 5	Layer 6	Layer 7	Layer 8	Layer 9	Layer 10
Victoria County GCD - GW-000436	5,186	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000437	5,178	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000438	5,435	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000439	5,414	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000440	5,400	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000441	5,681	1.36	--	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000442	5,667	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000443	5,652	1.36	1.85	--	--	--	--	--	--	--	--
Victoria County GCD - GW-000821	5,203	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000841	5,084	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000842	4,897	1.31	1.64	7.99	18.26	33.56	62.37	254.58	276.23	289.14	71.26
Victoria County GCD - GW-000843	4,893	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000891	4,779	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000892	4,789	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000893	4,675	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000894	4,680	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000895	5,283	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000896	5,504	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000897	5,471	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - GW-000898	5,484	1.36	1.85	8.05	18.22	33.37	61.78	243.48	258.72	276.57	70.56
Victoria County GCD - NW-000996	5,093	1.52	1.84	--	--	--	--	--	--	--	--

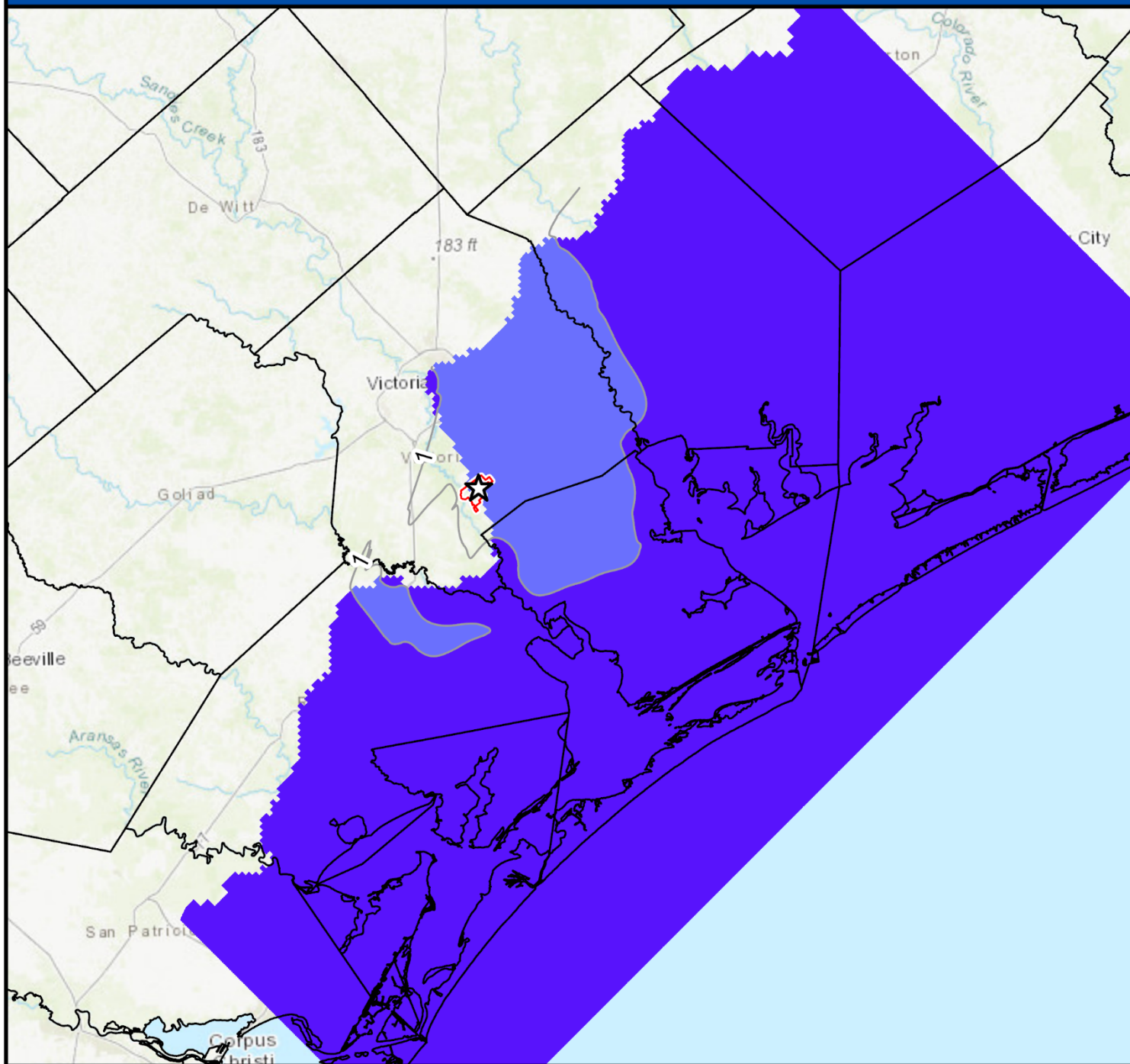
Table 6: Drawdown value at the base of freshwater according to Figure 2.39 in Yang and others, 2026.

Well Name	Total Depth	Model Layer	Distance from Proposed Well (ft)	5-Year Drawdown (ft)	10-Year Drawdown (ft)	30-Year Drawdown (ft)
Proposed Well	1,825	7	0	444.73	456.85	465.05
Victoria County GCD - GW-000405	23	7	5,397	256.23	268.19	276.23
Victoria County GCD - GW-000408	33	7	5,346	256.23	268.19	276.23
Victoria County GCD - GW-000413	114	7	5,605	238.76	250.70	258.72
Victoria County GCD - GW-000414	84	7	5,620	238.76	250.70	258.72
Victoria County GCD - GW-000415	60	7	5,581	238.76	250.70	258.72
Victoria County GCD - GW-000416	24	7	5,593	238.76	250.70	258.72
Victoria County GCD - GW-000417	117	7	5,330	238.76	250.70	258.72
Victoria County GCD - GW-000418	22	7	5,342	238.76	250.70	258.72
Victoria County GCD - GW-000419	90	7	5,349	238.76	250.70	258.72
Victoria County GCD - GW-000420	118	7	5,057	238.76	250.70	258.72
Victoria County GCD - GW-000421	87	7	5,073	238.76	250.70	258.72
Victoria County GCD - GW-000422	26	7	5,082	238.76	250.70	258.72
Victoria County GCD - GW-000423	117	7	4,916	238.76	250.70	258.72
Victoria County GCD - GW-000424	90	7	4,918	238.76	250.70	258.72
Victoria County GCD - GW-000425	63	7	4,914	238.76	250.70	258.72
Victoria County GCD - GW-000426	25	7	4,915	238.76	250.70	258.72
Victoria County GCD - GW-000429	102	7	5,458	238.76	250.70	258.72
Victoria County GCD - GW-000430	74	7	5,437	238.76	250.70	258.72
Victoria County GCD - GW-000431	26	7	5,471	238.76	250.70	258.72
Victoria County GCD - GW-000433	43	7	4,885	238.76	250.70	258.72
Victoria County GCD - GW-000434	122	7	5,089	238.76	250.70	258.72
Victoria County GCD - GW-000435	77	7	5,090	238.76	250.70	258.72

Table 6: Drawdown value at the base of freshwater according to Figure 2.39 in Yang and others, 2026. (continued)

Well Name	Total Depth	Model Layer	Distance from Proposed Well (ft)	5-Year Drawdown (ft)	10-Year Drawdown (ft)	30-Year Drawdown (ft)
Victoria County GCD - GW-000436	124	7	5,186	238.76	250.70	258.72
Victoria County GCD - GW-000437	107	7	5,178	238.76	250.70	258.72
Victoria County GCD - GW-000438	132	7	5,435	238.76	250.70	258.72
Victoria County GCD - GW-000439	94	7	5,414	238.76	250.70	258.72
Victoria County GCD - GW-000440	35	7	5,400	238.76	250.70	258.72
Victoria County GCD - GW-000441	34	7	5,681	238.76	250.70	258.72
Victoria County GCD - GW-000442	129	7	5,667	238.76	250.70	258.72
Victoria County GCD - GW-000443	92	7	5,652	238.76	250.70	258.72
Victoria County GCD - GW-000821	--	7	5,203	238.76	250.70	258.72
Victoria County GCD - GW-000841	--	7	5,084	238.76	250.70	258.72
Victoria County GCD - GW-000842	--	7	4,897	256.23	268.19	276.23
Victoria County GCD - GW-000843	--	7	4,893	238.76	250.70	258.72
Victoria County GCD - GW-000891	--	7	4,779	238.76	250.70	258.72
Victoria County GCD - GW-000892	--	7	4,789	238.76	250.70	258.72
Victoria County GCD - GW-000893	--	7	4,675	238.76	250.70	258.72
Victoria County GCD - GW-000894	--	7	4,680	238.76	250.70	258.72
Victoria County GCD - GW-000895	--	7	5,283	238.76	250.70	258.72
Victoria County GCD - GW-000896	--	7	5,504	238.76	250.70	258.72
Victoria County GCD - GW-000897	--	7	5,471	238.76	250.70	258.72
Victoria County GCD - GW-000898	--	7	5,484	238.76	250.70	258.72
Victoria County GCD - NW-000996	200	6	5,093	220.17	228.22	234.49

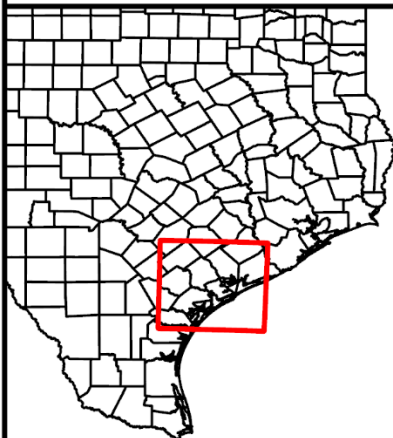
FIGURES



Explanation

- ★ Proposed Well
- ▭ Property Boundary
- ▭ County Boundaries
- 30-Year Drawdown Layer 1 Contour (ft)
- 30-Year Drawdown Layer 1 (ft)
- -0.769 - 1
- 1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 100
- 100 - 200
- 200 - 300
- 300 - 400
- 400 - 483.024

Project Location



0 5 10 20
Miles



FIGURE 1.
Drawdown in Layer 1 after
30 years of pumping.

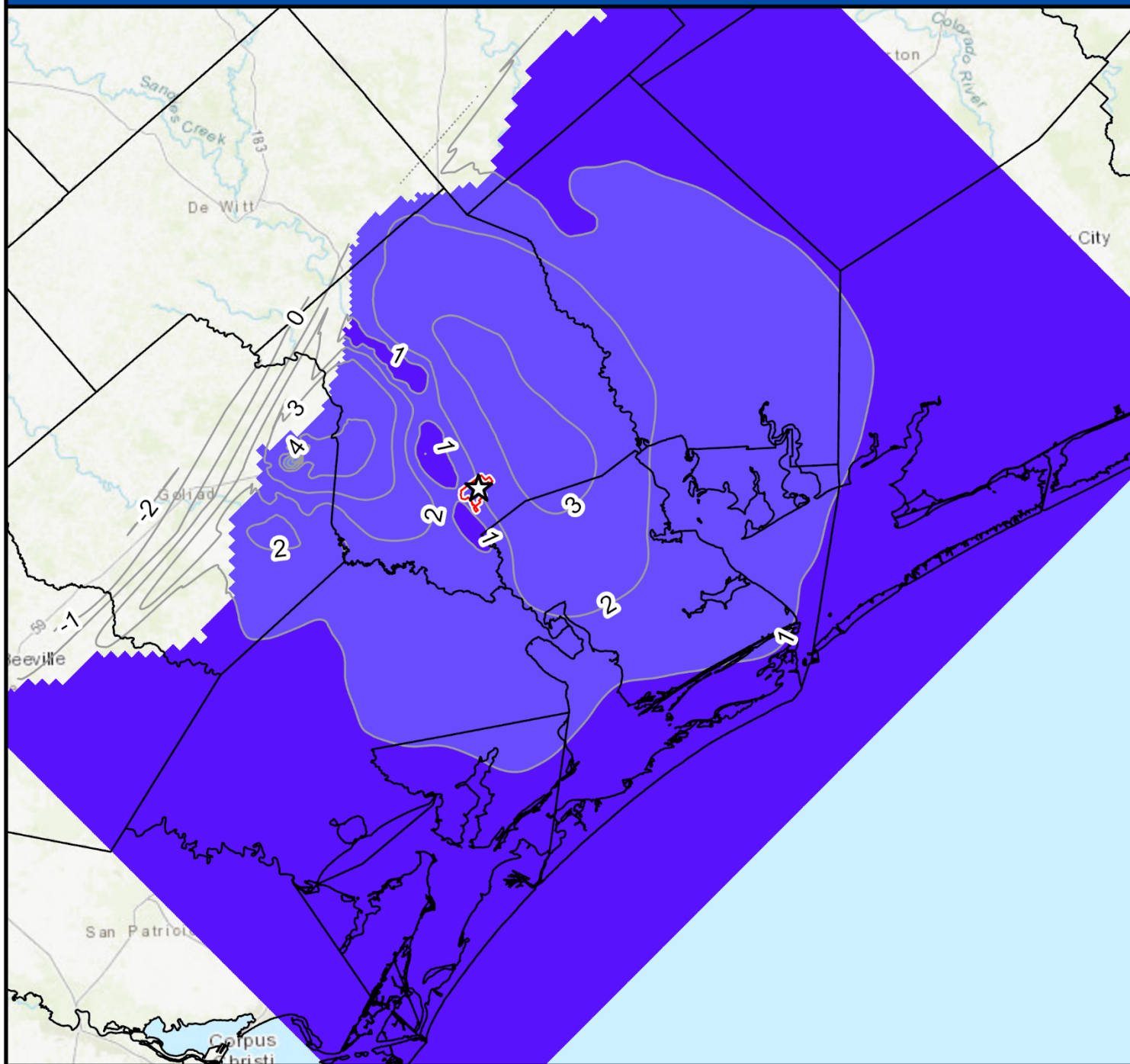
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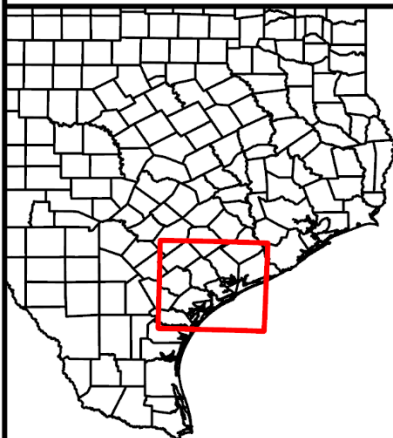
ADSP-20260402-01



Explanation

- ★ Proposed Well
- ▭ Property Boundary
- ▭ County Boundaries
- 30-Year Drawdown Layer 2 Contour (ft)
- 30-Year Drawdown Layer 2 (ft)
- ▭ -0.769 - 1
- ▭ 1 - 5
- ▭ 5 - 10
- ▭ 10 - 25
- ▭ 25 - 50
- ▭ 50 - 100
- ▭ 100 - 200
- ▭ 200 - 300
- ▭ 300 - 400
- ▭ 400 - 483.024

Project Location



0 5 10 20
Miles



FIGURE 2.
Drawdown in Layer 2 after
30 years of pumping.

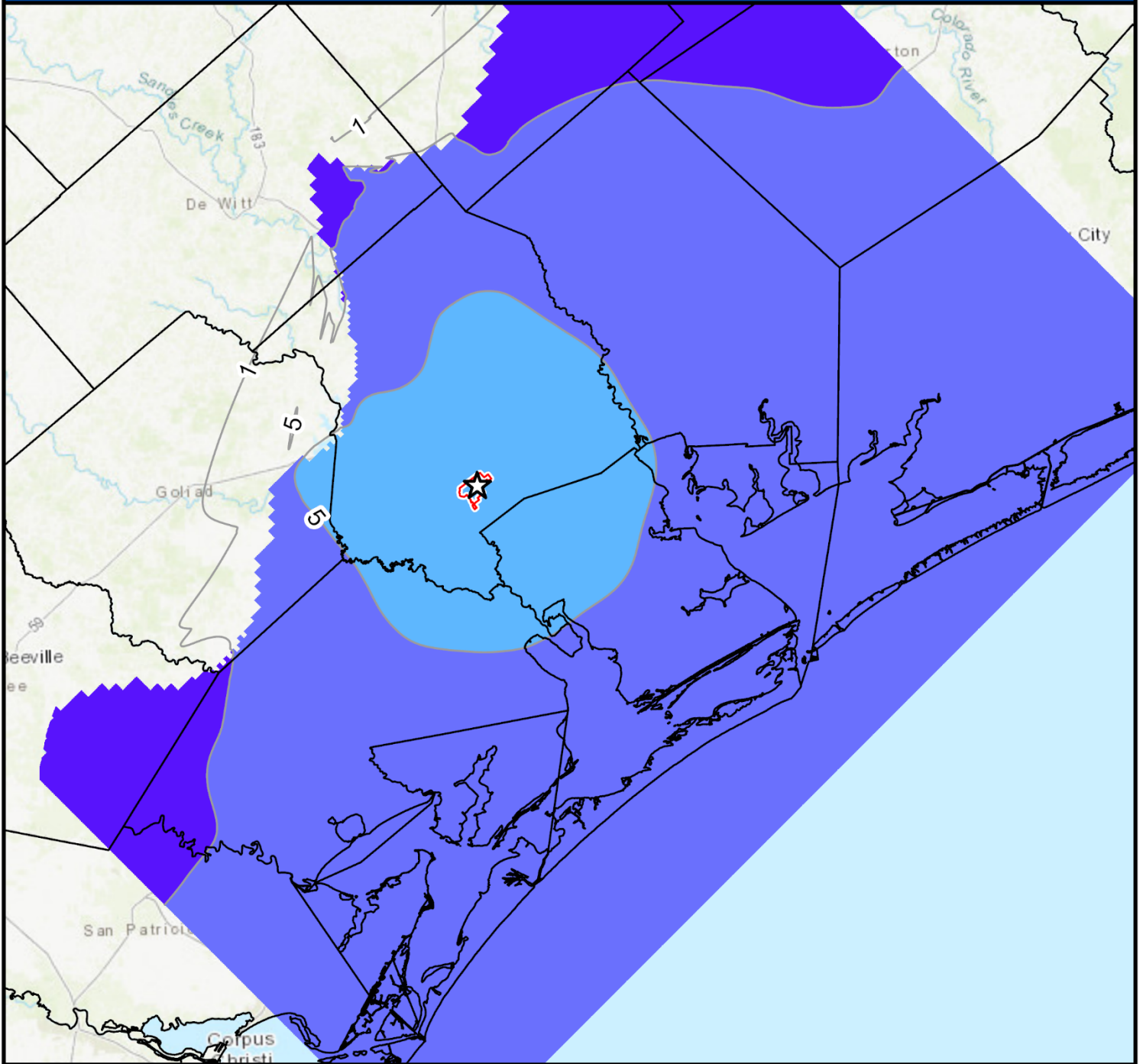
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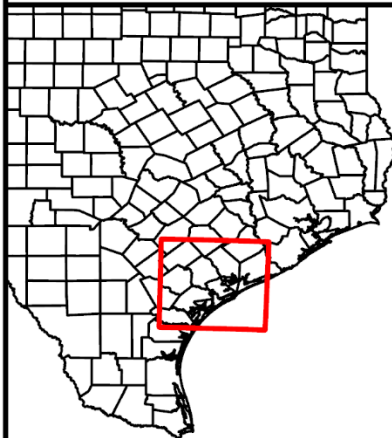
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Explanation

- ★ Proposed Well
- ▭ Property Boundary
- ▭ County Boundaries
- 30-Year Drawdown Layer 3 Contour (ft)
- 30-Year Drawdown Layer 3 (ft)
- ▭ -0.769 - 1
- ▭ 1 - 5
- ▭ 5 - 10
- ▭ 10 - 25
- ▭ 25 - 50
- ▭ 50 - 100
- ▭ 100 - 200
- ▭ 200 - 300
- ▭ 300 - 400
- ▭ 400 - 483.024

Project Location



0 5 10 20
Miles



FIGURE 3.
Drawdown in Layer 3 after
30 years of pumping.

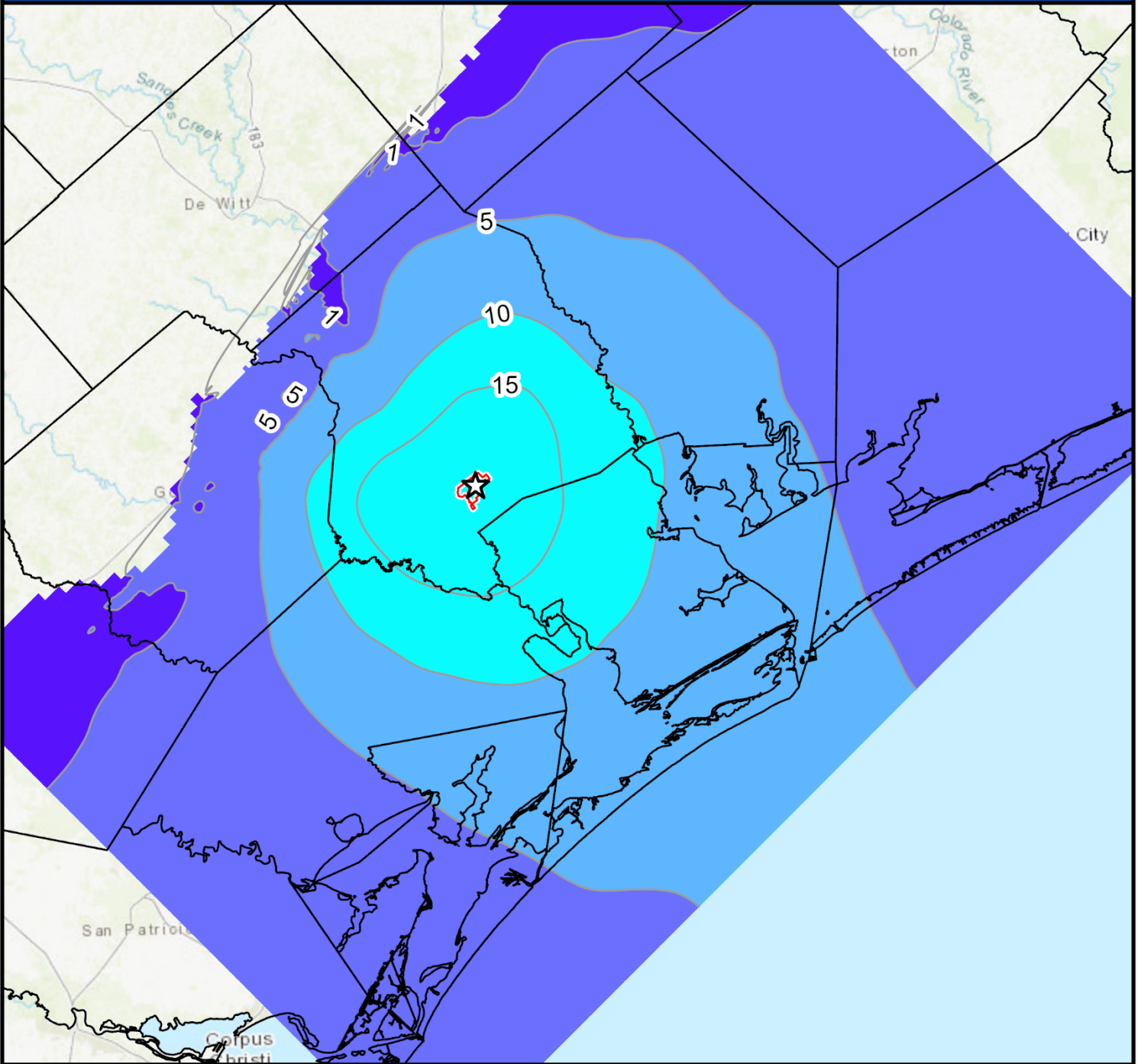
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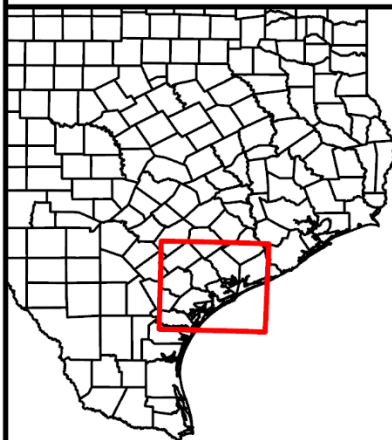
ADSP-20260402-01



Explanation

- ★ Proposed Well
- ▬ Property Boundary
- ▬ County Boundaries
- 30-Year Drawdown Layer 4 Contour (ft)
- 30-Year Drawdown Layer 4 (ft)
- 0.769 - 1
- 1 - 5
- 5 - 10
- 10 - 25
- 25 - 50
- 50 - 100
- 100 - 200
- 200 - 300
- 300 - 400
- 400 - 483.024

Project Location



0 5 10 20
Miles



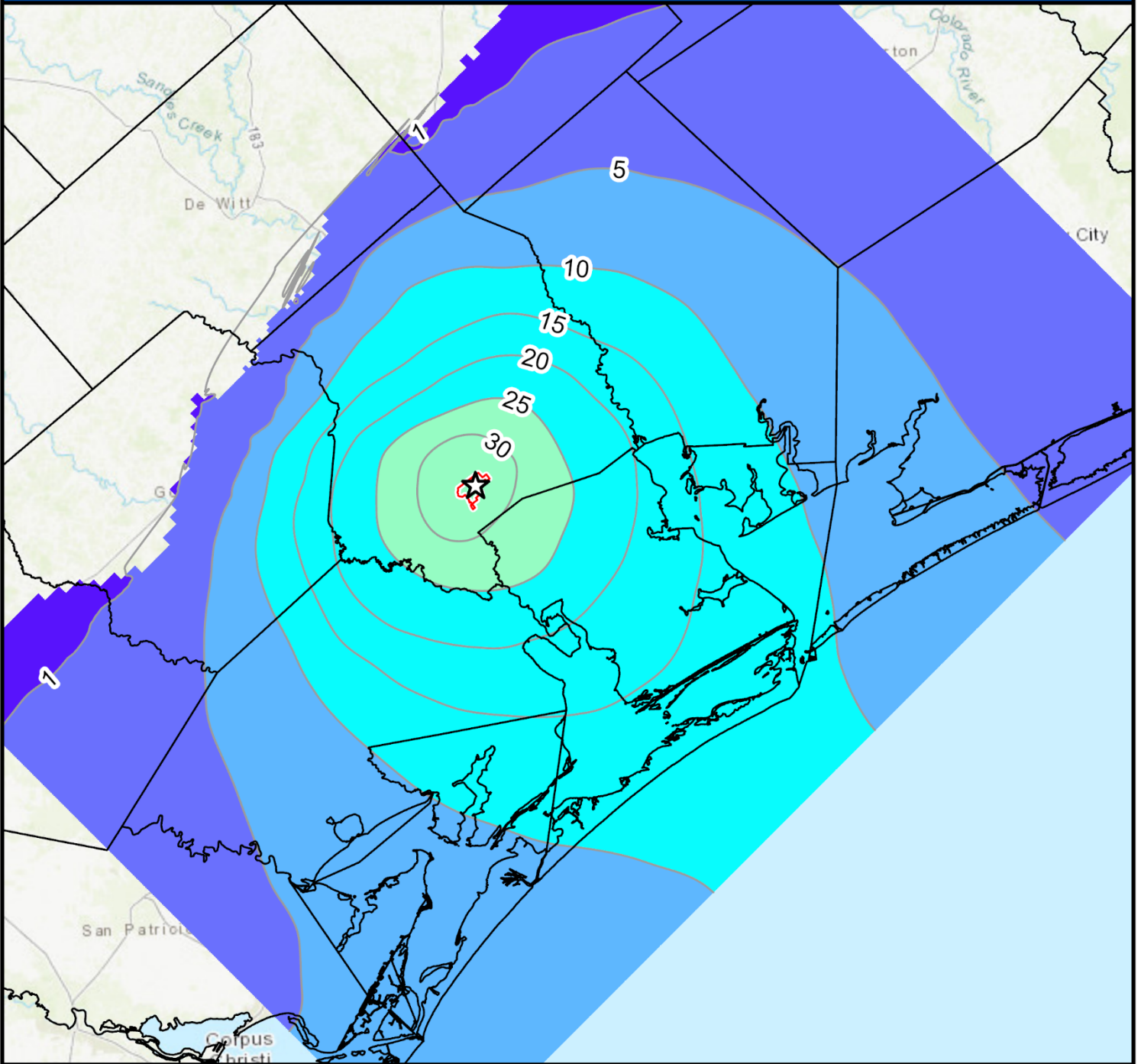
FIGURE 4.
Drawdown in Layer 4 after
30 years of pumping.

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Drawn: GD	Scale: 1:950,000	Revision: 1



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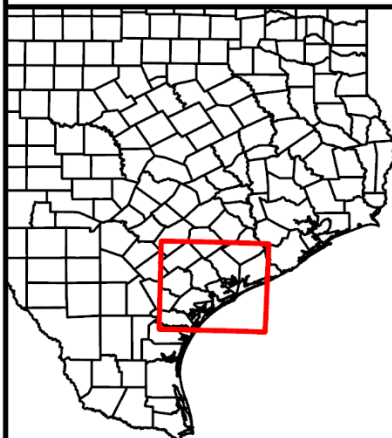
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Explanation

- ★ Proposed Well
 - ▭ Property Boundary
 - ▭ County Boundaries
 - 30-Year Drawdown Layer 5 Contour (ft)
- 30-Year Drawdown Layer 5 (ft)
- | |
|---------------|
| 0.769 - 1 |
| 1 - 5 |
| 5 - 10 |
| 10 - 25 |
| 25 - 50 |
| 50 - 100 |
| 100 - 200 |
| 200 - 300 |
| 300 - 400 |
| 400 - 483.024 |

Project Location



0 5 10 20
Miles



FIGURE 5.
Drawdown in Layer 5 after
30 years of pumping.

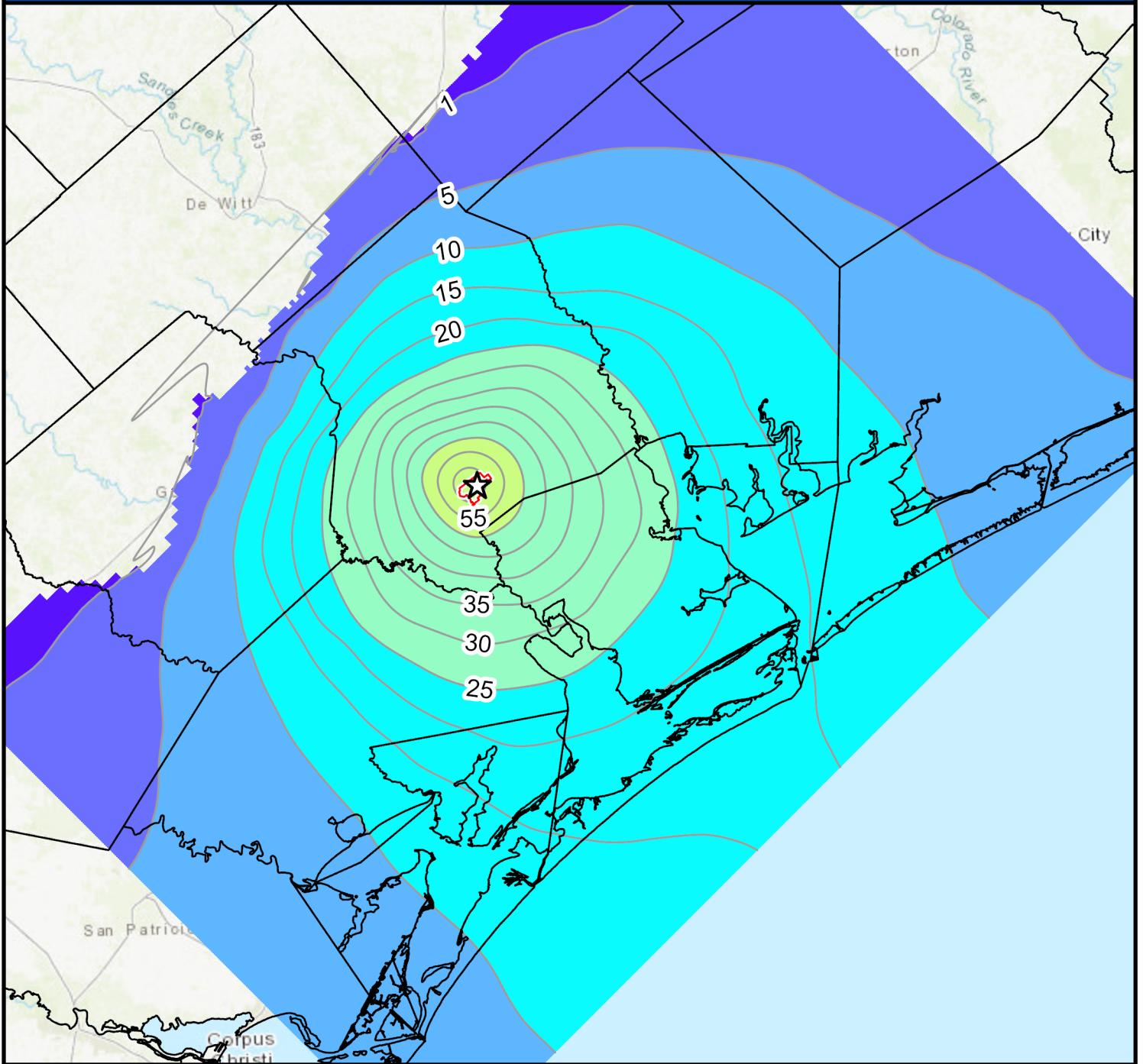
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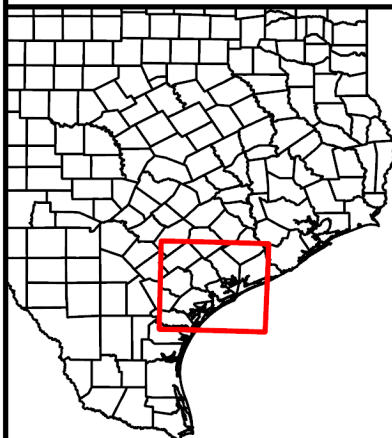
ADSP-20260402-01



Explanation

- ★ Proposed Well
- ▬ Property Boundary
- ▬ County Boundaries
- 30-Year Drawdown Layer 6 Contour (ft)
- 30-Year Drawdown Layer 6 (ft)
- 0.769 - 1
 - 1 - 5
 - 5 - 10
 - 10 - 25
 - 25 - 50
 - 50 - 100
 - 100 - 200
 - 200 - 300
 - 300 - 400
 - 400 - 483.024

Project Location



0 5 10 20
Miles



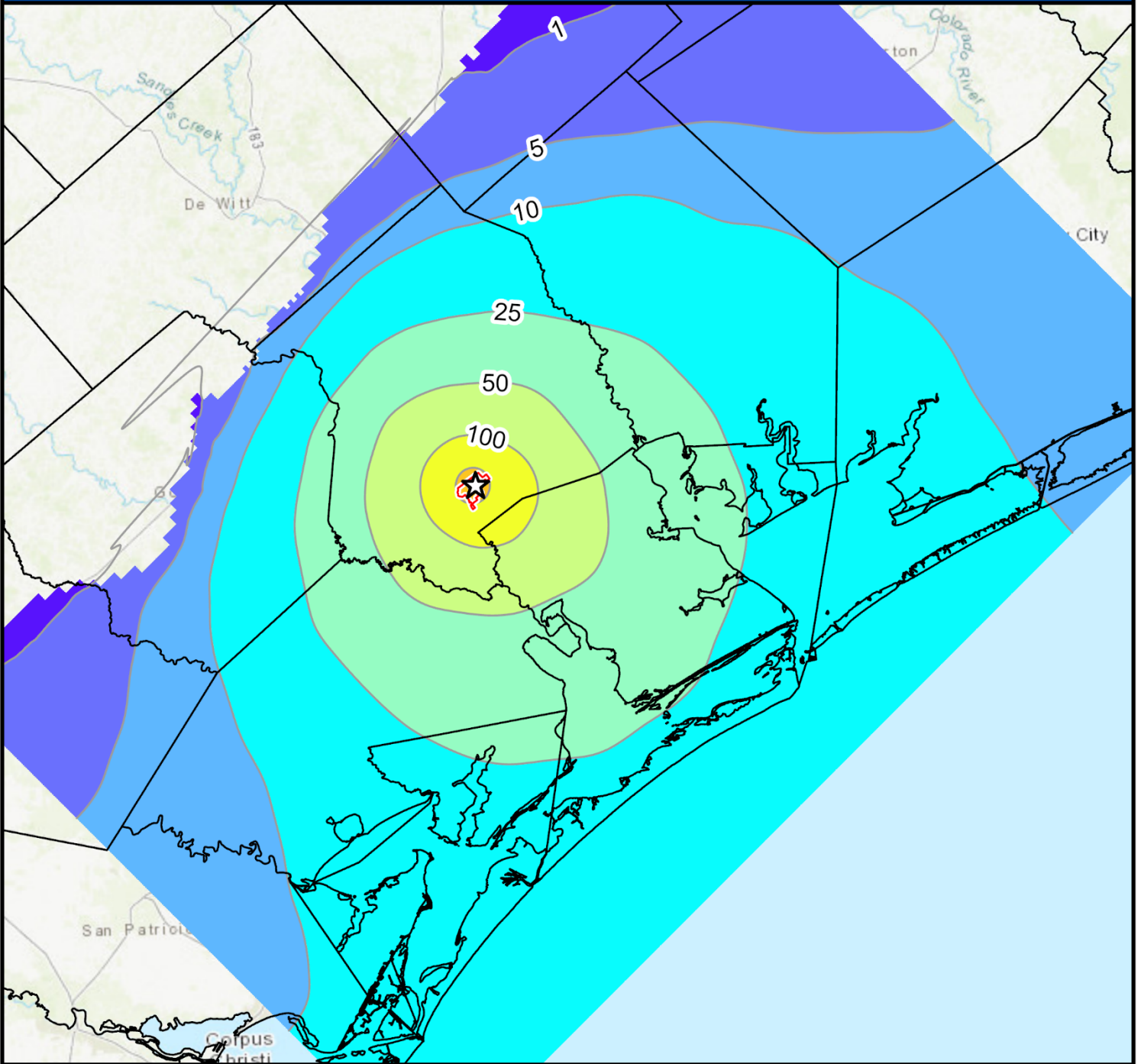
FIGURE 6.
Drawdown in Layer 6 after
30 years of pumping.

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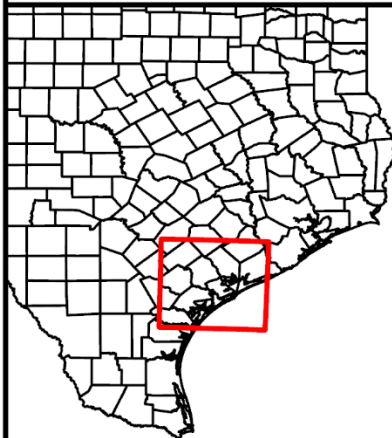
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Explanation

- ★ Proposed Well
- ▬ Property Boundary
- ▬ County Boundaries
- 30-Year Drawdown Layer 7 Contour (ft)
- 30-Year Drawdown Layer 7 (ft)
- ▬ -0.769 - 1
- ▬ 1 - 5
- ▬ 5 - 10
- ▬ 10 - 25
- ▬ 25 - 50
- ▬ 50 - 100
- ▬ 100 - 200
- ▬ 200 - 300
- ▬ 300 - 400
- ▬ 400 - 483.024

Project Location



0 5 10 20
Miles



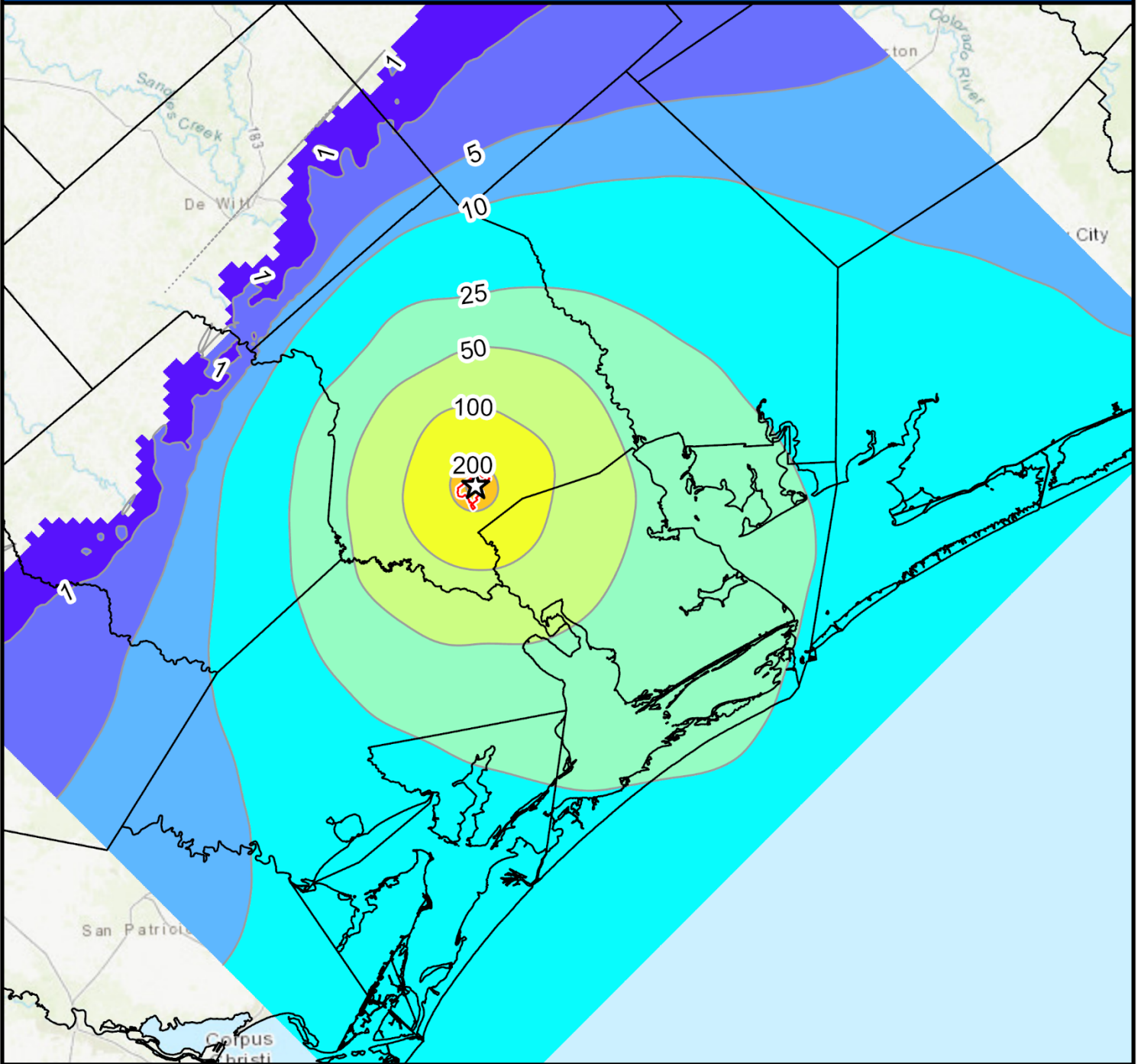
FIGURE 7.
Drawdown in Layer 7 after
30 years of pumping.

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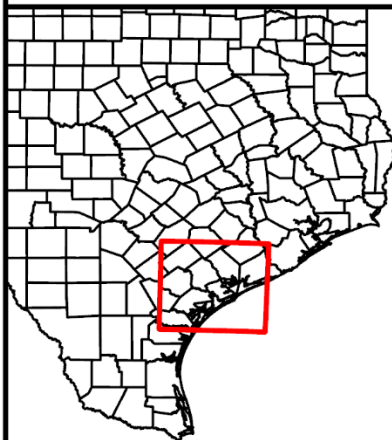
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Explanation

- ★ Proposed Well
- ▬ Property Boundary
- ▬ County Boundaries
- 30-Year Drawdown Layer 8 Contour (ft)
- 30-Year Drawdown Layer 8 (ft)
- ▬ -0.769 - 1
 - ▬ 1 - 5
 - ▬ 5 - 10
 - ▬ 10 - 25
 - ▬ 25 - 50
 - ▬ 50 - 100
 - ▬ 100 - 200
 - ▬ 200 - 300
 - ▬ 300 - 400
 - ▬ 400 - 483.024

Project Location



0 5 10 20
Miles



FIGURE 8.
Drawdown in Layer 8 after
30 years of pumping.

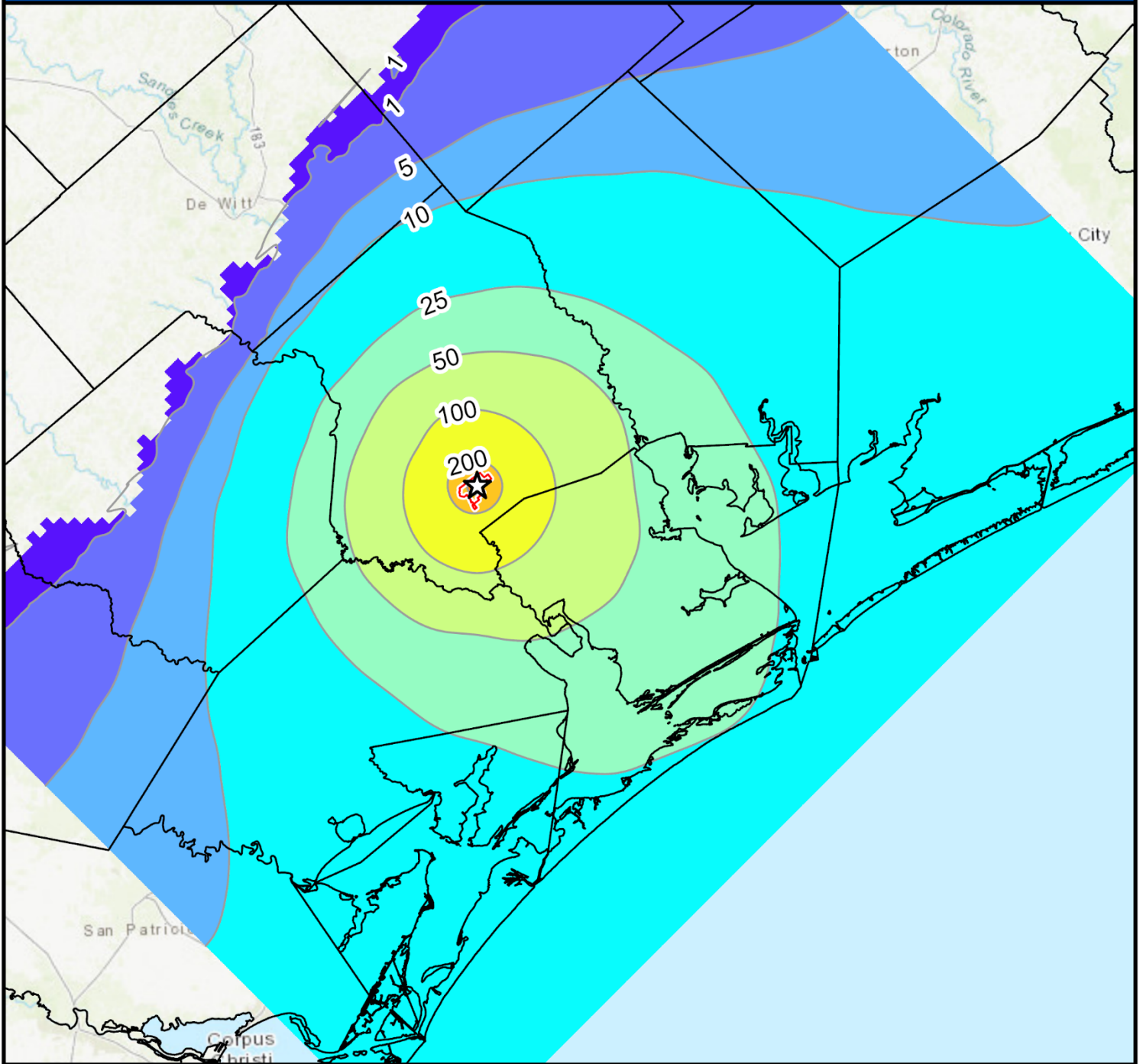
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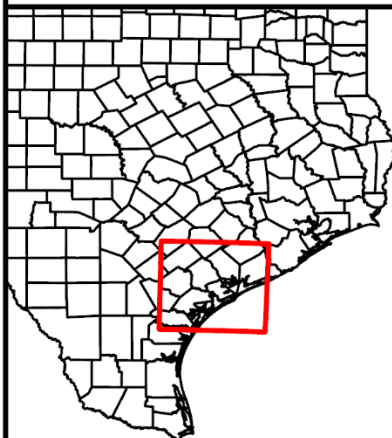
ADSP-20260402-01



Explanation

- ★ Proposed Well
- ▬ Property Boundary
- ▬ County Boundaries
- 30-Year Drawdown Layer 9 Contour (ft)
- 30-Year Drawdown Layer 9 (ft)
- 0.769 - 1
 - 1 - 5
 - 5 - 10
 - 10 - 25
 - 25 - 50
 - 50 - 100
 - 100 - 200
 - 200 - 300
 - 300 - 400
 - 400 - 483.024

Project Location



0 5 10 20
Miles



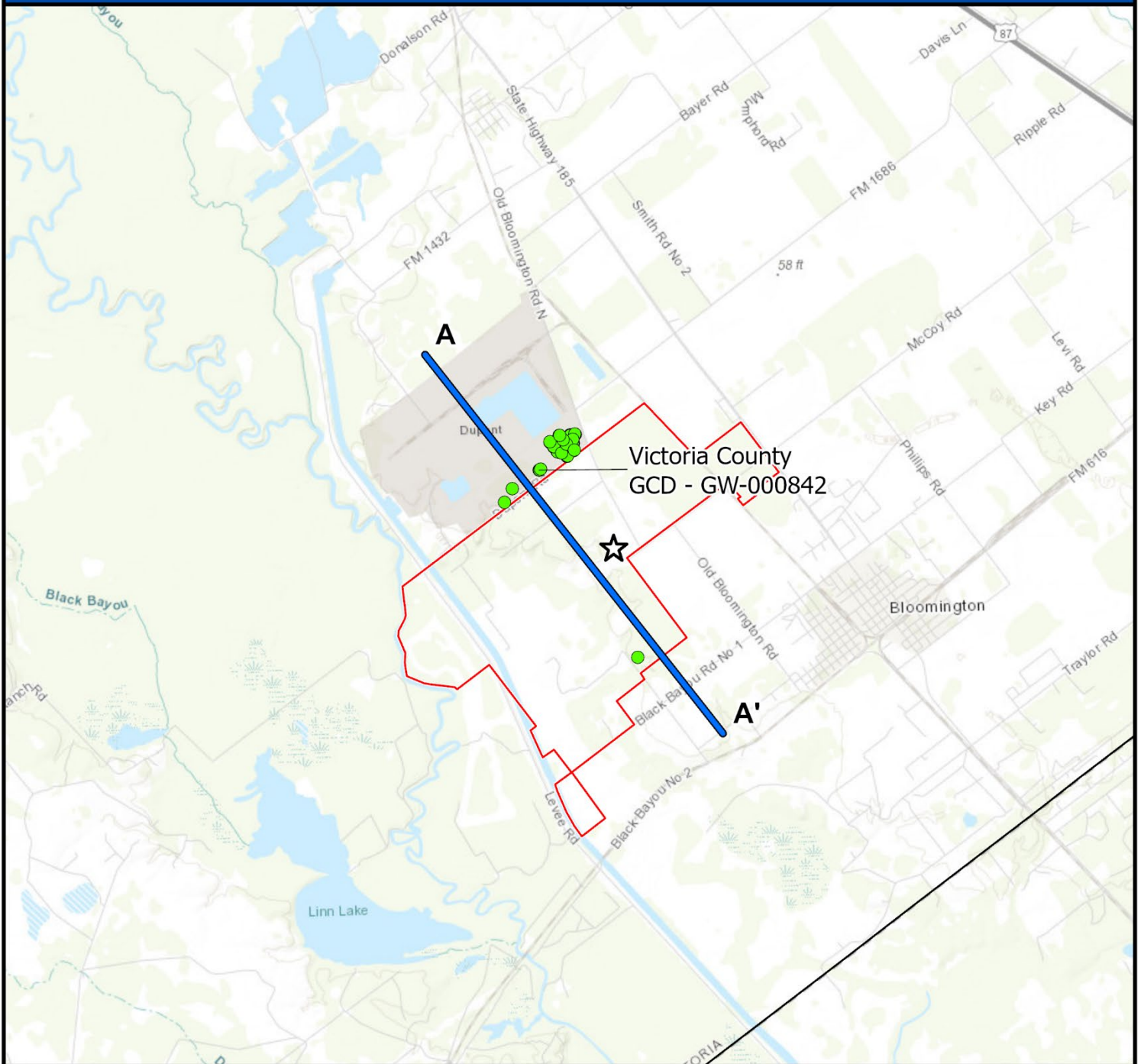
FIGURE 9.
Drawdown in Layer 9 after
30 years of pumping.

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Drawn: GD	Scale: 1:950,000	Revision: 1



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Explanation

- ☆ Proposed Well
- Neighboring Wells
- Property Boundary
- County Boundaries
- Cross-section Line A to A'

Project Location



0 0.5 1 2 Miles



FIGURE 10.
Cross-section line with
proposed well and
neighboring well locations.

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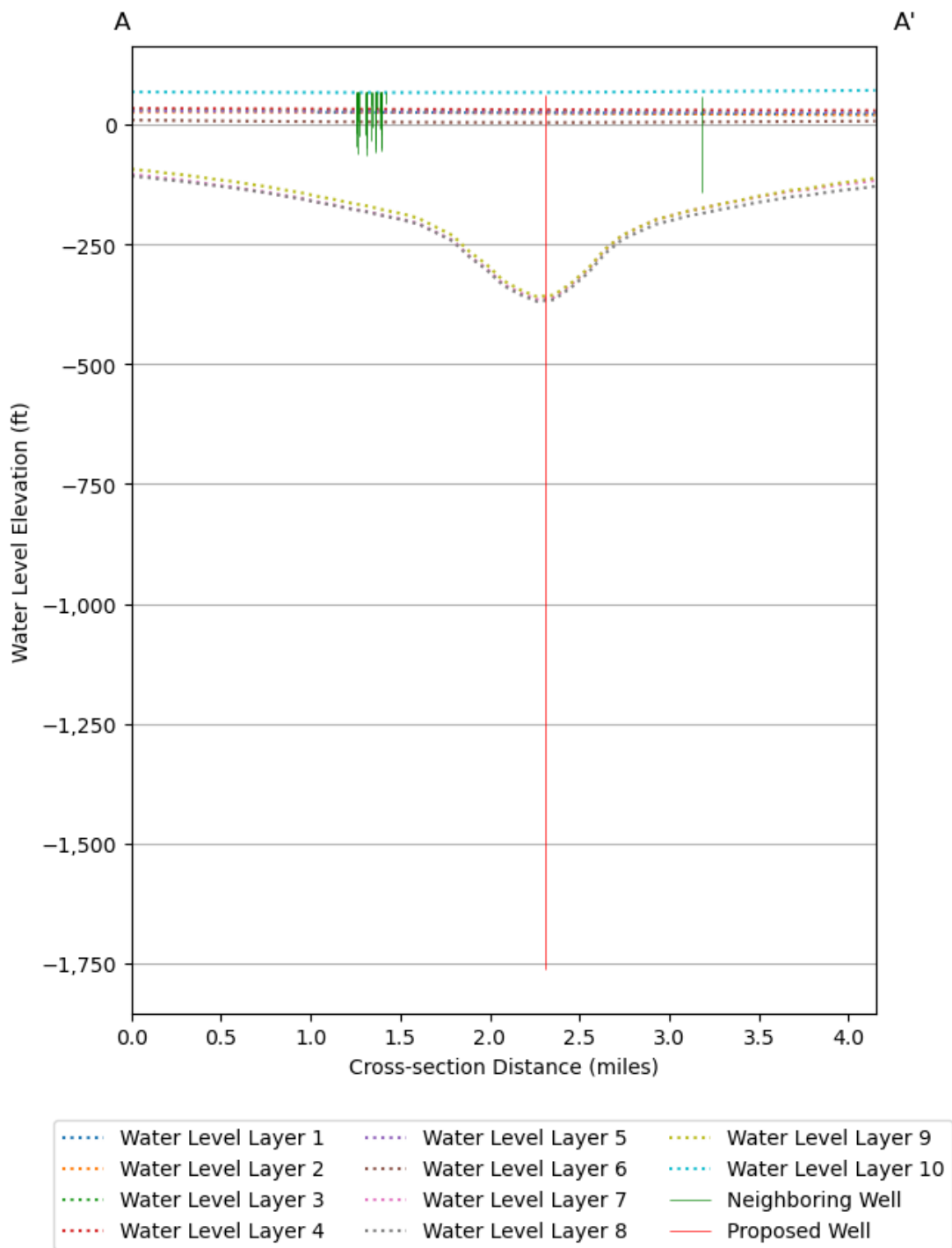


Figure 11: Cross-section view of water levels after 5 years of pumping at the proposed location and rate.

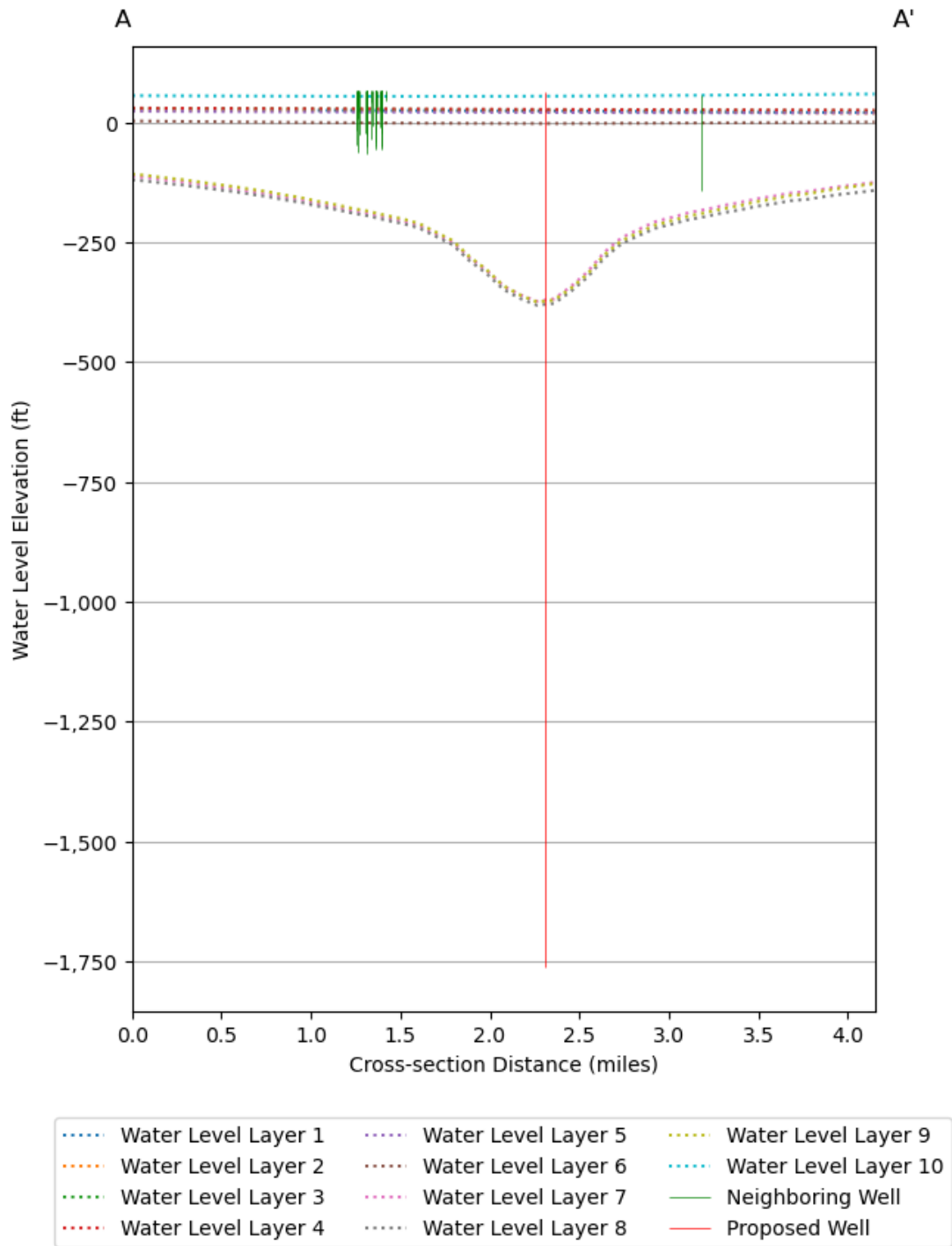


Figure 12: Cross-section view of water levels after 10 years of pumping at the proposed location and rate.

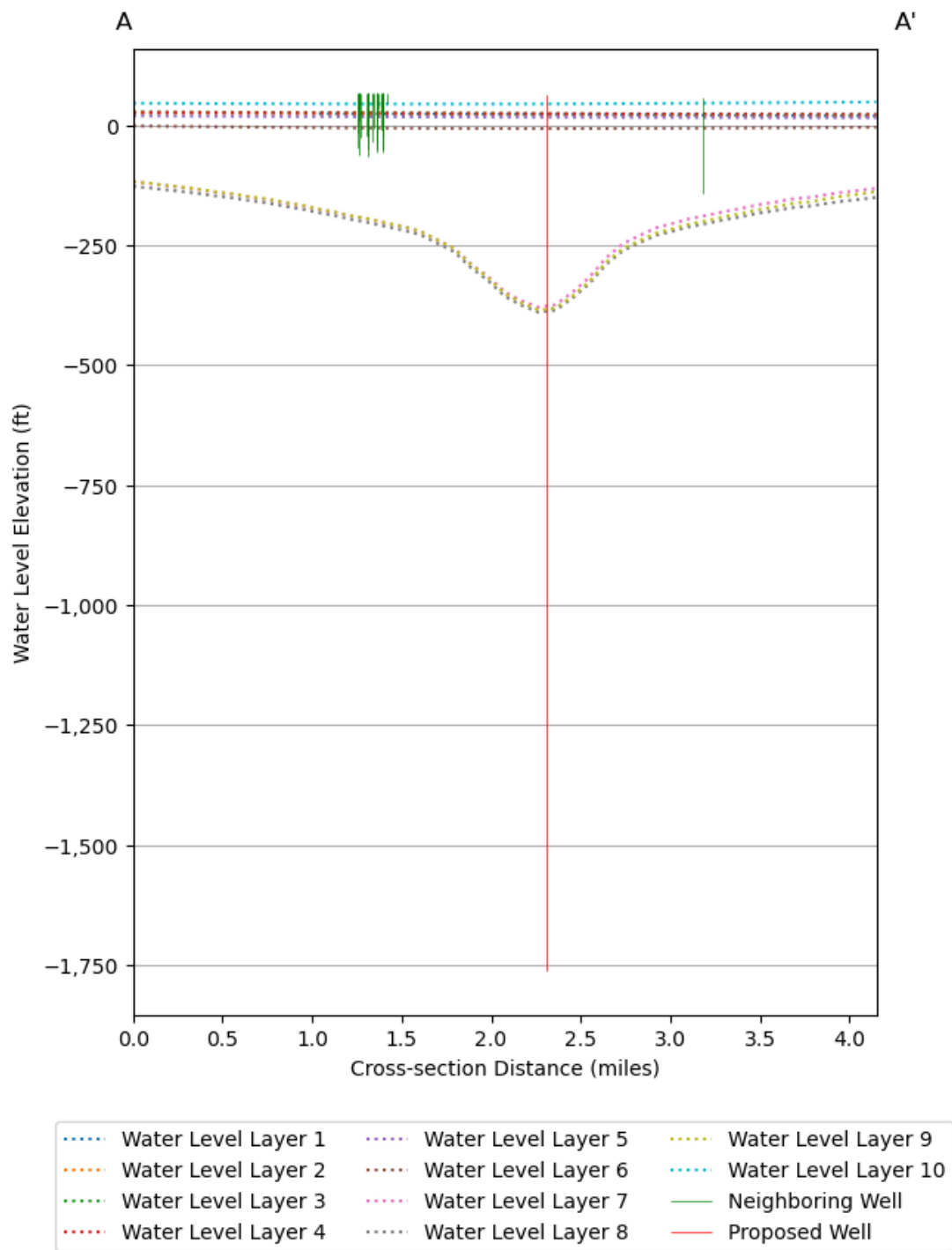


Figure 13: Cross-section view of water levels after 30 years of pumping at the proposed location and rate.

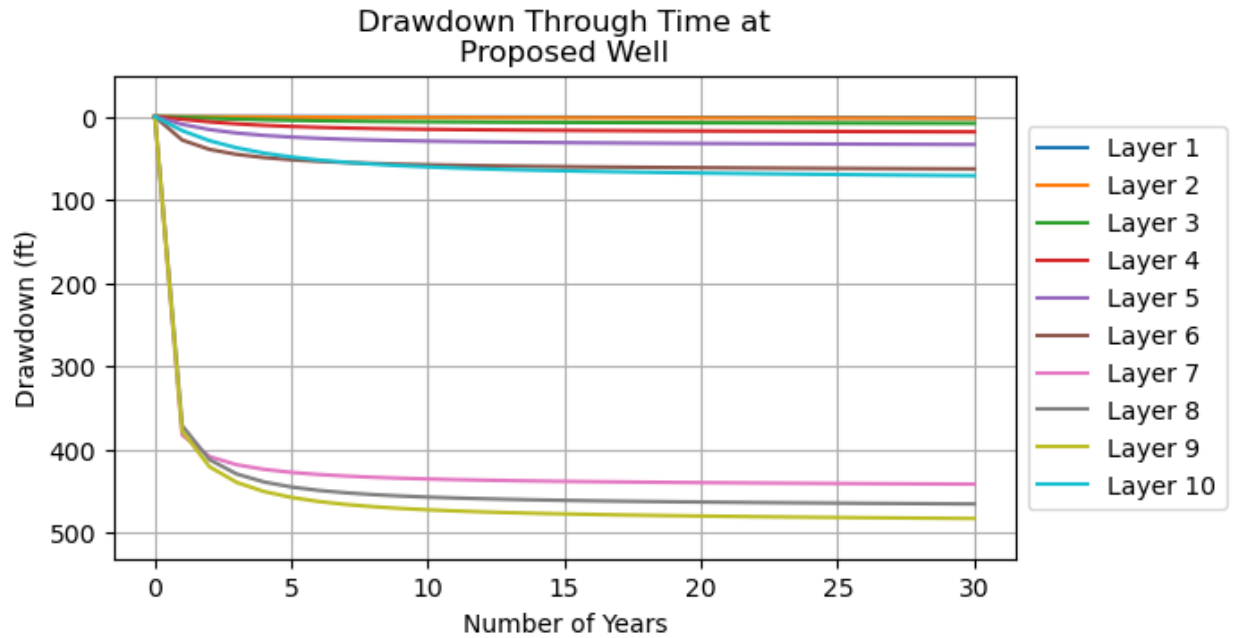


Figure 14: Drawdown through time at the proposed well location.

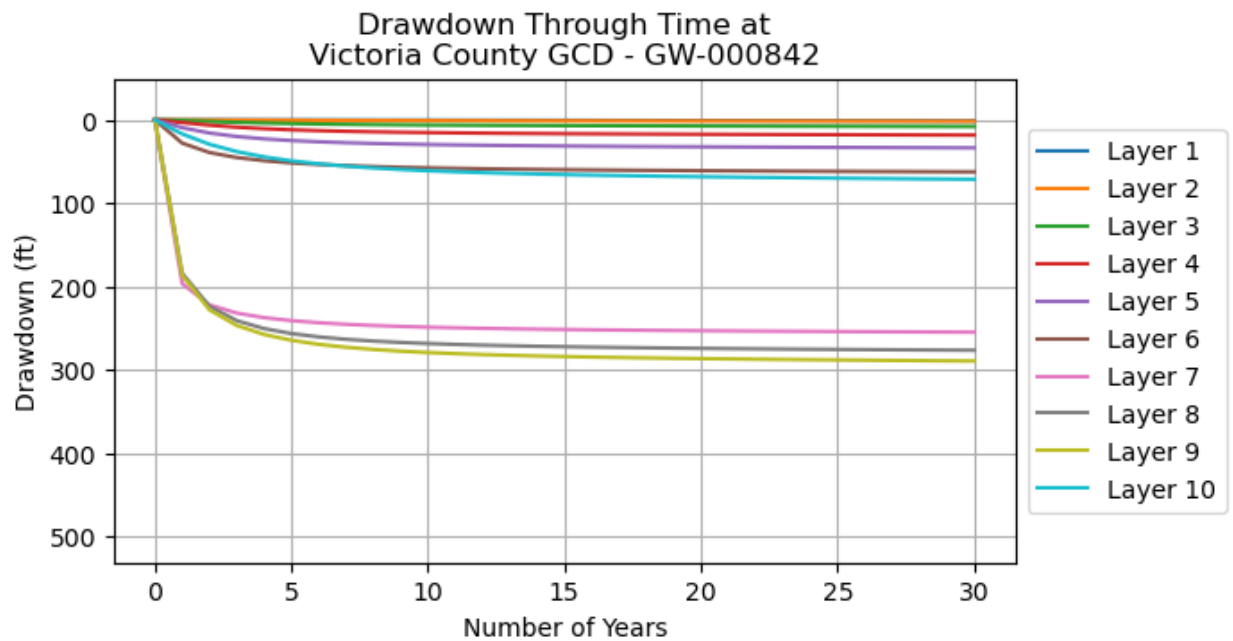


Figure 15: Drawdown through time at VCGCD well ID Victoria County GCD – GW-000842 location.