

**Volumetric Survey
of
LAKE STRIKER**

March 2021



March 2022

Texas Water Development Board

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Jeff Walker, Executive Administrator

Prepared for:

Angelina & Nacogdoches WCID #1

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Executive summary

In March 2021, the Texas Water Development Board (TWDB) entered into an agreement with the Angelina and Nacogdoches Counties Water Control and Improvement District No. 1 to perform a volumetric survey of Lake Striker (Cherokee and Rusk counties, Texas). Surveying was performed using a multi-frequency (208 kHz, 50 kHz, and 12 kHz), sub-bottom profiling depth sounder; although only data collected at the 208 kHz frequency was analyzed for this report.

Striker Creek Dam, impounding Striker Creek Reservoir, known as Lake Striker, is located on Striker Creek in Cherokee and Rusk counties, 18 miles southwest of Henderson, Texas. The conservation pool elevation of Lake Striker is 293.00 feet NAVD88. The TWDB collected bathymetric data for Lake Striker on March 29 and March 30, 2021, while daily average water surface elevations measured 293.12 and 293.13 feet NAVD88, respectively.

The 2021 TWDB volumetric survey indicates Lake Striker has a total reservoir capacity of 21,799 acre-feet and encompasses 1,954 acres at conservation pool elevation (293.00 feet NAVD88). Previous capacity estimates include the original design estimate in 1957 of 29,960 acre-feet and a re-calculated 1996 TWDB survey estimate of 23,094 acre-feet. Because of differences in past and present survey methodologies, direct comparison of volumetric surveys to others to estimate loss of area and capacity can be unreliable. Information from past surveys is presented here for informational purposes only.

The TWDB recommends that a similar methodology be used to resurvey Lake Striker in 10 years or after a major high flow event. To further improve estimates of capacity loss, the TWDB recommends a volumetric and sedimentation survey. Sedimentation surveys include additional analysis of the multi-frequency data for post-impoundment sediment by correlation with sediment core samples and a map identifying the spatial distribution of sediment throughout the reservoir.

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Note: References to brand names throughout this report do not imply endorsement by the Texas Water Development Board

Introduction

The Hydrographic Survey Program of the Texas Water Development Board (TWDB) was authorized by the 72nd Texas State Legislature in 1991. Texas Water Code Section 15.804 authorizes the TWDB to perform surveys to determine reservoir storage capacity, sedimentation levels, rates of sedimentation, and projected water supply availability.

In March 2021, the TWDB entered into an agreement with the Angelina and Nacogdoches Counties Water Control and Improvement District No. 1 (Angelina-Nacogdoches Counties WCID#1) to perform a volumetric survey of Lake Striker (Texas Water Development Board, 2021). This report provides an overview of the survey methods, analysis techniques, and associated results. Also included are the following contract deliverables: (1) an elevation-area-capacity table of the reservoir acceptable to the Texas Commission on Environmental Quality (Appendices E and F), (2) a bottom contour map (Figure 6), and (3) a shaded relief plot of the reservoir bottom (Figure 4).

Lake Striker general information

Striker Creek Dam, impounding Striker Creek Reservoir, known as Lake Striker, is located on Striker Creek in Cherokee and Rusk counties, 18 miles southwest of Henderson, Texas (Figure 1). Lake Striker is owned and operated by the Angelina-Nacogdoches Counties WCID #1. Construction of Striker Creek Dam and Lake Striker began on July 23, 1956, and the dam was completed on July 1, 1957. Deliberate impoundment of water began on May 1, 1957 (Texas Water Development Board, 1974). The reservoir was built primarily for municipal and industrial water supply purposes and is also used for recreational purposes (Angelina-Nacogdoches Counties WCID #1, 2023). Additional pertinent data about Striker Creek Dam and Lake Striker can be found in Table 1.

Water rights for Lake Striker have been appropriated to the Angelina-Nacogdoches Counties WCID #1 through Certificate of Adjudication No. 06-4847 and Amendment to Certificate of Adjudication Nos. 06-4847A and 06-4847B (Texas Commission on Environmental Quality, 2021). The complete certificates are on file at the Texas Commission on Environmental Quality (TCEQ).

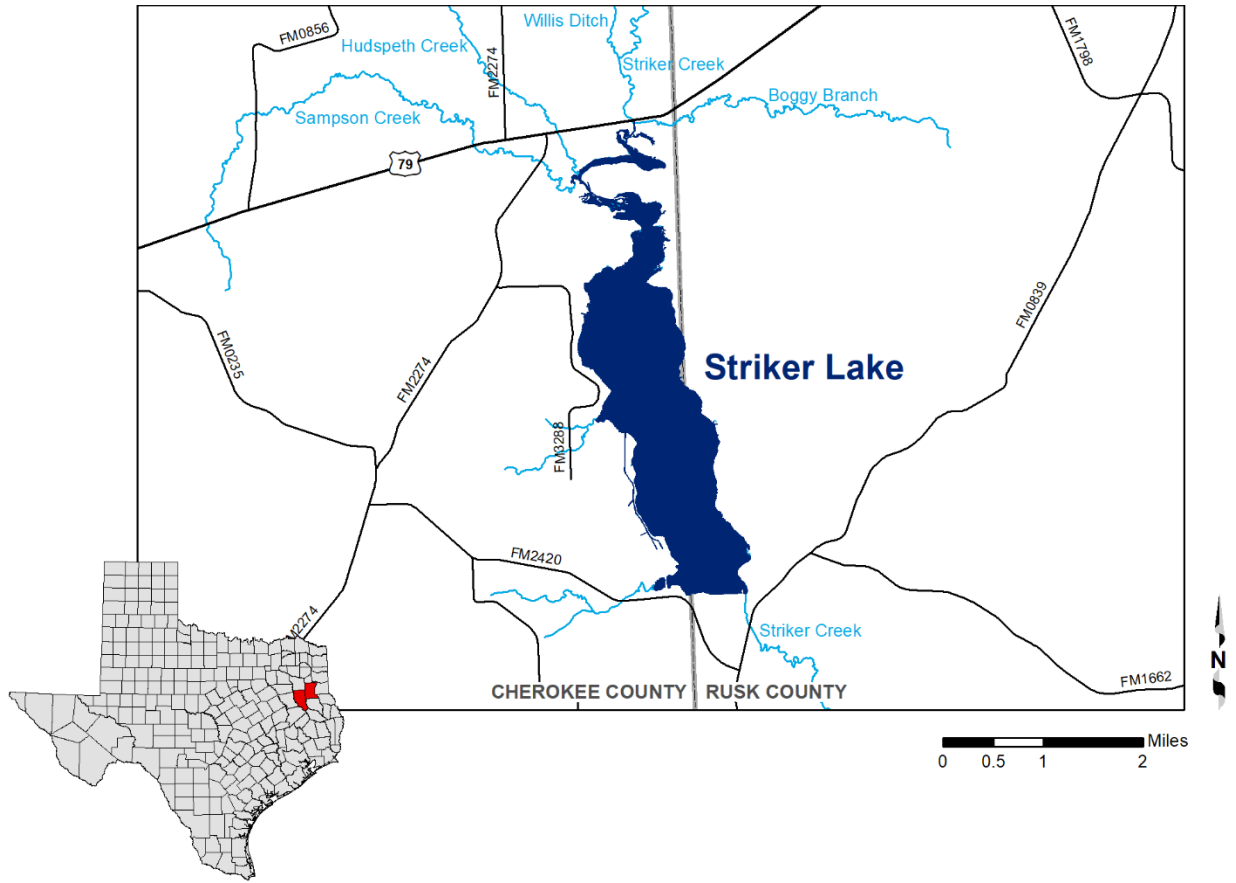


Figure 1. Location map.

Table 1. Pertinent Data for Lake Striker Dam and Lake Striker

Owner(s)			
Angelina and Nacogdoches Counties Water Control and Improvement District No. 1 (Angelina-Nacogdoches Counties WCID#1)			
Engineer (Design)			
J.M. Lloyd and Associates			
W.H. Wolverton			
Freese and Nichols			
General contractor			
Markham & Brown – McMullen & Larson			
Location			
Striker Creek in Cherokee and Rusk Counties, 18 miles southwest of Henderson			
Drainage area			
Total drainage area	182 square miles		
Dam			
Type	Earthfill embankment		
Total length (including service spillway)	2,400 feet		
Height	42.0 feet		
Top width (earthfill)	25.0 feet		
Top of dam elevation	309.0 feet NAVD88		
Spillway			
Emergency			
Type	Earth-cut channel		
Location	Right end of the dam		
Crest length	600 feet		
Crest elevation	294.0 feet NAVD88		
Service			
Location	Left end of the dam		
Type	Concrete ogee structure		
Control	4 tainter gates, each 35 feet by 10 feet plus a 1-foot-tall stop log on top of each gate		
Crest length	140 feet		
Crest elevation	282.0 feet NAVD88		
Low flow outlet			
Location	In the service spillway		
Type	Concrete pipe, 24-inch diameter		
Invert elevation	282.0 feet NAVD88		
Control	Flap valve		
Reservoir Data (Based on 2021 TWDB survey)			
Feature	Elevation (feet NAVD88^a)	Capacity (acre-feet)	Area (acres)
Top of dam	309.0	N/A	N/A
Emergency spillway crest elevation	294.0	N/A	N/A
Top of conservation pool	293.0	21,799	1,954
Invert elevation/ Dead pool elevation	282.0	4,922	960
Conservation storage capacity ^b	—	16,877	—

Sources: Texas Water Development Board, 1974, Texas Water Development Board, 2003.

^a. North American Vertical Datum 1988 (NAVD88).

^b. Usable conservation storage equals total capacity at conservation pool elevation minus dead pool capacity. Dead pool refers to water that cannot be drained by gravity through the dam outlet works.

Volumetric survey of Lake Striker

Datum

The vertical datum used during this survey is the North American Vertical Datum 1988 (NAVD88). This datum is utilized by the United States Geological Survey (USGS) for the reservoir elevation gage *USGS 08033810 Lk Striker nr Reklaw, TX* (U.S. Geological Survey, 2021). Elevations herein are reported in feet relative to the NAVD88 datum. Volume and area calculations in this report are referenced to water levels reported by the USGS gage. The horizontal datum used for this report is North American Datum 1983 (NAD83), and the horizontal coordinate system is State Plane Texas Central Zone (feet).

TWDB bathymetric data collection

The TWDB collected bathymetric data for Lake Striker on March 29 and March 30, 2021, while daily average water surface elevations measured 293.12 and 293.13 feet NAVD88, respectively. For data collection, the TWDB used a Specialty Devices, Inc. (SDI), single-beam, multi-frequency (208 kHz, 50 kHz, and 12 kHz) sub-bottom profiling depth sounder integrated with differential global positioning system (DGPS) equipment; although only data collected at the 208 kHz frequency was analyzed for this report. Data were collected along pre-planned survey lines oriented perpendicular to the assumed location of the original river channels and spaced approximately 250 feet apart. Many of the same survey lines also were used by the TWDB for the *Volumetric Surveys of Striker Creek Reservoir and Lake Kurth, December 1996* (Texas Water Development Board, 2003). The depth sounder was calibrated daily using a velocity profiler to measure the speed of sound in the water column and a weighted tape or stadia rod for depth reading verification. Each speed of sound profile, or velocity cast, is saved for further data processing. Figure 2 shows the data collection locations for the 2021 TWDB survey.



Figure 2. 2021 TWDB sounding data (blue dots).

Data processing

Model boundary

The bathymetric model boundary of the reservoir was digitized from aerial photographs, also known as digital orthophoto quarter-quadrangle images (DOQQs), obtained through the Texas Imagery Service. The Texas Natural Resources Information System manages the Texas Imagery Service, allowing public organizations in the State of Texas to access high resolution imagery as a service using Environmental Systems Research Institute's ArcGIS software (Texas Natural Resources Information System, 2020a, Texas Natural Resources Information System, 2020b). DOQQs photographed on April 8, 2019, while the daily average water surface elevation measured 293.27 feet, were used to digitize a model boundary at the land-water interface. For modeling purposes, the boundary was assigned an elevation of 293.30 feet.

Triangulated Irregular Network model

Following completion of data collection, the raw data files collected by the TWDB were edited to remove data anomalies. The current bottom surface of the reservoir is automatically determined by the data acquisition software. Hydropick software, developed by TWDB staff, was used to display, interpret, and edit the multi-frequency data by manually removing data anomalies in the current bottom surface. The speed of sound profiles, also known as velocity casts, were used to further refine the measured depths. For each location velocity casts are collected, the harmonic mean sound speed of all the casts are calculated. From this, depths collected using one average speed of sound are corrected with an overall optimum speed of sound for each specific depth (Specialty Devices, Inc., 2018).

All data were exported into a single file. The water surface elevation at the time of each sounding was used to convert each sounding depth to a corresponding reservoir-bottom elevation. This survey point dataset was then preconditioned by inserting a uniform grid of artificial survey points between the actual survey lines. Bathymetric elevations at these artificial points were determined using an anisotropic spatial interpolation algorithm described in the next section. This technique creates a high resolution, uniform grid of interpolated bathymetric elevation points throughout a majority of the reservoir (McEwen *et al.* 2011a). The resulting point file was used in conjunction with sounding and boundary

data to create volumetric Triangulated Irregular Network (TIN) models utilizing the 3D Analyst Extension of ArcGIS. The 3D Analyst algorithm uses Delaunay's criteria for triangulation to create a grid composed of triangles from non-uniformly spaced points, including the boundary vertices (Environmental Systems Research Institute, 1995).

Spatial interpolation of reservoir bathymetry

Isotropic spatial interpolation techniques such as the Delaunay triangulation used by the 3D Analyst extension of ArcGIS are, in many instances, unable to suitably interpolate bathymetry between survey lines common to reservoir surveys. Reservoirs and stream channels are anisotropic morphological features where bathymetry at any particular location is more similar to upstream and downstream locations than to transverse locations. Interpolation schemes that do not consider this anisotropy lead to the creation of several types of artifacts in the final representation of the reservoir bottom surface and hence to errors in volume. These artifacts may include artificially curved contour lines extending into the reservoir where the reservoir walls are steep or the reservoir is relatively narrow, intermittent representation of submerged stream channel connectivity, and oscillations of contour lines in between survey lines. These artifacts reduce the accuracy of the resulting volumetric TIN model in areas between actual survey data.

To improve the accuracy of bathymetric representation between survey lines, the TWDB developed various anisotropic spatial interpolation techniques. Generally, the directionality of interpolation at different locations of a reservoir can be determined from external data sources. A basic assumption is that the reservoir profile in the vicinity of a particular location has upstream and downstream similarity. In addition, the sinuosity and directionality of submerged stream channels can be determined by directly examining the survey data, or more robustly by examining scanned USGS 7.5-minute quadrangle maps (DRGs), hypsography files (the vector format of USGS 7.5-minute quadrangle map contours), and historical aerial photographs, when available. Using the survey data, polygons are created to partition the reservoir into segments with centerlines defining the directionality of interpolation within each segment. Using the interpolation definition files and survey data, the current reservoir-bottom elevation is calculated for each point in the high-resolution uniform grid of artificial survey points. The reservoir boundary, artificial survey points grid, and survey data points are used to create the volumetric TIN model representing reservoir bathymetry. Specific details of this interpolation technique can be

found in the HydroTools manual (McEwen and others, 2011a) and in McEwen and others (2011b).

In areas inaccessible to survey data collection, such as small coves and shallow upstream areas of the reservoir, linear interpolation is used for volumetric estimations (McEwen and others, 2011a). Linear interpolation results in improved elevation-capacity and elevation-area calculations.

Figure 3 illustrates typical results from application of the anisotropic interpolation as applied to Lake Striker. In Figure 3A, deeper channels and steep slopes indicated by surveyed cross-sections are not continuously represented in areas between survey cross-sections. This is an artifact of the TIN generation routine rather than an accurate representation of the physical bathymetric surface. Inclusion of interpolation points in creation of the volumetric TIN model, represented in Figure 3B, directs Delaunay triangulation to better represent the reservoir bathymetry between survey cross-sections. The bathymetry shown in Figure 3C was used in computing reservoir elevation-capacity (Appendix E) and elevation-area (Appendix F) tables.

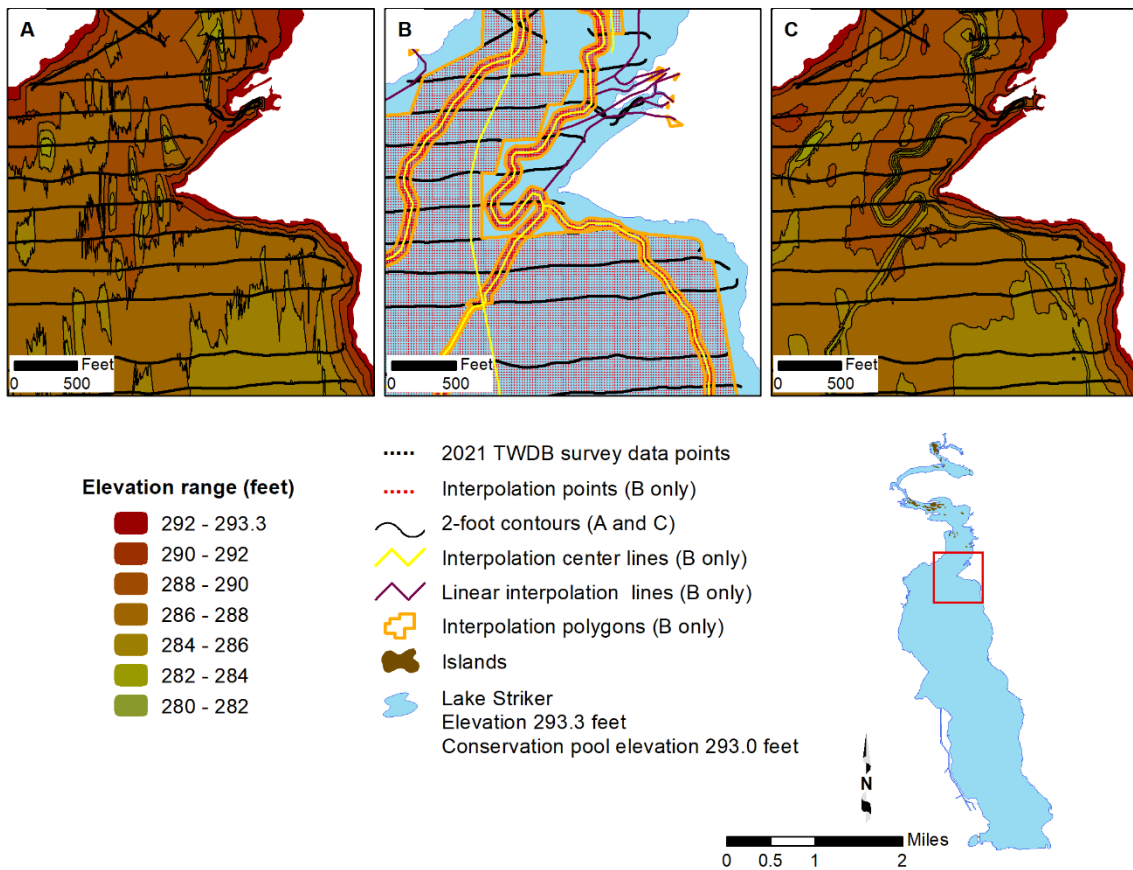


Figure 3. Anisotropic spatial interpolation as applied to Lake Striker sounding data; A) bathymetric contours without interpolated points, B) sounding points (*black*) and interpolated points (*red*), C) bathymetric contours with interpolated points.

To properly compare results from the 1996 TWDB survey of Lake Striker, the TWDB applied anisotropic spatial interpolation to the survey data collected in 1996 (Texas Water Development Board, 2016). The 1996 survey boundary was digitized from U.S. Geological Survey quarter quadrangle maps. The quadrangles covering Lake Striker are New Salem, TX (1973) and New Summerfield, TX (1973) (Texas Water Development Board, 2003). The 1996 re-calculated elevation-capacity table and elevation-area table are presented in Appendices A and B, respectively. The re-calculated capacity curve is presented in Appendix C, and the re-calculated area curve is presented in Appendix D.

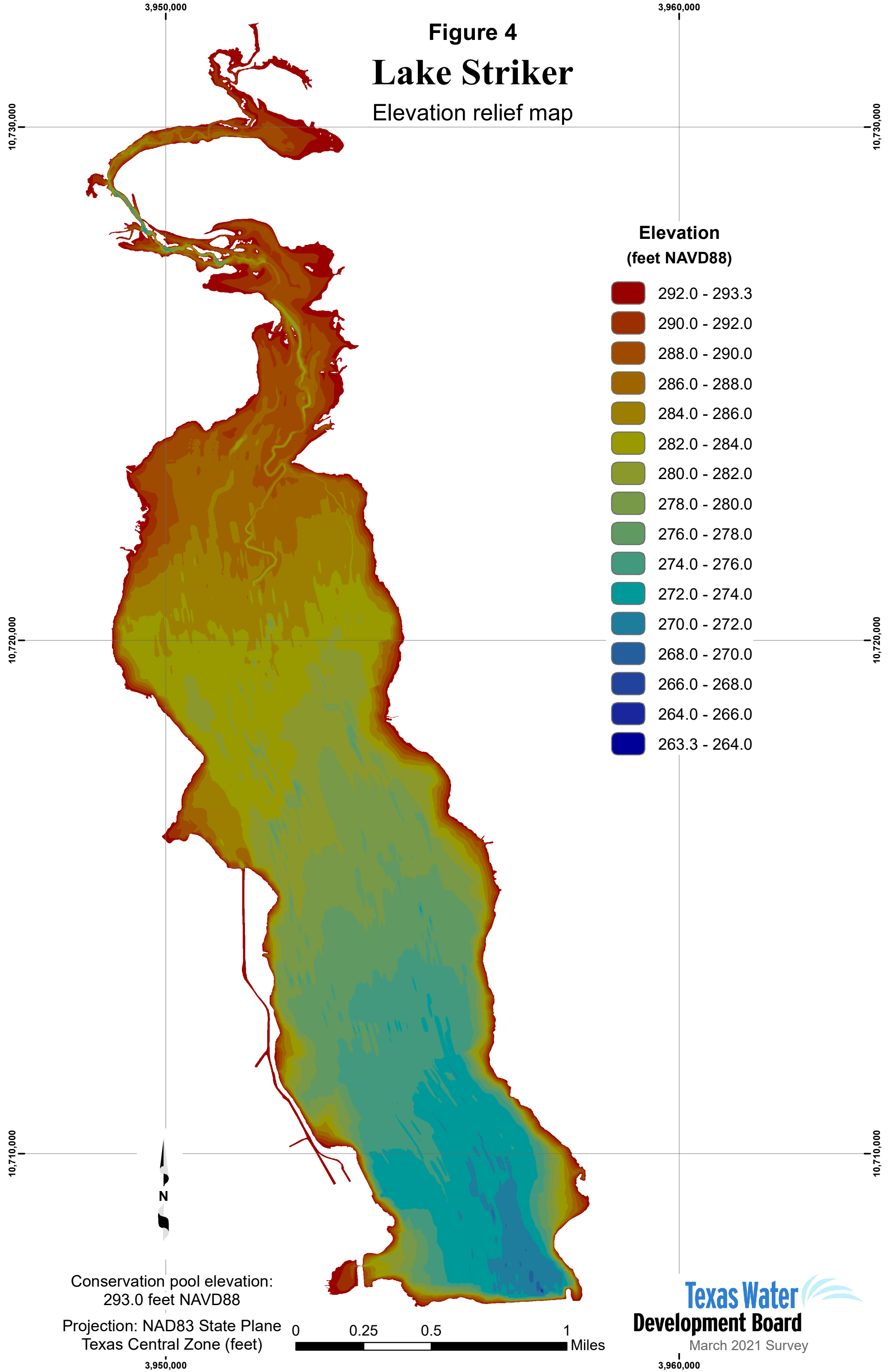
Area, volume, and contour calculation

Volumes and areas were computed for the entire reservoir at 0.01-foot intervals, from 263.14 to 293.30 feet for the bathymetric TIN model. The bathymetric elevation-capacity table and bathymetric elevation-area table, based on the 2021 survey and analysis,

are presented in Appendices E and F, respectively. The bathymetric capacity curve is presented in Appendix G, and the bathymetric area curve is presented in Appendix H.

The bathymetric volumetric TIN model was converted to a raster representation using a cell size of 1 foot by 1 foot. The raster data then were used to produce three figures: (1) an elevation relief map representing the topography of the reservoir bottom (Figure 4); (2) a depth range map showing depth ranges for Lake Striker (Figure 5); and (3) a 5-foot contour map (Figure 6).

Figure 4
Lake Striker
 Elevation relief map



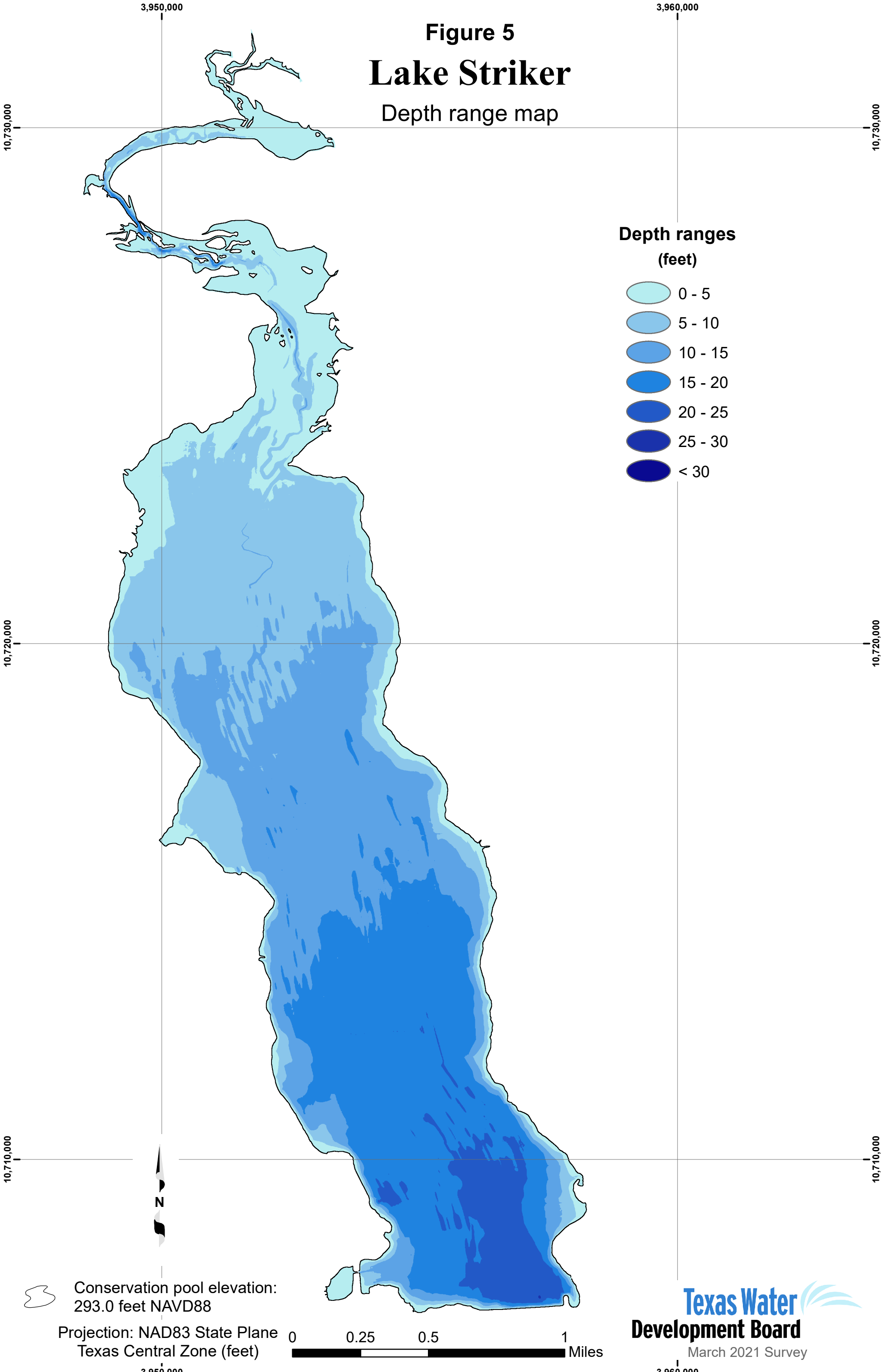
Conservation pool elevation:
 293.0 feet NAVD88

Projection: NAD83 State Plane
 Texas Central Zone (feet)

Figure 5

Lake Striker

Depth range map



Survey results

Volumetric survey

The 2021 TWDB volumetric survey indicates that Lake Striker has a total reservoir capacity of 21,799 acre-feet and encompasses 1,954 acres at conservation pool elevation (293.0 feet NAVD88). Current area and capacity estimates are compared to previous area and capacity estimates at different elevations in Table 2. Because of differences in past and present survey methodologies, direct comparison of volumetric surveys to others to estimate loss of area and capacity can be unreliable.

Table 2. Surface area, total capacity, and conservation pool elevation.

Survey	Surface Area (acres)	Total Capacity (acre-feet)	Conservation pool elevation ^a	Source
Original design	2,400	26,960	292.00 feet NGVD29	Texas Water Development Board, 1974
TWDB 1996	1,920	22,865	293.00 feet NGVD29	Texas Water Development Board, 2003
TWDB 1996 re-calculated	1,920	23,094	293.00 feet NGVD29	Texas Water Development Board, 2016
TWDB 2021	1,954	21,799	293.00 feet NAVD88	

^a The original conservation pool elevation of Lake Striker was 292.00 feet NGVD29. In subsequent years a 1-foot-tall stop log was added to the top of each tainter gate increasing conservation pool elevation to 293.00 feet NGVD29 (Texas Water Development Board, 2003). Conservation pool elevation 293.00 feet NGVD29 is equivalent to 293.0 feet NAVD88.

Comparison of capacity estimates of Lake Striker derived using differing methodologies are provided in Table 3 for sedimentation rate calculation. Long-term trends indicate Lake Striker loses capacity at an average of 82 acre-feet per year since impoundment due to sedimentation below conservation pool elevation (Figure 7).

Table 3. Average annual capacity loss comparisons.

Survey	Top of conservation pool elevation	
Original design ^a	26,960	<
TWDB 1996 re-calculated ^b	<	23,094
TWDB 2021 volumetric survey	21,799	21,799
Volume difference (acre-feet)	5,161	1,295
Percent change	19.1	5.6
Number of years	64	25
Capacity loss rate (acre-feet/year)	80	52
Capacity loss rate (acre-feet/square mile of drainage area of 182 square miles /year)	0.44	0.28

^a Source: Texas Water Development Board, 1974, Striker Creek Dam was completed, and deliberate impoundment began in 1957.

^b Source: Texas Water Development Board, 2016

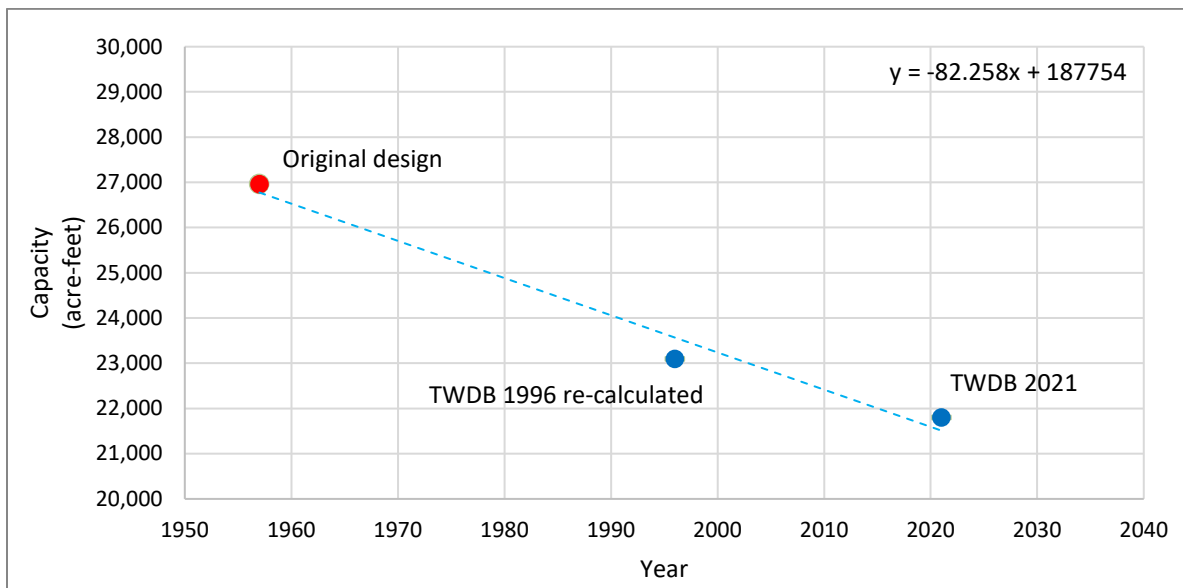


Figure 7. Plot of current and previous capacity estimates (acre-feet). Capacity estimates for each TWDB survey plotted as blue dots and other surveys as red dots. The blue trend line illustrates the total average loss of capacity through 2021.

Sediment range lines

In 1996, the TWDB established three sediment range lines in Lake Striker to estimate sediment accumulation over time. A cross-sectional comparison of the three sediment range lines comparing the current surfaces from the TWDB 2021 survey and the TWDB 1996 re-calculated survey is presented in Appendix I. Appendix I includes a map depicting the locations of the sediment range lines and a list of the endpoint coordinates for

each line (Table I1). Some differences in the cross-sections may be a result of spatial interpolation and the interpolation routine of the TIN Model.

Recommendations

The TWDB recommends that a similar methodology be used to resurvey Lake Striker in 10 years or after a major high flow event. To further improve estimates of capacity loss, TWDB recommends a volumetric and sedimentation survey. Sedimentation surveys include additional analysis of the multi-frequency data for post-impoundment sediment by correlation with sediment core samples and a map identifying the spatial distribution of sediment throughout the reservoir.

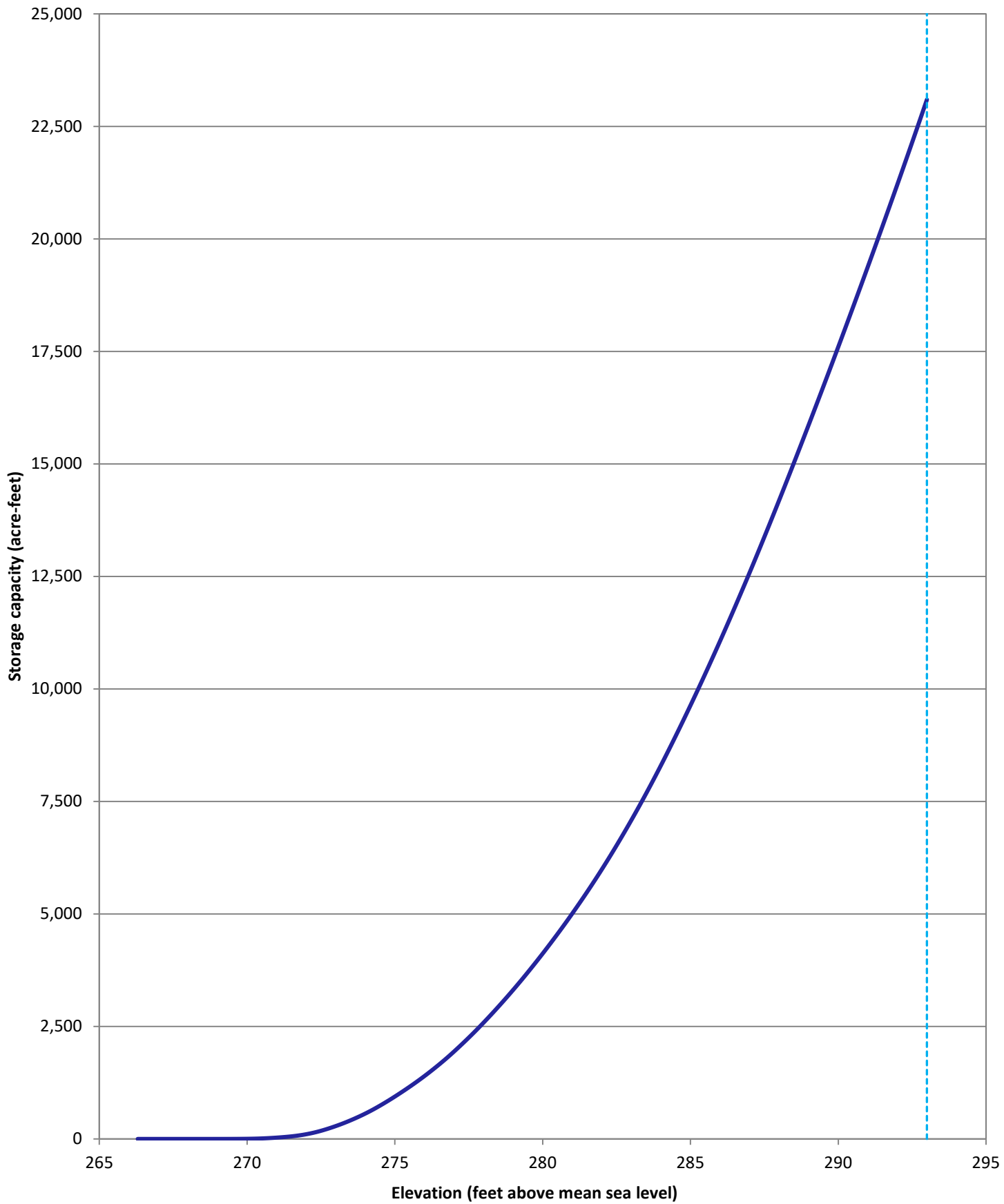
TWDB contact information

For more information about the TWDB Hydrographic Survey Program, visit www.twdb.texas.gov/surfacewater/surveys. Any questions regarding the TWDB Hydrographic Survey Program or this report may be addressed to: Hydrosurvey@twdb.texas.gov.

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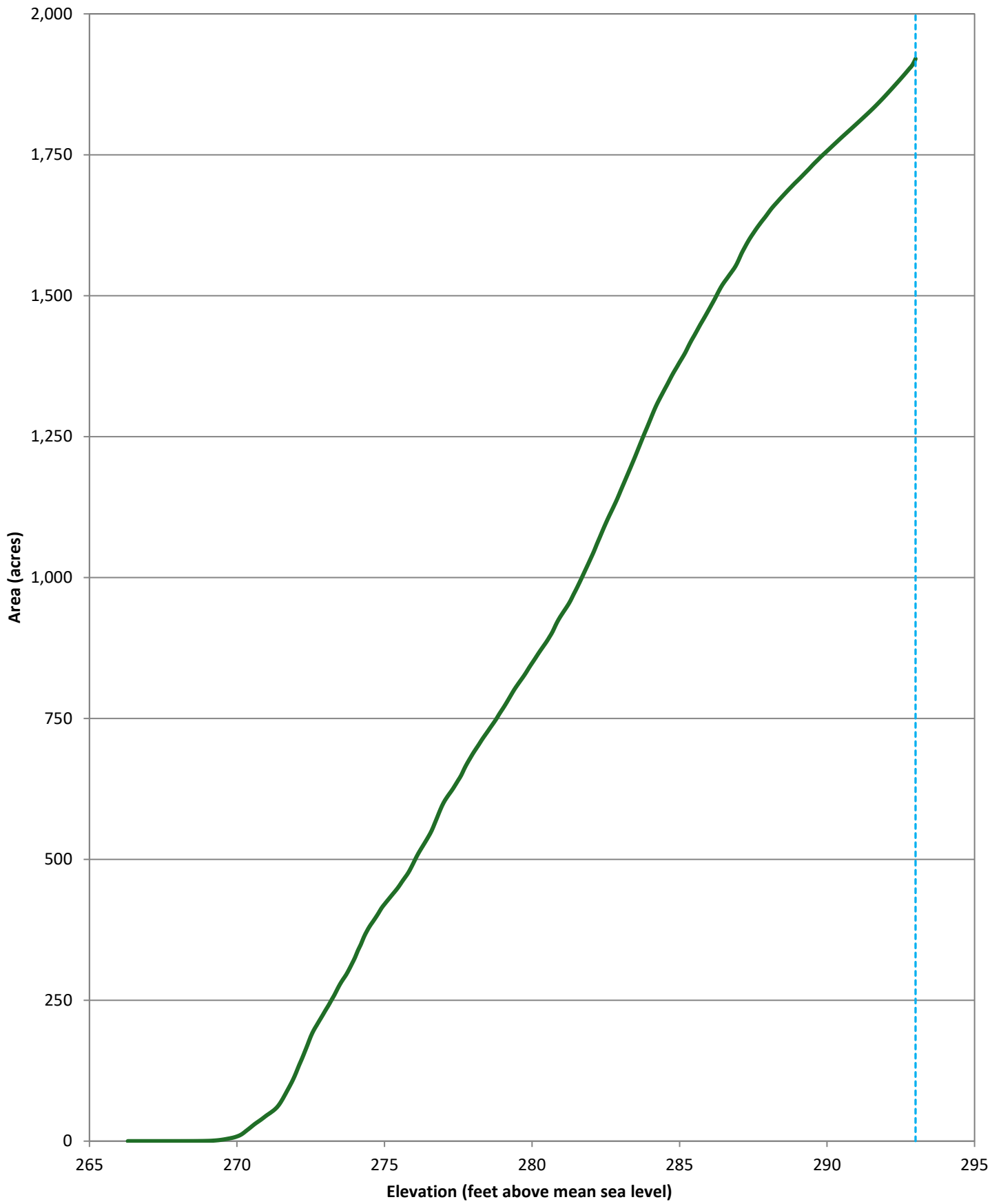
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— Total capacity 1996 - - - - Conservation pool elevation 293.0 feet

Striker Creek Reservoir
 December 1996 Survey
 re-calculated October 2016
 Prepared by: TWDB



Total area 1996
 Conservation pool elevation 293.0 feet

Striker Creek Reservoir
 December 1996 Survey
 re-calculated October 2016
 Prepared by: TWDB

Appendix E

Lake Striker

RESERVOIR CAPACITY TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

CAPACITY IN ACRE-FEET

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
268.6	0	0	0	0	0	0	0	0	0	0
268.7	0	0	0	0	0	0	0	0	0	0
268.8	0	0	0	0	0	0	0	0	0	0
268.9	0	0	0	0	0	0	0	0	0	0
269	0	0	0	0	0	0	0	0	0	0
269.1	0	0	0	0	0	0	0	0	0	0
269.2	0	0	0	0	0	0	0	0	0	0
269.3	0	0	0	0	0	0	0	0	0	0
269.4	0	0	0	0	0	0	0	0	0	0
269.5	0	0	0	0	0	0	0	0	0	0
269.6	0	0	0	0	0	0	0	0	0	0
269.7	0	0	0	0	0	0	0	0	0	0
269.8	1	1	1	1	1	1	1	1	1	1
269.9	1	1	1	1	1	1	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
270.1	1	1	1	1	1	1	1	1	1	1
270.2	1	1	1	1	1	1	1	1	1	1
270.3	1	1	1	1	1	1	1	1	1	1
270.4	1	1	1	1	1	2	2	2	2	2
270.5	2	2	2	2	2	2	2	2	2	2
270.6	2	2	2	2	2	2	2	2	2	2
270.7	2	2	3	3	3	3	3	3	3	3
270.8	3	3	3	3	3	3	3	3	3	3
270.9	4	4	4	4	4	4	4	4	4	4
271	4	4	5	5	5	5	5	5	5	5
271.1	5	5	6	6	6	6	6	6	6	7
271.2	7	7	7	7	7	7	8	8	8	8
271.3	8	8	9	9	9	9	9	10	10	10
271.4	10	10	11	11	11	11	11	12	12	12
271.5	12	13	13	13	13	14	14	14	14	15
271.6	15	15	15	16	16	16	17	17	17	17
271.7	18	18	18	19	19	19	20	20	20	21
271.8	21	21	22	22	22	23	23	24	24	24
271.9	25	25	25	26	26	27	27	28	28	28
272	29	29	30	30	31	31	32	32	33	33
272.1	34	34	35	35	36	36	37	37	38	38
272.2	39	39	40	40	41	41	42	43	43	44
272.3	44	45	45	46	47	47	48	49	49	50
272.4	50	51	52	52	53	54	54	55	56	56
272.5	57	58	58	59	60	61	61	62	63	63
272.6	64	65	66	66	67	68	69	69	70	71
272.7	72	73	73	74	75	76	77	78	78	79
272.8	80	81	82	83	84	84	85	86	87	88
272.9	89	90	91	92	93	94	95	96	97	98
273	99	100	101	102	103	104	105	106	108	109
273.1	110	111	112	113	115	116	117	118	119	121
273.2	122	123	125	126	127	128	130	131	132	134
273.3	135	137	138	139	141	142	144	145	147	148
273.4	150	151	153	154	156	157	159	160	162	164
273.5	165	167	168	170	172	173	175	177	178	180
273.6	182	184	185	187	189	191	192	194	196	198
273.7	200	201	203	205	207	209	211	213	215	217
273.8	219	220	222	224	226	228	230	232	234	236
273.9	239	241	243	245	247	249	251	253	255	257
274	260	262	264	266	268	271	273	275	277	280
274.1	282	284	286	289	291	293	296	298	300	303

Appendix E

Lake Striker

RESERVOIR CAPACITY TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

CAPACITY IN ACRE-FEET

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
274.2	305	307	310	312	314	317	319	322	324	326
274.3	329	331	334	336	339	341	344	346	348	351
274.4	353	356	359	361	364	366	369	371	374	376
274.5	379	382	384	387	389	392	395	397	400	403
274.6	405	408	411	413	416	419	421	424	427	430
274.7	432	435	438	440	443	446	449	452	454	457
274.8	460	463	466	468	471	474	477	480	483	486
274.9	488	491	494	497	500	503	506	509	512	515
275	518	521	524	527	530	533	536	539	542	545
275.1	548	551	554	557	560	563	566	569	572	575
275.2	578	582	585	588	591	594	597	601	604	607
275.3	610	613	617	620	623	626	630	633	636	640
275.4	643	646	650	653	656	660	663	667	670	673
275.5	677	680	684	687	691	694	698	701	705	708
275.6	712	715	719	722	726	730	733	737	741	744
275.7	748	751	755	759	762	766	770	774	777	781
275.8	785	789	792	796	800	804	808	811	815	819
275.9	823	827	831	835	839	843	846	850	854	858
276	862	866	870	874	878	882	886	890	894	898
276.1	903	907	911	915	919	923	927	931	935	940
276.2	944	948	952	956	960	965	969	973	977	981
276.3	986	990	994	998	1,003	1,007	1,011	1,016	1,020	1,024
276.4	1,028	1,033	1,037	1,041	1,046	1,050	1,054	1,059	1,063	1,067
276.5	1,072	1,076	1,081	1,085	1,089	1,094	1,098	1,103	1,107	1,112
276.6	1,116	1,121	1,125	1,129	1,134	1,138	1,143	1,147	1,152	1,156
276.7	1,161	1,166	1,170	1,175	1,179	1,184	1,188	1,193	1,197	1,202
276.8	1,207	1,211	1,216	1,220	1,225	1,230	1,234	1,239	1,243	1,248
276.9	1,253	1,257	1,262	1,267	1,271	1,276	1,281	1,285	1,290	1,295
277	1,300	1,304	1,309	1,314	1,319	1,323	1,328	1,333	1,338	1,343
277.1	1,347	1,352	1,357	1,362	1,367	1,372	1,376	1,381	1,386	1,391
277.2	1,396	1,401	1,406	1,411	1,416	1,421	1,426	1,431	1,436	1,441
277.3	1,446	1,451	1,456	1,461	1,466	1,471	1,476	1,481	1,487	1,492
277.4	1,497	1,502	1,507	1,512	1,518	1,523	1,528	1,533	1,539	1,544
277.5	1,549	1,554	1,560	1,565	1,570	1,576	1,581	1,586	1,592	1,597
277.6	1,603	1,608	1,613	1,619	1,624	1,630	1,635	1,640	1,646	1,651
277.7	1,657	1,662	1,668	1,673	1,679	1,684	1,690	1,696	1,701	1,707
277.8	1,712	1,718	1,724	1,729	1,735	1,740	1,746	1,752	1,758	1,763
277.9	1,769	1,775	1,780	1,786	1,792	1,798	1,803	1,809	1,815	1,821
278	1,826	1,832	1,838	1,844	1,850	1,856	1,862	1,867	1,873	1,879
278.1	1,885	1,891	1,897	1,903	1,909	1,915	1,921	1,927	1,933	1,939
278.2	1,945	1,951	1,957	1,963	1,969	1,975	1,981	1,987	1,993	1,999
278.3	2,005	2,011	2,018	2,024	2,030	2,036	2,042	2,048	2,055	2,061
278.4	2,067	2,073	2,079	2,086	2,092	2,098	2,104	2,111	2,117	2,123
278.5	2,130	2,136	2,142	2,149	2,155	2,161	2,168	2,174	2,180	2,187
278.6	2,193	2,200	2,206	2,212	2,219	2,225	2,232	2,238	2,245	2,251
278.7	2,257	2,264	2,270	2,277	2,283	2,290	2,296	2,303	2,310	2,316
278.8	2,323	2,329	2,336	2,342	2,349	2,355	2,362	2,369	2,375	2,382
278.9	2,389	2,395	2,402	2,409	2,415	2,422	2,429	2,435	2,442	2,449
279	2,455	2,462	2,469	2,476	2,482	2,489	2,496	2,503	2,510	2,516
279.1	2,523	2,530	2,537	2,544	2,551	2,558	2,565	2,571	2,578	2,585
279.2	2,592	2,599	2,606	2,613	2,620	2,627	2,634	2,641	2,648	2,655
279.3	2,662	2,669	2,676	2,684	2,691	2,698	2,705	2,712	2,719	2,726
279.4	2,733	2,741	2,748	2,755	2,762	2,769	2,777	2,784	2,791	2,798
279.5	2,806	2,813	2,820	2,827	2,835	2,842	2,849	2,857	2,864	2,871
279.6	2,879	2,886	2,893	2,901	2,908	2,916	2,923	2,930	2,938	2,945
279.7	2,953	2,960	2,968	2,975	2,983	2,990	2,998	3,005	3,013	3,020

Appendix E

Lake Striker

RESERVOIR CAPACITY TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

CAPACITY IN ACRE-FEET

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
279.8	3,028	3,036	3,043	3,051	3,058	3,066	3,074	3,081	3,089	3,097
279.9	3,104	3,112	3,120	3,127	3,135	3,143	3,151	3,158	3,166	3,174
280	3,182	3,189	3,197	3,205	3,213	3,221	3,228	3,236	3,244	3,252
280.1	3,260	3,268	3,276	3,283	3,291	3,299	3,307	3,315	3,323	3,331
280.2	3,339	3,347	3,355	3,363	3,371	3,379	3,387	3,395	3,403	3,411
280.3	3,419	3,427	3,435	3,443	3,451	3,459	3,467	3,475	3,483	3,491
280.4	3,499	3,508	3,516	3,524	3,532	3,540	3,548	3,557	3,565	3,573
280.5	3,581	3,589	3,598	3,606	3,614	3,623	3,631	3,639	3,647	3,656
280.6	3,664	3,672	3,681	3,689	3,698	3,706	3,714	3,723	3,731	3,740
280.7	3,748	3,757	3,765	3,773	3,782	3,790	3,799	3,807	3,816	3,824
280.8	3,833	3,842	3,850	3,859	3,867	3,876	3,884	3,893	3,902	3,910
280.9	3,919	3,927	3,936	3,945	3,953	3,962	3,971	3,979	3,988	3,997
281	4,006	4,014	4,023	4,032	4,041	4,049	4,058	4,067	4,076	4,084
281.1	4,093	4,102	4,111	4,120	4,128	4,137	4,146	4,155	4,164	4,173
281.2	4,182	4,191	4,199	4,208	4,217	4,226	4,235	4,244	4,253	4,262
281.3	4,271	4,280	4,289	4,298	4,307	4,316	4,325	4,334	4,343	4,352
281.4	4,361	4,370	4,379	4,388	4,397	4,406	4,415	4,425	4,434	4,443
281.5	4,452	4,461	4,470	4,480	4,489	4,498	4,507	4,516	4,526	4,535
281.6	4,544	4,553	4,563	4,572	4,581	4,590	4,600	4,609	4,618	4,628
281.7	4,637	4,646	4,656	4,665	4,675	4,684	4,693	4,703	4,712	4,722
281.8	4,731	4,741	4,750	4,759	4,769	4,778	4,788	4,797	4,807	4,816
281.9	4,826	4,835	4,845	4,854	4,864	4,874	4,883	4,893	4,902	4,912
282	4,922	4,931	4,941	4,950	4,960	4,970	4,979	4,989	4,999	5,008
282.1	5,018	5,028	5,037	5,047	5,057	5,067	5,076	5,086	5,096	5,106
282.2	5,116	5,125	5,135	5,145	5,155	5,165	5,175	5,185	5,194	5,204
282.3	5,214	5,224	5,234	5,244	5,254	5,264	5,274	5,284	5,294	5,304
282.4	5,314	5,324	5,334	5,344	5,355	5,365	5,375	5,385	5,395	5,405
282.5	5,415	5,426	5,436	5,446	5,456	5,467	5,477	5,487	5,497	5,508
282.6	5,518	5,528	5,539	5,549	5,560	5,570	5,580	5,591	5,601	5,612
282.7	5,622	5,633	5,643	5,654	5,664	5,675	5,685	5,696	5,707	5,717
282.8	5,728	5,738	5,749	5,760	5,770	5,781	5,792	5,803	5,813	5,824
282.9	5,835	5,846	5,856	5,867	5,878	5,889	5,900	5,911	5,922	5,932
283	5,943	5,954	5,965	5,976	5,987	5,998	6,009	6,020	6,031	6,042
283.1	6,053	6,064	6,075	6,086	6,097	6,108	6,119	6,130	6,141	6,153
283.2	6,164	6,175	6,186	6,197	6,208	6,220	6,231	6,242	6,253	6,265
283.3	6,276	6,287	6,298	6,310	6,321	6,332	6,344	6,355	6,366	6,378
283.4	6,389	6,401	6,412	6,424	6,435	6,446	6,458	6,469	6,481	6,492
283.5	6,504	6,516	6,527	6,539	6,550	6,562	6,573	6,585	6,597	6,608
283.6	6,620	6,632	6,644	6,655	6,667	6,679	6,690	6,702	6,714	6,726
283.7	6,738	6,749	6,761	6,773	6,785	6,797	6,809	6,821	6,833	6,844
283.8	6,856	6,868	6,880	6,892	6,904	6,916	6,928	6,940	6,952	6,964
283.9	6,976	6,988	7,000	7,012	7,025	7,037	7,049	7,061	7,073	7,085
284	7,097	7,109	7,122	7,134	7,146	7,158	7,170	7,183	7,195	7,207
284.1	7,219	7,232	7,244	7,256	7,269	7,281	7,293	7,306	7,318	7,330
284.2	7,343	7,355	7,367	7,380	7,392	7,405	7,417	7,430	7,442	7,455
284.3	7,467	7,480	7,492	7,505	7,517	7,530	7,542	7,555	7,567	7,580
284.4	7,593	7,605	7,618	7,631	7,643	7,656	7,669	7,681	7,694	7,707
284.5	7,720	7,732	7,745	7,758	7,771	7,783	7,796	7,809	7,822	7,835
284.6	7,848	7,861	7,873	7,886	7,899	7,912	7,925	7,938	7,951	7,964
284.7	7,977	7,990	8,003	8,016	8,029	8,042	8,055	8,068	8,081	8,094
284.8	8,108	8,121	8,134	8,147	8,160	8,173	8,186	8,200	8,213	8,226
284.9	8,239	8,252	8,266	8,279	8,292	8,305	8,319	8,332	8,345	8,358
285	8,372	8,385	8,398	8,412	8,425	8,439	8,452	8,465	8,479	8,492
285.1	8,506	8,519	8,532	8,546	8,559	8,573	8,586	8,600	8,613	8,627
285.2	8,640	8,654	8,667	8,681	8,695	8,708	8,722	8,735	8,749	8,763
285.3	8,776	8,790	8,803	8,817	8,831	8,845	8,858	8,872	8,886	8,899

Appendix E

Lake Striker

RESERVOIR CAPACITY TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

CAPACITY IN ACRE-FEET

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
285.4	8,913	8,927	8,941	8,954	8,968	8,982	8,996	9,010	9,023	9,037
285.5	9,051	9,065	9,079	9,093	9,107	9,120	9,134	9,148	9,162	9,176
285.6	9,190	9,204	9,218	9,232	9,246	9,260	9,274	9,288	9,302	9,316
285.7	9,330	9,344	9,358	9,372	9,386	9,400	9,414	9,429	9,443	9,457
285.8	9,471	9,485	9,499	9,513	9,528	9,542	9,556	9,570	9,584	9,599
285.9	9,613	9,627	9,641	9,656	9,670	9,684	9,698	9,713	9,727	9,741
286	9,756	9,770	9,784	9,799	9,813	9,828	9,842	9,856	9,871	9,885
286.1	9,900	9,914	9,928	9,943	9,957	9,972	9,986	10,001	10,015	10,030
286.2	10,044	10,059	10,073	10,088	10,103	10,117	10,132	10,146	10,161	10,175
286.3	10,190	10,205	10,219	10,234	10,249	10,263	10,278	10,293	10,307	10,322
286.4	10,337	10,351	10,366	10,381	10,396	10,410	10,425	10,440	10,455	10,469
286.5	10,484	10,499	10,514	10,529	10,544	10,558	10,573	10,588	10,603	10,618
286.6	10,633	10,648	10,663	10,678	10,692	10,707	10,722	10,737	10,752	10,767
286.7	10,782	10,797	10,812	10,827	10,842	10,857	10,872	10,887	10,903	10,918
286.8	10,933	10,948	10,963	10,978	10,993	11,008	11,023	11,039	11,054	11,069
286.9	11,084	11,099	11,115	11,130	11,145	11,160	11,175	11,191	11,206	11,221
287	11,237	11,252	11,267	11,282	11,298	11,313	11,328	11,344	11,359	11,375
287.1	11,390	11,405	11,421	11,436	11,451	11,467	11,482	11,498	11,513	11,529
287.2	11,544	11,560	11,575	11,591	11,606	11,622	11,637	11,653	11,668	11,684
287.3	11,699	11,715	11,730	11,746	11,762	11,777	11,793	11,808	11,824	11,840
287.4	11,855	11,871	11,887	11,902	11,918	11,934	11,949	11,965	11,981	11,997
287.5	12,012	12,028	12,044	12,060	12,075	12,091	12,107	12,123	12,139	12,154
287.6	12,170	12,186	12,202	12,218	12,234	12,250	12,265	12,281	12,297	12,313
287.7	12,329	12,345	12,361	12,377	12,393	12,409	12,425	12,441	12,457	12,473
287.8	12,489	12,505	12,521	12,537	12,553	12,569	12,585	12,601	12,618	12,634
287.9	12,650	12,666	12,682	12,698	12,714	12,731	12,747	12,763	12,779	12,795
288	12,811	12,828	12,844	12,860	12,876	12,893	12,909	12,925	12,941	12,958
288.1	12,974	12,990	13,007	13,023	13,039	13,056	13,072	13,088	13,105	13,121
288.2	13,137	13,154	13,170	13,187	13,203	13,220	13,236	13,252	13,269	13,285
288.3	13,302	13,318	13,335	13,351	13,368	13,384	13,401	13,417	13,434	13,450
288.4	13,467	13,483	13,500	13,517	13,533	13,550	13,566	13,583	13,599	13,616
288.5	13,633	13,649	13,666	13,683	13,699	13,716	13,733	13,749	13,766	13,783
288.6	13,799	13,816	13,833	13,849	13,866	13,883	13,900	13,916	13,933	13,950
288.7	13,967	13,984	14,000	14,017	14,034	14,051	14,068	14,084	14,101	14,118
288.8	14,135	14,152	14,169	14,186	14,203	14,219	14,236	14,253	14,270	14,287
288.9	14,304	14,321	14,338	14,355	14,372	14,389	14,406	14,423	14,440	14,457
289	14,474	14,491	14,508	14,525	14,542	14,559	14,576	14,593	14,610	14,627
289.1	14,644	14,661	14,679	14,696	14,713	14,730	14,747	14,764	14,781	14,798
289.2	14,816	14,833	14,850	14,867	14,884	14,902	14,919	14,936	14,953	14,970
289.3	14,988	15,005	15,022	15,039	15,057	15,074	15,091	15,108	15,126	15,143
289.4	15,160	15,178	15,195	15,212	15,230	15,247	15,264	15,282	15,299	15,316
289.5	15,334	15,351	15,369	15,386	15,403	15,421	15,438	15,456	15,473	15,491
289.6	15,508	15,526	15,543	15,561	15,578	15,596	15,613	15,631	15,648	15,666
289.7	15,683	15,701	15,718	15,736	15,754	15,771	15,789	15,806	15,824	15,842
289.8	15,859	15,877	15,894	15,912	15,930	15,947	15,965	15,983	16,001	16,018
289.9	16,036	16,054	16,071	16,089	16,107	16,125	16,142	16,160	16,178	16,196
290	16,213	16,231	16,249	16,267	16,285	16,303	16,320	16,338	16,356	16,374
290.1	16,392	16,410	16,427	16,445	16,463	16,481	16,499	16,517	16,535	16,553
290.2	16,571	16,589	16,607	16,624	16,642	16,660	16,678	16,696	16,714	16,732
290.3	16,750	16,768	16,786	16,804	16,822	16,840	16,858	16,876	16,894	16,912
290.4	16,930	16,948	16,966	16,984	17,003	17,021	17,039	17,057	17,075	17,093
290.5	17,111	17,129	17,147	17,165	17,183	17,201	17,220	17,238	17,256	17,274
290.6	17,292	17,310	17,328	17,346	17,365	17,383	17,401	17,419	17,437	17,456
290.7	17,474	17,492	17,510	17,528	17,546	17,565	17,583	17,601	17,619	17,638
290.8	17,656	17,674	17,692	17,711	17,729	17,747	17,765	17,784	17,802	17,820
290.9	17,838	17,857	17,875	17,893	17,912	17,930	17,948	17,967	17,985	18,003

Appendix F
Lake Striker

RESERVOIR AREA TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

AREA IN ACRES

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
268.6	0	0	0	0	0	0	0	0	0	0
268.7	0	0	0	0	0	0	0	0	0	0
268.8	0	0	0	0	0	0	0	0	0	0
268.9	0	0	0	0	0	0	0	0	0	0
269	0	0	0	0	0	0	0	0	0	0
269.1	0	0	0	0	0	0	0	0	0	0
269.2	0	0	0	0	0	0	0	0	0	0
269.3	0	0	0	0	0	0	0	0	0	0
269.4	0	0	0	0	0	0	0	0	0	0
269.5	0	0	0	0	0	0	0	0	0	0
269.6	1	1	1	1	1	1	1	1	1	1
269.7	1	1	1	1	1	1	1	1	1	1
269.8	1	1	1	1	1	1	1	1	1	1
269.9	1	1	1	1	1	1	1	1	1	1
270	1	1	1	1	1	1	1	1	1	1
270.1	1	1	1	1	1	2	2	2	2	2
270.2	2	2	2	2	2	2	2	2	2	2
270.3	2	2	2	2	2	2	2	2	2	2
270.4	3	3	3	3	3	3	3	3	3	3
270.5	3	3	3	3	3	3	4	4	4	4
270.6	4	4	4	4	4	4	4	4	4	5
270.7	5	5	5	5	5	5	5	5	5	6
270.8	6	6	6	6	6	6	6	6	7	7
270.9	7	7	7	7	8	8	8	8	9	9
271	9	9	9	10	10	10	11	11	11	11
271.1	12	12	12	13	13	13	14	14	14	14
271.2	15	15	15	15	16	16	16	16	17	17
271.3	17	18	18	18	18	19	19	19	20	20
271.4	20	21	21	21	22	22	22	22	23	23
271.5	23	24	24	25	25	25	25	26	26	26
271.6	27	27	27	28	28	29	29	29	30	30
271.7	31	31	31	32	32	33	33	33	34	34
271.8	35	35	36	36	37	37	37	38	38	39
271.9	39	40	40	41	41	42	42	43	43	44
272	44	45	45	46	46	47	47	48	48	48
272.1	49	49	50	50	51	51	52	52	53	53
272.2	54	54	55	55	56	56	57	57	58	58
272.3	59	59	60	60	61	61	62	62	63	63
272.4	64	64	65	65	66	66	67	67	68	68
272.5	69	69	70	70	71	71	72	72	73	73
272.6	74	74	75	75	76	76	77	77	78	79
272.7	79	80	81	81	82	83	84	84	85	86
272.8	86	87	88	89	89	90	91	92	92	93
272.9	94	94	95	96	97	98	99	100	101	102
273	103	105	106	107	108	109	111	112	113	114
273.1	115	116	117	119	120	121	122	123	124	126
273.2	127	128	129	130	131	133	134	135	136	137
273.3	138	139	140	141	143	144	145	146	148	149
273.4	150	151	152	153	154	155	157	158	159	160
273.5	162	163	164	165	166	167	168	169	170	172
273.6	173	174	175	176	177	178	179	180	181	182
273.7	183	184	186	187	188	189	190	191	192	193
273.8	194	195	196	198	199	200	201	202	203	204
273.9	206	207	208	209	210	211	212	214	215	216
274	217	218	219	220	221	222	223	224	225	226
274.1	227	228	228	229	230	231	232	233	233	234

Appendix F
Lake Striker

RESERVOIR AREA TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

March 2021 Survey

AREA IN ACRES

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
274.2	235	236	237	237	238	239	239	240	241	242
274.3	243	244	245	245	246	247	248	249	250	251
274.4	252	252	253	254	255	256	256	257	258	258
274.5	259	260	261	261	262	263	263	264	265	265
274.6	266	266	267	268	268	269	270	271	272	272
274.7	273	274	275	275	276	277	278	278	279	280
274.8	281	281	282	283	284	285	286	287	288	289
274.9	289	290	291	291	292	293	294	294	295	296
275	297	297	298	299	299	300	301	302	302	303
275.1	304	305	305	306	307	308	308	309	310	311
275.2	312	312	313	314	315	316	318	319	320	321
275.3	323	324	325	326	328	329	330	331	332	333
275.4	334	335	336	337	338	339	340	341	342	343
275.5	344	345	346	347	348	349	350	351	352	353
275.6	354	355	356	357	358	360	361	362	363	364
275.7	365	366	367	368	369	370	371	373	374	375
275.8	376	377	378	380	381	382	383	384	385	386
275.9	387	389	390	391	392	393	394	395	396	397
276	398	399	400	401	402	403	404	405	406	406
276.1	407	408	409	410	411	411	412	413	414	415
276.2	416	416	417	418	419	420	421	421	422	423
276.3	424	424	425	426	427	427	428	429	430	430
276.4	431	432	432	433	434	435	435	436	437	437
276.5	438	439	440	440	441	442	443	443	444	445
276.6	446	446	447	448	449	449	450	451	451	452
276.7	452	453	454	454	455	456	456	457	457	458
276.8	459	459	460	461	461	462	463	463	464	465
276.9	465	466	467	467	468	469	470	470	471	472
277	473	474	474	475	476	477	478	479	480	481
277.1	482	483	484	485	486	487	488	489	490	491
277.2	493	494	495	496	497	498	500	501	502	503
277.3	504	505	506	508	509	510	512	513	514	515
277.4	517	518	519	520	522	523	524	525	526	527
277.5	528	529	530	531	533	534	535	536	537	538
277.6	539	540	541	542	543	544	545	546	547	548
277.7	549	550	551	552	553	554	555	557	558	559
277.8	560	561	563	564	565	566	567	568	569	570
277.9	571	572	573	574	575	576	577	578	579	580
278	581	582	583	584	585	586	587	588	589	590
278.1	591	592	593	594	595	596	597	598	599	600
278.2	601	602	603	604	605	606	608	609	610	611
278.3	612	613	614	615	616	617	618	619	620	620
278.4	621	622	623	624	625	626	627	628	629	630
278.5	631	632	633	633	634	635	636	637	638	638
278.6	639	640	641	642	642	643	644	645	646	647
278.7	647	648	649	650	651	651	652	653	654	655
278.8	656	656	657	658	659	660	661	661	662	663
278.9	664	665	666	667	667	668	669	670	671	672
279	673	674	675	676	677	678	680	681	682	683
279.1	684	685	687	688	689	690	691	692	693	694
279.2	695	697	698	699	700	701	702	703	704	705
279.3	706	707	708	709	710	711	712	713	714	715
279.4	716	717	718	719	720	721	722	723	724	725
279.5	726	727	728	729	730	731	732	733	734	735
279.6	736	737	738	739	740	742	743	744	745	746
279.7	747	748	749	750	751	752	753	754	755	756

Appendix F
Lake Striker

RESERVOIR AREA TABLE (continued)

TEXAS WATER DEVELOPMENT BOARD

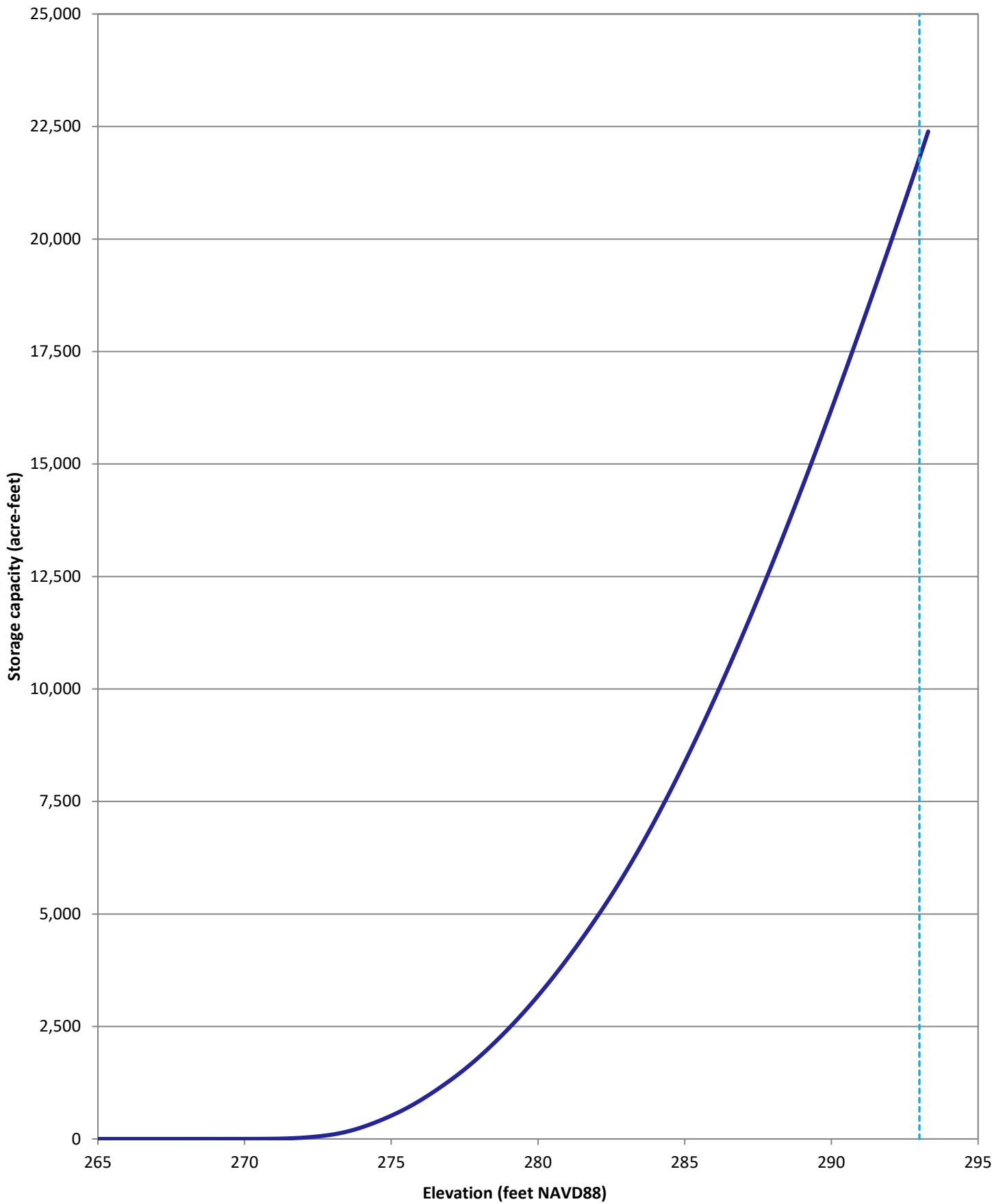
March 2021 Survey

AREA IN ACRES

Conservation pool elevation 293.0 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

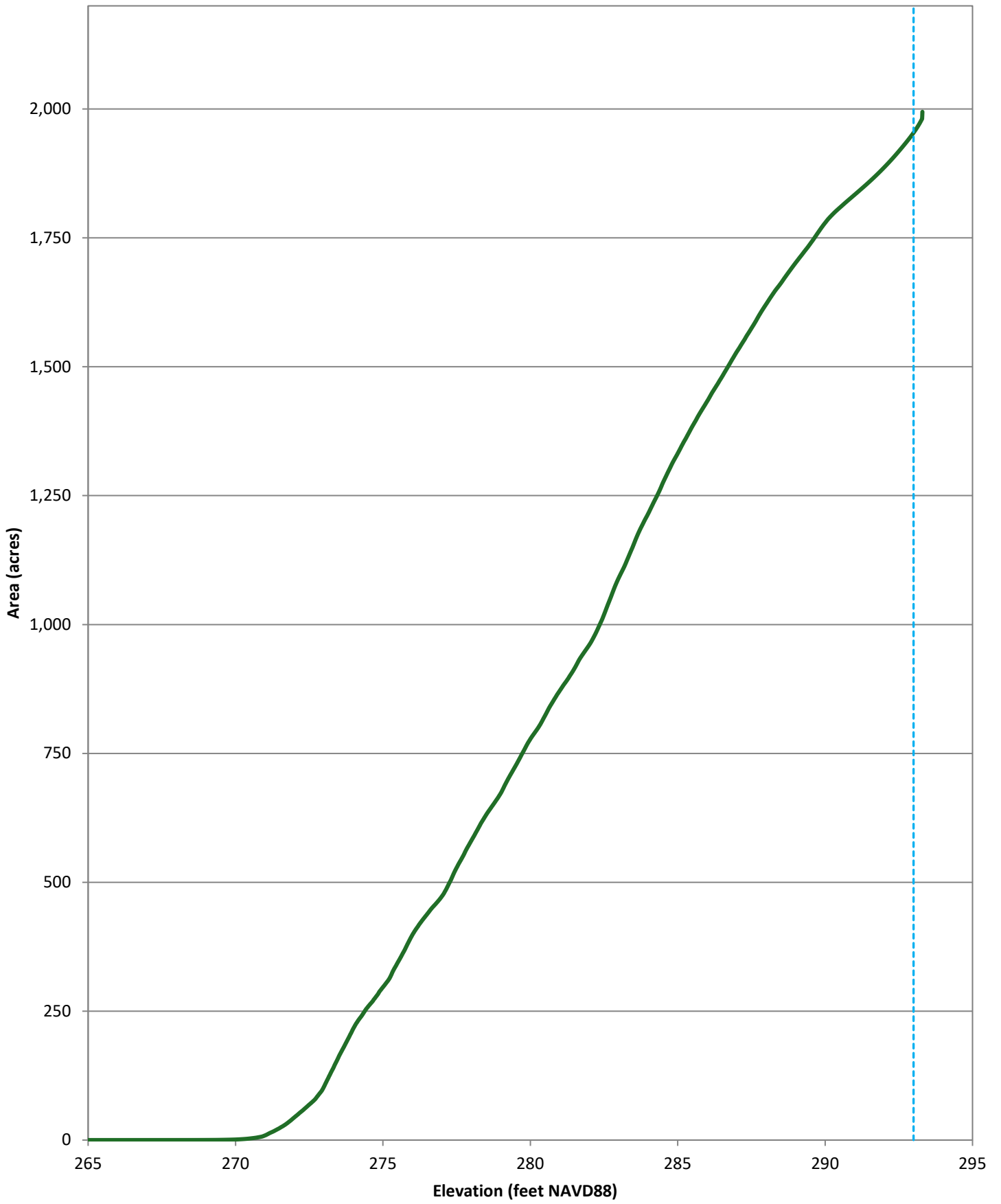
ELEVATION (Feet)	0	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
279.8	758	759	760	761	762	763	764	765	766	767
279.9	768	769	770	771	772	773	774	775	776	777
280	778	779	780	780	781	782	783	784	785	785
280.1	786	787	788	789	789	790	791	792	793	793
280.2	794	795	796	797	798	798	799	800	801	802
280.3	803	804	805	806	806	807	809	810	811	812
280.4	813	814	815	816	817	818	819	820	821	822
280.5	823	824	825	827	828	829	830	831	832	833
280.6	834	835	836	838	839	840	841	842	843	843
280.7	844	845	846	847	848	849	850	851	852	853
280.8	854	855	856	857	858	858	859	860	861	862
280.9	863	864	865	866	867	867	868	869	870	871
281	872	873	873	874	875	876	877	878	879	879
281.1	880	881	882	883	884	884	885	886	887	888
281.2	888	889	890	891	892	892	893	894	895	896
281.3	897	898	899	900	900	901	902	903	904	905
281.4	906	907	907	908	909	910	911	912	913	914
281.5	915	916	917	918	919	920	921	922	923	924
281.6	926	927	928	929	930	931	932	933	934	935
281.7	936	936	937	938	939	940	941	941	942	943
281.8	944	945	946	946	947	948	949	950	951	951
281.9	952	953	954	955	955	956	957	958	959	960
282	960	961	962	963	964	965	966	967	968	969
282.1	970	971	972	973	974	975	977	978	979	980
282.2	981	982	983	984	986	987	988	989	990	992
282.3	993	994	996	997	998	999	1,001	1,002	1,003	1,004
282.4	1,005	1,007	1,008	1,009	1,011	1,012	1,013	1,015	1,016	1,018
282.5	1,019	1,021	1,022	1,024	1,025	1,027	1,028	1,030	1,031	1,033
282.6	1,034	1,036	1,037	1,039	1,040	1,041	1,043	1,044	1,046	1,047
282.7	1,049	1,050	1,051	1,053	1,054	1,056	1,057	1,059	1,061	1,062
282.8	1,064	1,065	1,066	1,068	1,069	1,071	1,072	1,074	1,075	1,077
282.9	1,078	1,079	1,080	1,082	1,083	1,084	1,086	1,087	1,088	1,089
283	1,091	1,092	1,093	1,094	1,095	1,096	1,098	1,099	1,100	1,101
283.1	1,102	1,103	1,104	1,106	1,107	1,108	1,109	1,110	1,111	1,113
283.2	1,114	1,115	1,117	1,118	1,119	1,121	1,122	1,123	1,125	1,126
283.3	1,127	1,129	1,130	1,131	1,133	1,134	1,135	1,137	1,138	1,140
283.4	1,141	1,142	1,144	1,145	1,146	1,147	1,149	1,150	1,152	1,153
283.5	1,154	1,156	1,157	1,159	1,160	1,162	1,163	1,165	1,166	1,167
283.6	1,169	1,170	1,171	1,173	1,174	1,175	1,177	1,178	1,179	1,180
283.7	1,182	1,183	1,184	1,185	1,186	1,188	1,189	1,190	1,191	1,192
283.8	1,193	1,194	1,195	1,197	1,198	1,199	1,200	1,201	1,202	1,203
283.9	1,205	1,206	1,207	1,208	1,209	1,210	1,211	1,212	1,213	1,214
284	1,215	1,216	1,217	1,219	1,220	1,221	1,222	1,223	1,225	1,226
284.1	1,227	1,228	1,229	1,231	1,232	1,233	1,234	1,235	1,236	1,238
284.2	1,239	1,240	1,241	1,242	1,243	1,244	1,245	1,246	1,248	1,249
284.3	1,250	1,251	1,252	1,253	1,255	1,256	1,257	1,258	1,259	1,261
284.4	1,262	1,263	1,265	1,266	1,267	1,269	1,270	1,271	1,273	1,274
284.5	1,275	1,277	1,278	1,279	1,280	1,281	1,283	1,284	1,285	1,286
284.6	1,287	1,288	1,290	1,291	1,292	1,293	1,294	1,296	1,297	1,298
284.7	1,299	1,300	1,301	1,303	1,304	1,305	1,306	1,307	1,309	1,310
284.8	1,311	1,312	1,313	1,314	1,315	1,316	1,317	1,319	1,320	1,321
284.9	1,322	1,323	1,324	1,325	1,326	1,327	1,328	1,329	1,330	1,331
285	1,332	1,333	1,334	1,335	1,336	1,337	1,338	1,339	1,340	1,342
285.1	1,343	1,344	1,345	1,346	1,347	1,348	1,349	1,350	1,351	1,352
285.2	1,354	1,355	1,356	1,357	1,358	1,358	1,359	1,360	1,361	1,363
285.3	1,364	1,365	1,366	1,367	1,368	1,369	1,370	1,371	1,372	1,373



— Total capacity 2021

- - - Conservation pool elevation 293.0 feet

Lake Striker
March 2021 Survey
Prepared by: TWDB



— Total area 2021

- - - Conservation pool elevation 293.0 feet

Lake Striker
March 2021 Survey
Prepared by: TWDB

Appendix I

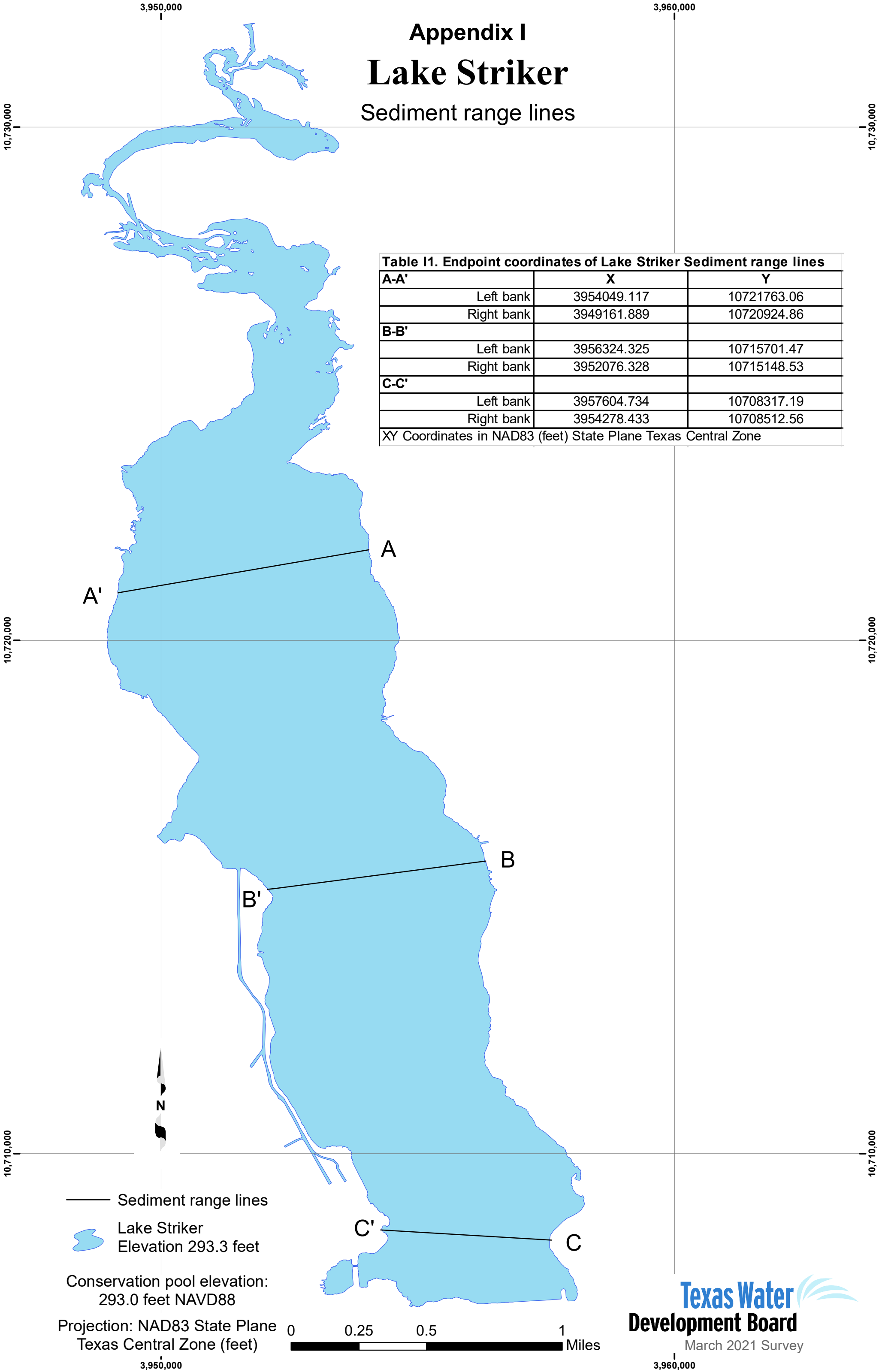
Lake Striker

Sediment range lines

Table I1. Endpoint coordinates of Lake Striker Sediment range lines

A-A'	X	Y
Left bank	3954049.117	10721763.06
Right bank	3949161.889	10720924.86
B-B'		
Left bank	3956324.325	10715701.47
Right bank	3952076.328	10715148.53
C-C'		
Left bank	3957604.734	10708317.19
Right bank	3954278.433	10708512.56

XY Coordinates in NAD83 (feet) State Plane Texas Central Zone



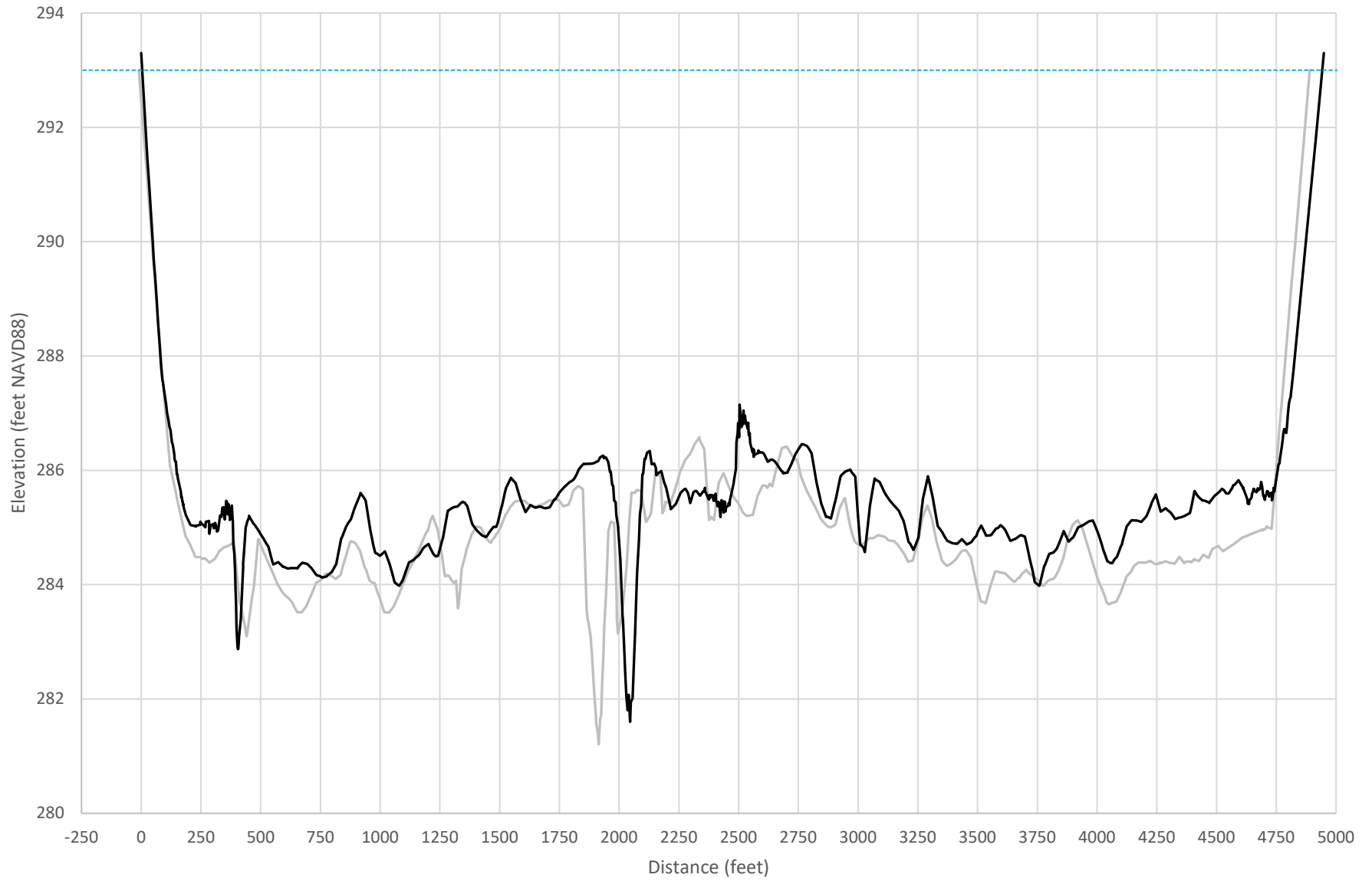
— Sediment range lines
 Lake Striker
 Elevation 293.3 feet

Conservation pool elevation:
 293.0 feet NAVD88

Projection: NAD83 State Plane
 Texas Central Zone (feet)

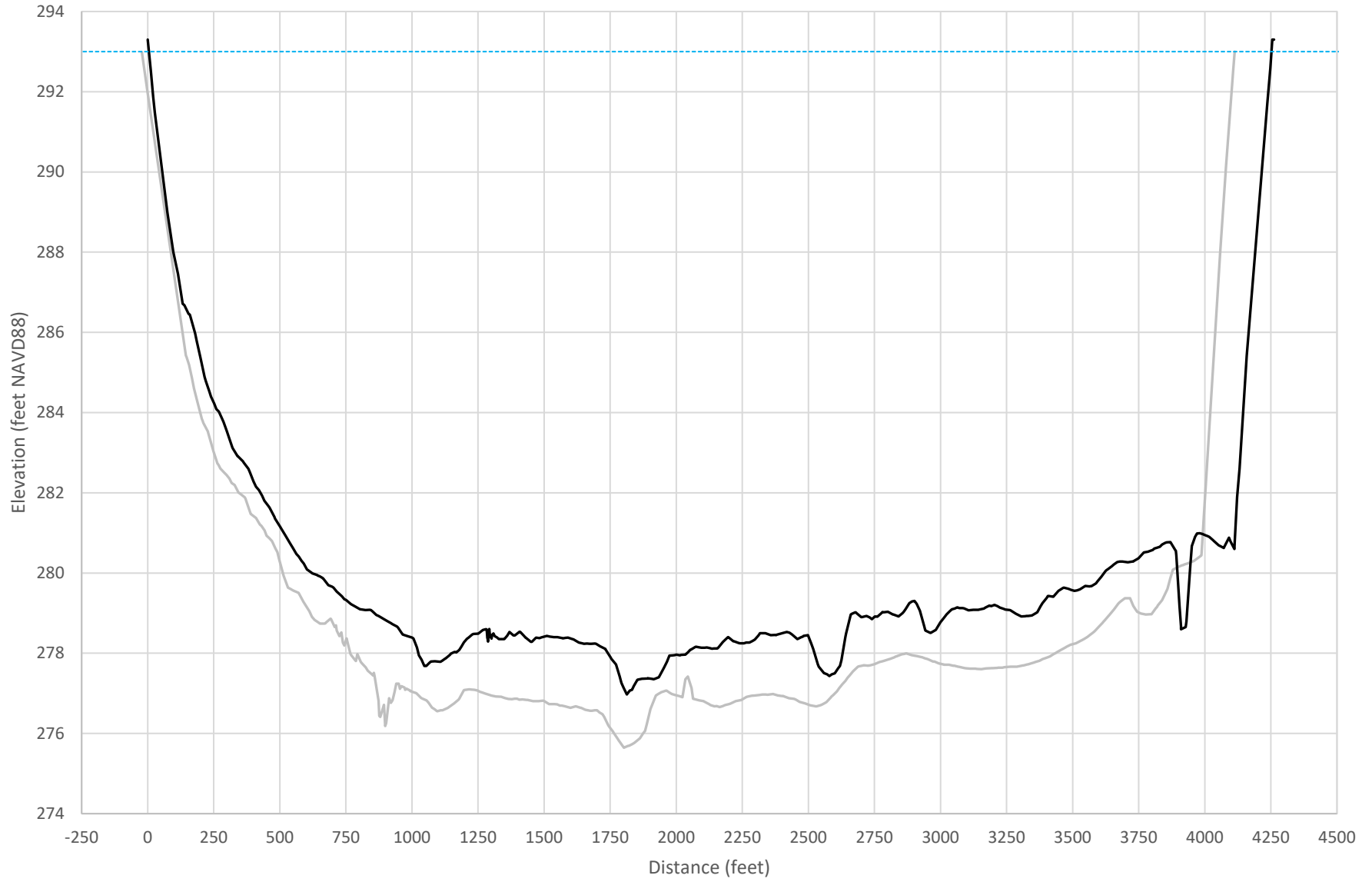
0 0.25 0.5 1 Miles

Sediment range A - A'



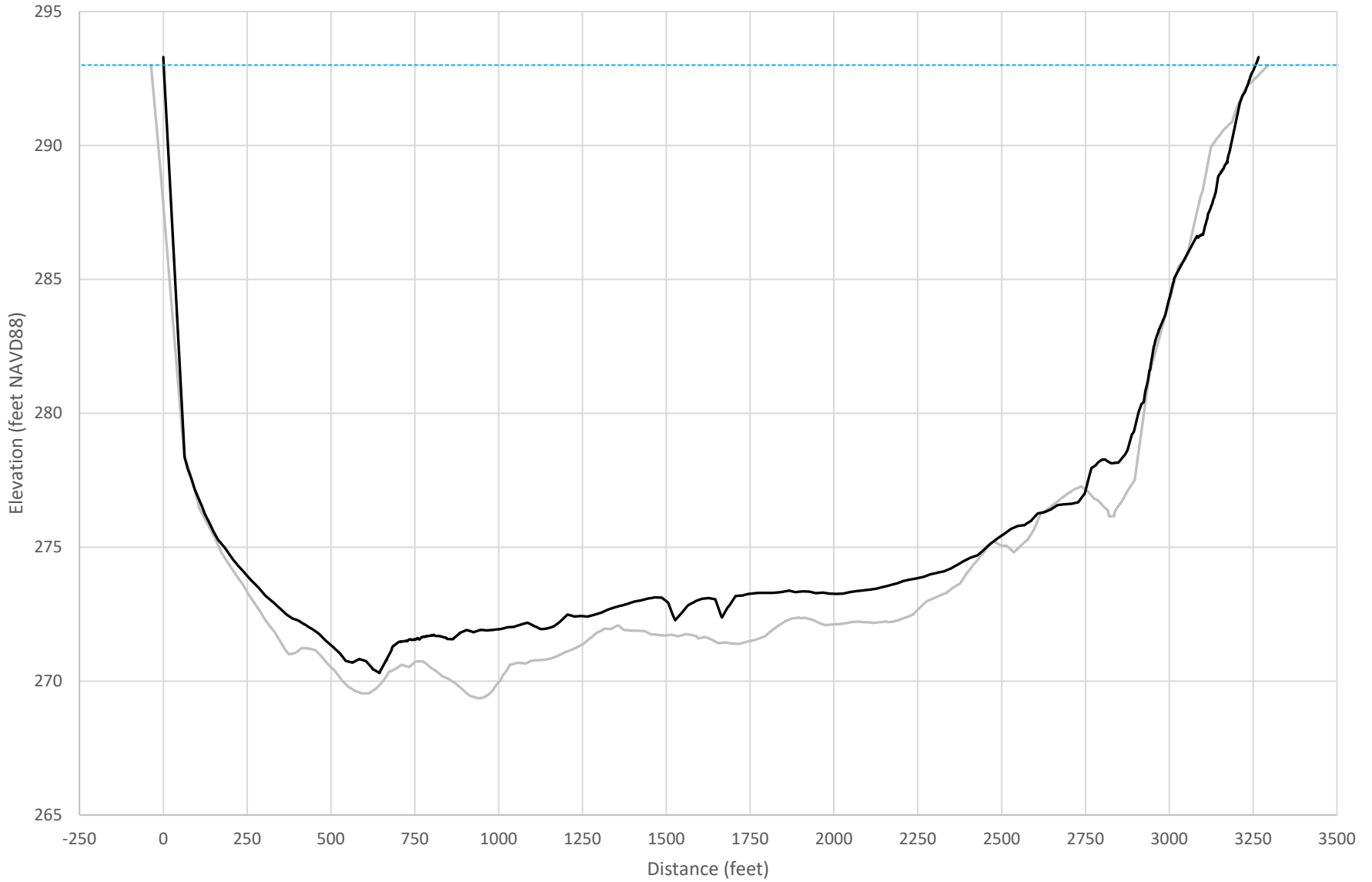
— 1996 range A - A' — 2021 range A - A' - - - - Conservation pool elevation 293.0 feet NAVD88

Sediment range B - B'



— 1996 range B - B' — 2021 range B - B' - - - - Conservation pool elevation 293.0 feet NAVD88








Sediment range C - C'

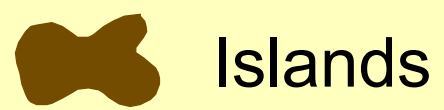


— 1996 range C - C' — 2021 range C - C' - - - - Conservation pool elevation 293.0 feet NAVD88

Figure 6

CONTOURS
(feet NAVD88)

-  293
-  290
-  285
-  280
-  275
-  270
-  265



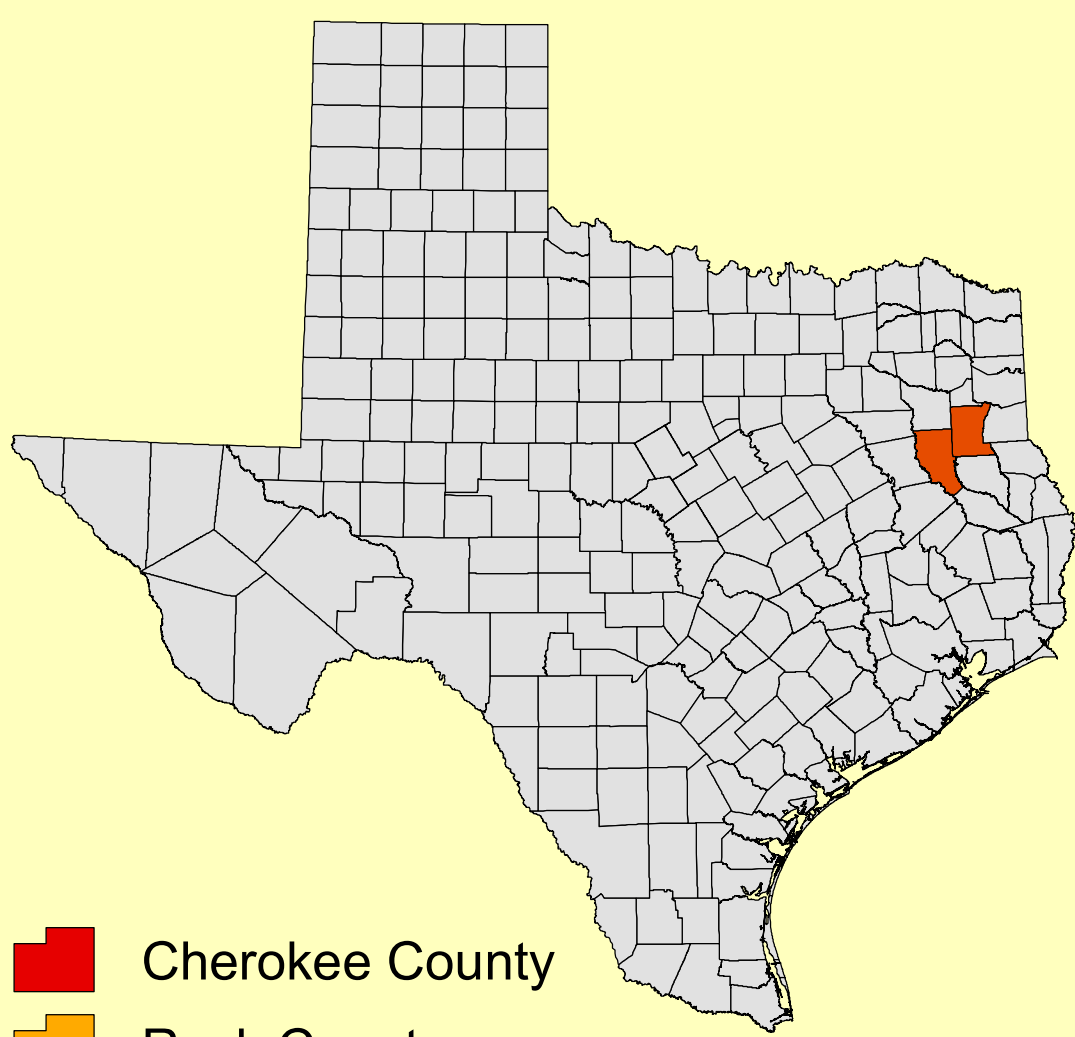
Islands



Lake Striker



Elevation 293.3 feet
Conservation pool
elevation 293.0 feet

Projection: NAD83 State Plane
Texas Central Zone (feet)



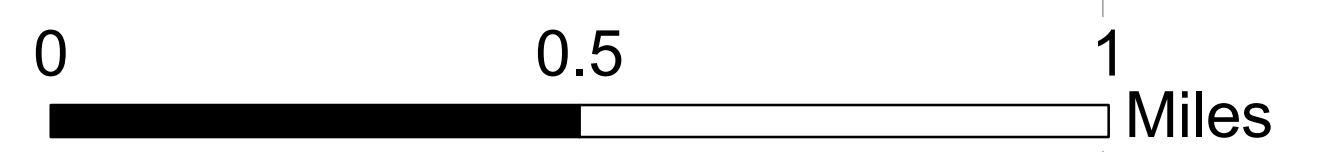
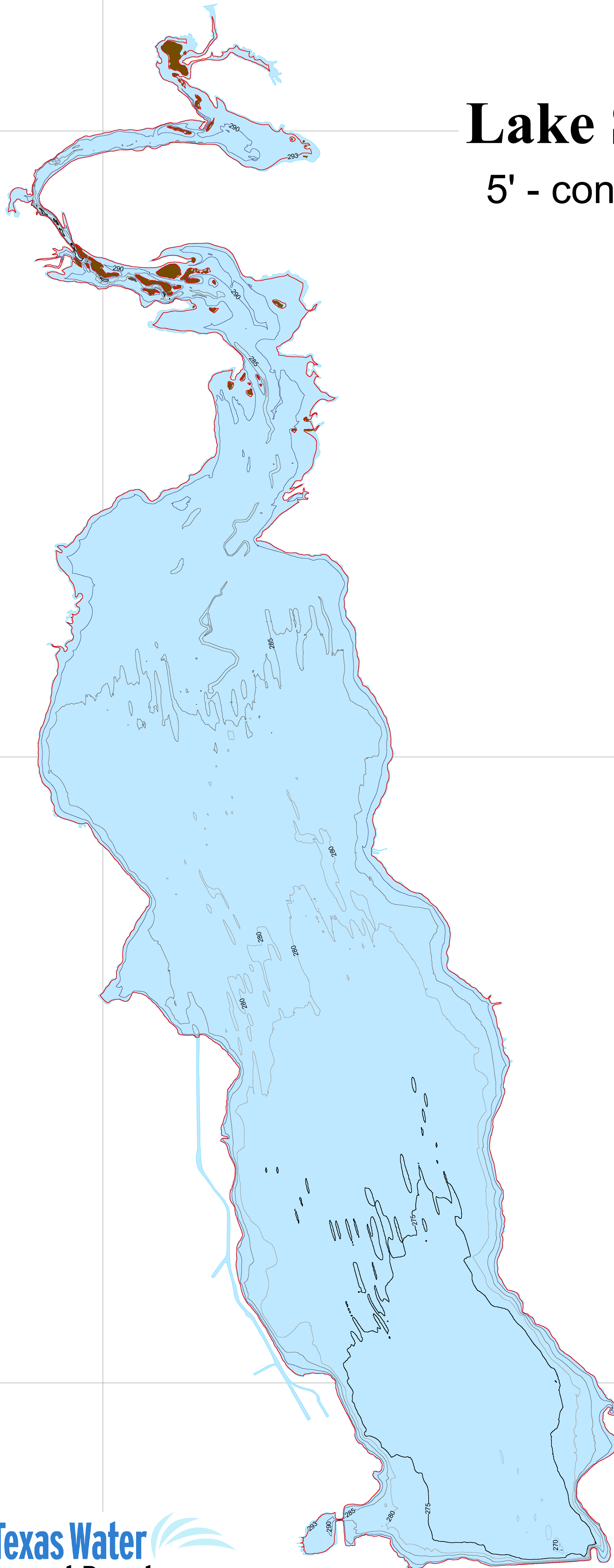
 Cherokee County
 Rusk County

This map is the product of a survey conducted by the Texas Water Development Board's Hydrographic Survey Program to determine the capacity of Lake Striker. The Texas Water Development Board makes no representations nor assumes any liability.

Texas Water
Development Board
March 2021 Survey

Lake Striker

5' - contour map



3,950,000

3,960,000

10,730,000

10,720,000

10,710,000