

**Volumetric Survey  
of  
HUBBARD CREEK  
RESERVOIR**

**March 2017 – January 2018 Survey**



**June 2018**

# Texas Water Development Board

Peter Lake, Chairman | Kathleen Jackson, Member | Brooke Paup, Member

Jeff Walker, Executive Administrator

Prepared for:

## **West Central Texas Municipal Water District**

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This report was prepared by staff of the Surface Water Division:

Nathan Leber, Manager  
Holly Holmquist  
Khan Iqbal  
Josh Duty

Published and distributed by the



P.O. Box 13231, 1700 N. Congress Ave.  
Austin, TX 78711-3231, [www.twdb.texas.gov](http://www.twdb.texas.gov)  
Phone (512) 463-7847, Fax (512) 475-2053

## Executive summary

In February 2017, the Texas Water Development Board (TWDB) entered into an agreement with the West Central Texas Municipal Water District, to perform a volumetric survey of Hubbard Creek Reservoir (Shackelford and Stephens counties, Texas). Surveying was performed using a multi-frequency (208 kHz, 50 kHz, and 24 kHz), sub-bottom profiling depth sounder; although only data collected at the 208 kHz frequency was analyzed for this report.

Hubbard Creek Dam and Hubbard Creek Reservoir are located on Big Sandy Creek and Hubbard Creek, a tributary of the Brazos River, approximately six miles northwest of the City of Breckenridge, in Shackelford and Stephens counties, Texas. The conservation pool elevation of Hubbard Creek Reservoir is 1,183.31 feet (NAVD88). The TWDB collected bathymetric data for Hubbard Creek Reservoir in the Big Sandy Creek Branch south of U.S. Highway 180 on March 14–15, 2017, while daily average water surface elevations measured 1,183.14 and 1,183.12 feet (NAVD88), respectively. The TWDB collected bathymetric data for the remainder of the reservoir between November 13, 2017, and January 25, 2018, while daily average water surface elevations measured between 1,180.07 and 1,180.64 feet (NAVD88).

**The 2017–2018 TWDB volumetric survey indicates Hubbard Creek Reservoir has a total reservoir capacity of 318,174 acre-feet and encompasses 15,687 acres at conservation pool elevation (1,183.31 feet NAVD88).** Previous capacity estimates include the original design estimate of 317,750 acre-feet and a TWDB survey in 1997. The 1997 TWDB survey was re-evaluated using current processing procedures resulting in an updated capacity estimate of 329,807 acre-feet.

The TWDB recommends that a similar methodology be used to resurvey Hubbard Creek Reservoir in 10 years or after a major flood 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.

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

## **Introduction**

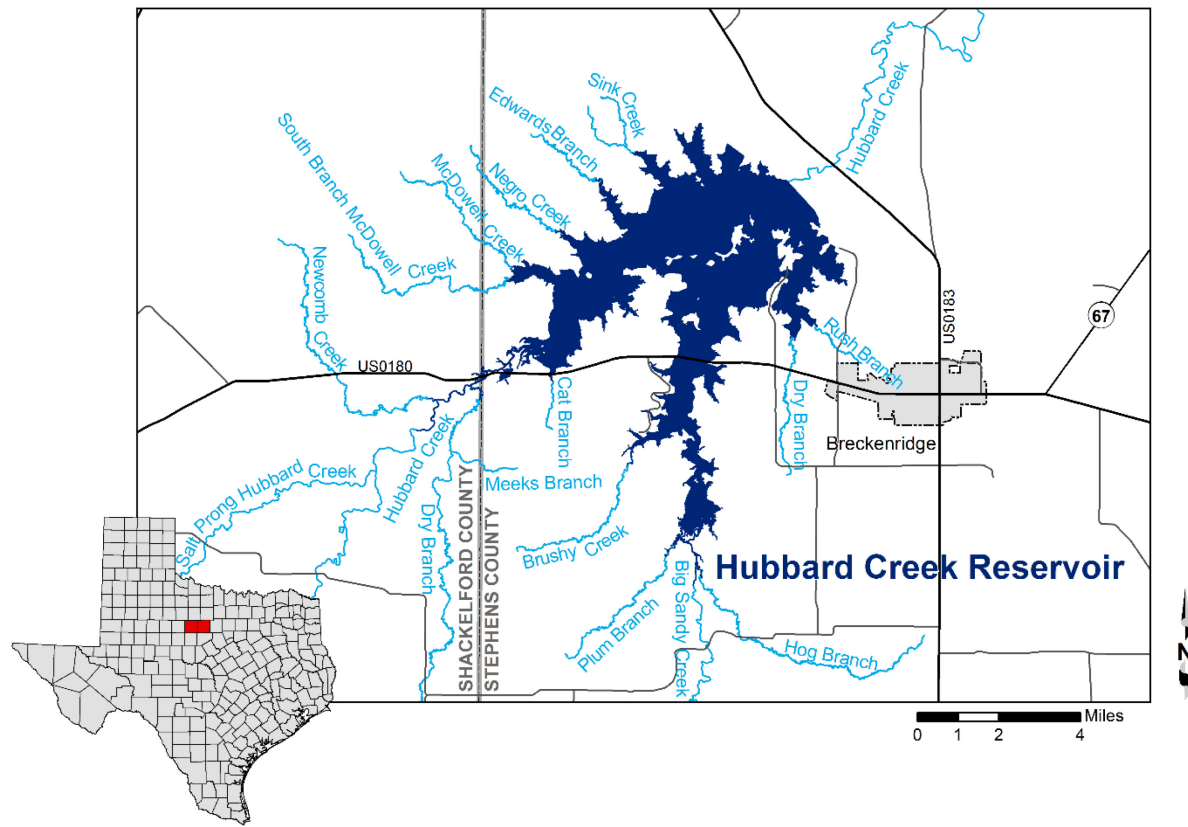
The Hydrographic Survey Program of the Texas Water Development Board (TWDB) was authorized by the 72<sup>nd</sup> Texas State Legislature in 1991. Texas Water Code Section 15.804 authorizes the TWDB to perform surveys to determine reservoir storage capacity, sedimentation levels, rates of sedimentation,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

In February 2017, the TWDB entered into an agreement with the West Central Texas Municipal Water District to perform a volumetric survey of Hubbard Creek Reservoir (Texas Water Development Board, 2017). This report provides an overview of the survey methods, analysis techniques, and associated results. Also included are the following contract deliverables: (1) a shaded relief plot of the reservoir bottom (Figure 4), (2) a bottom contour map (Figure 6), and (3) an elevation-area-capacity table of the reservoir acceptable to the Texas Commission on Environmental Quality (Appendices E and F).

## **Hubbard Creek Reservoir general information**

Hubbard Creek Dam and Hubbard Creek Reservoir are located on Big Sandy Creek and Hubbard Creek, a tributary of the Brazos River, approximately six miles northwest of Breckenridge, in Shackelford and Stephens counties, Texas (Figure 1). Construction of the dam began on March 1, 1961, and the dam was completed on November 26, 1962. Deliberate impoundment began on December 18, 1962 (Texas Water Development Board, 1973). Hubbard Creek Reservoir is owned and operated by the West Central Texas Municipal Water District. Hubbard Creek Reservoir is primarily a water supply reservoir for the cities of Abilene, Albany, Anson, and Breckenridge (West Central Texas Municipal Water District, 2018). Additional pertinent data about Hubbard Creek Dam and Hubbard Creek Reservoir can be found in Table 1.

Water rights for Hubbard Creek Reservoir have been appropriated to West Central Texas Municipal Water District through Certificate of Adjudication No. 12-4213 and Amendments to Certificate of Adjudication Nos. 12-4213A, 12-4213B, and 12-4213C. The complete certificates are on file in the Information Resources Division of the Texas Commission on Environmental Quality.



**Figure 1. Location map of Hubbard Creek Reservoir.**

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**Table 1. Pertinent data for Hubbard Creek Dam and Hubbard Creek Reservoir.**

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<b>Owner</b>	West Central Texas Municipal Water District		
<b>Design Engineer</b>	Freese, Nichols and Endress		
<b>Location of dam</b>	On Hubbard Creek in Shakelford and Stephens counties, 6 miles northwest of Breckenridge		
<b>Drainage area</b>	1,107 square miles		
<b>Dam</b>	Type	Earthfill	
	Length	15,150 feet including levees	
	Height	112 feet	
	Top width	20 feet	
	Top elevation	1,208.31 feet NAVD88	
<b>Spillway (emergency)</b>	Location	Near left end of the dam	
	Type	Excavated broad-crested weir	
	Length	2,000 feet	
	Crest elevation	1,194.31 feet NAVD88	
	4,000-foot long fuse plug	1,197.31 feet NAVD88	
<b>Spillway (service)</b>	Type	Circular drop inlet (gated)	
	Outlet	1 conduit, 22-foot diameter	
	Invert elevation	1,108.31 feet NAVD88	
	Crest elevation	1,176.81 feet NAVD88	
	Top of gates	1,185.31 feet NAVD88	
	Gated 5 by 7 foot opening invert	1,138.31 feet NAVD88	
<b>Low flow outlet</b>	Valve-controlled pipe	48-inch diameter	
	Invert elevation	1,136.31 feet NAVD88	

**Reservoir data** (Based on 2017–2018 TWDB survey)

<b>Feature</b>	<b>Elevation (feet NAVD88)</b>	<b>Capacity (acre-feet)</b>	<b>Area (acres)</b>
Top of dam	1,208.31	N/A	N/A
Top of earth fuse plug	1,197.31	N/A	N/A
Crest emergency spillway	1,194.31	N/A	N/A
Top of gates service spillway	1,185.31	N/A	N/A
Top of conservation pool	1,183.31	318,174	15,687
Crest service spillway	1,176.81	226,581	12,478
Invert of 48-inch valve	1,136.31	4,876	948
Usable conservation storage <sup>a</sup>	—	313,298	—

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Source: (Texas Water Development Board, 1973)

Note: On October 1, 2010, the U.S. Geological Survey changed the datum of water surface elevations from NGVD29 (National Geodetic Vertical Datum 1929) to NAVD88 (North American Vertical Datum 1988). Elevations here have been converted from NGVD29 to NAVD88 by adding 0.31 feet (U.S. Geological Survey, 2018).

<sup>a</sup> 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 a dam's outlet works.

## **Volumetric survey of Hubbard Creek Reservoir**

### **Datum**

The vertical datum used during this survey is the North American Vertical Datum 1988 (NAVD88). This datum also is utilized by the United States Geological Survey (USGS) for the reservoir elevation gage *USGS 08086400 Hubbard Ck Res nr Breckenridge, TX* (U.S. Geological Survey, 2018). Elevations herein are reported in feet relative to the NAVD88 datum. Volume and area calculations in this report are referenced to water levels provided 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 North Central Zone (feet).

### **TWDB bathymetric data collection**

The TWDB collected bathymetric data for Hubbard Creek Reservoir in the Big Sandy Creek Branch south of U.S. Highway 180 on March 14–15, 2017, while daily average water surface elevations measured 1,183.14 and 1,183.12 feet (NAVD88), respectively. The TWDB collected bathymetric data for the remainder of the reservoir between November 13, 2017, and January 25, 2018, while daily average water surface elevations measured between 1,180.07 and 1,180.64 feet (NAVD88). For data collection, the TWDB used a Specialty Devices, Inc. (SDI), single-beam, multi-frequency (208 kHz, 50 kHz, and 24 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. Data was collected along pre-planned survey lines oriented perpendicular to the assumed location of the original river channels and spaced approximately 500 feet apart. Many of the same survey lines also were used by the TWDB during the 1997 survey. 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. Figure 2 shows the data collection locations for the 2017–2018 TWDB survey.



- ..... 2017–2018 survey data points
- ..... 2015 DOQQ shoreline points
- ..... Islands
- ..... Hubbard Creek Reservoir at elevation 1,181.75 feet
- ..... Conservation pool elevation 1,183.31 feet

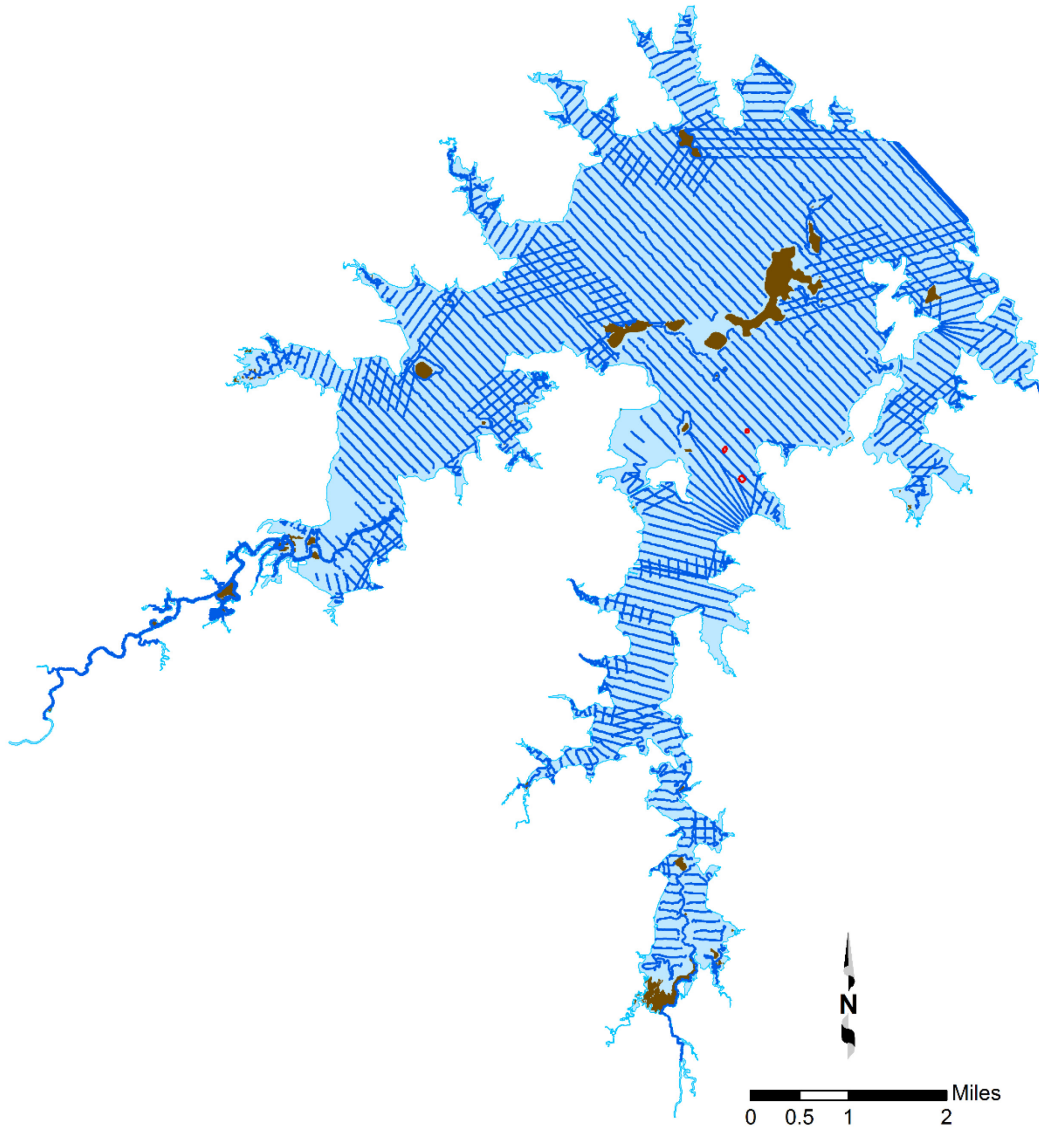


Figure 2. 2017–2018 TWDB Hubbard Creek Reservoir survey data (*blue dots*), and 2015 DOQQ shoreline data (*red dots*).

## **Data processing**

### **Model boundary**

The reservoir's model boundary was digitized from aerial photographs, also known as digital orthophoto quarter-quadrangle images (DOQQs), obtained from the Texas Natural Resources Information System (Texas Natural Resources Information System, 2018a) using Environmental Systems Research Institute's ArcGIS software. The quarter-quadrangles containing Hubbard Creek Reservoir are Breckenridge (NW, SW), Buck Mountain (NW), Edwards Branch (NW, NE, SW, SE), and Eolian (NW, NE). The DOQQs were photographed on September 30, 2016, and October 2, 2016 while the daily average water surface elevation measured 1,181.78 feet, and 1,181.74 feet (NAVD88). The DOQQs have a resolution or ground sample distance of 1 meter and a horizontal accuracy within  $\pm 6$  meters or better of true ground, according to the associated metadata (Texas Natural Resources Information System, 2018b, U.S. Department of Agriculture, 2016). The model boundary was digitized at the land-water interface in the 2016 photographs and assigned an elevation of 1,181.75 feet, the average water surface elevation of the photos. The section titled "Area, volume, and contour calculation" describes how areas and capacities were generated up to the conservation pool elevation.

Additional boundary information was obtained from an aerial photograph taken on June 5, 2015, while the daily average water surface elevation measured 1,163.01 feet (NAVD88). At this water surface elevation, three islands were visible in between survey transects. These features were digitized at the land-water interface in the 2015 photo and added to the lake model as points. The DOQQs have a resolution or ground sample distance of 0.5 meters and a horizontal accuracy within  $\pm 2.45$  meters at 95 percent confidence level, according to the associated metadata (Texas Natural Resources Information System, 2018c).

### **Triangulated Irregular Network model**

Following completion of data collection, the raw data files collected by the TWDB were edited to remove data anomalies. The reservoir's current bottom surface is automatically determined by the data acquisition software. DepthPic© software, developed by SDI, Inc., was used to display, interpret, and edit the multi-frequency data by manually removing data anomalies in the current bottom surface. For further analysis, HydroTools,

software developed by TWDB staff, was used to merge all the data 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 and others, 2011a). Finally, the point file resulting from spatial interpolation is used in conjunction with sounding and boundary data to create a volumetric Triangulated Irregular Network (TIN) model 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**

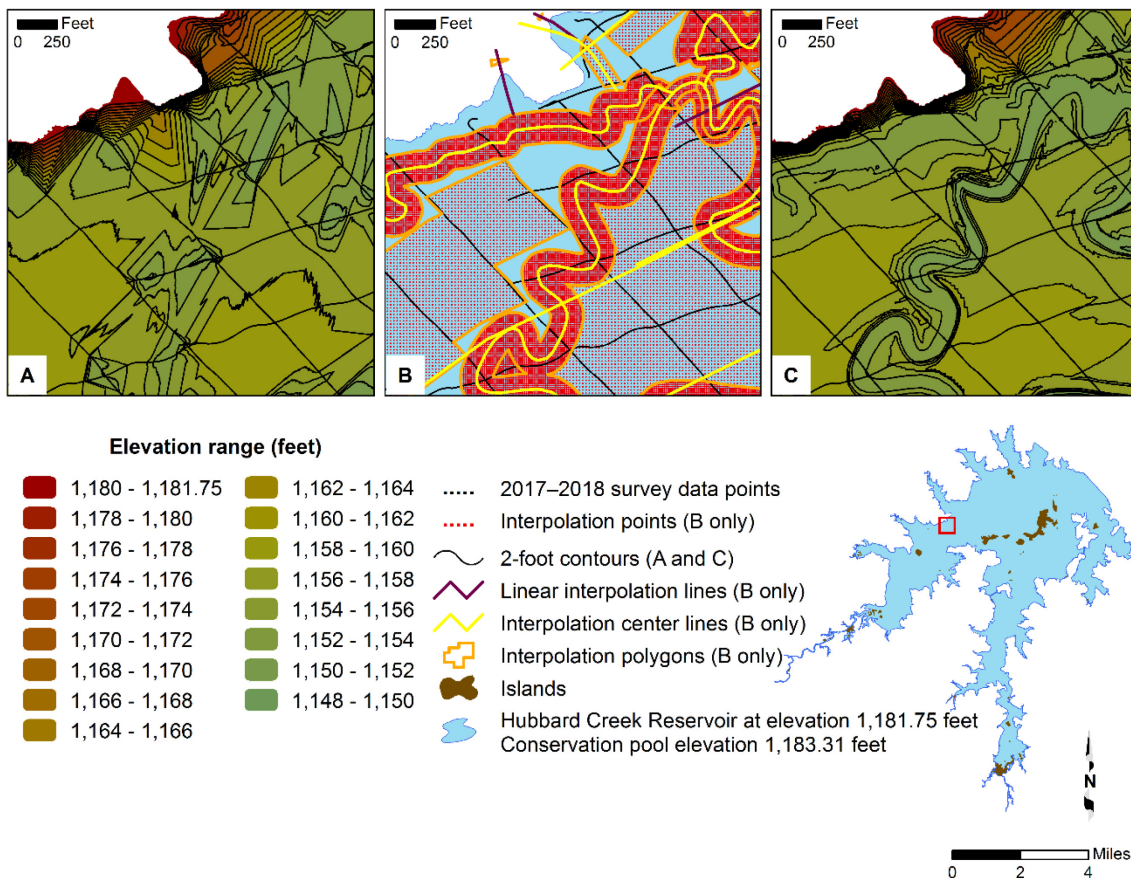
Isotropic spatial interpolation techniques such as the Delaunay triangulation used by the 3D Analyst extension of ArcGIS are, in many instances, unable to suitably interpolate bathymetry between survey lines common to reservoir surveys. Reservoirs and stream channels are anisotropic morphological features 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 to errors in volume. These 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 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 (known as digital raster graphics), 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 directionality of interpolation within each segment. For surveys with similar spatial coverage, these interpolation definition files are, in principle, independent of the survey data and could be applied to past and future survey data of the same reservoir. In practice, however, minor revisions of the interpolation definition files may be needed to account for differences in spatial coverage and boundary conditions between surveys. 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 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. Linear interpolation follows a line linking the survey points file to the reservoir boundary file (McEwen and others, 2011a). Without linearly interpolated data, the TIN model builds flat triangles. A flat triangle is defined as a triangle where all three vertices are equal in elevation, generally the elevation of the reservoir boundary. Reducing flat triangles by applying linear interpolation improves the elevation-capacity and elevation-area calculations, although it is not always possible to remove all flat triangles.

Figure 3 illustrates typical results from application of the anisotropic interpolation and linear interpolation techniques to Hubbard Creek Reservoir. 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 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 and linear interpolation of Hubbard Creek Reservoir sounding data; A) bathymetric contours without interpolated points, B) sounding points (black) and interpolated points (red), C) bathymetric contours with interpolated points.**

To standardize results from the previous TWDB survey of Hubbard Creek Reservoir, the TWDB applied anisotropic spatial interpolation to the survey data collected in 1997 (Texas Water Development Board, 2016). The original 1997 survey boundary was digitized from the 1,183.0 foot (NGVD29) contour from 7.5 minute USGS quadrangle maps: Breckenridge, Texas (Photo-Revised 1981); Buck Mountain, Texas (Photo-Revised 1982); Edwards Branch, Texas (Photo-Revised 1981); and Eolian, Texas (Photo-Revised 1987), with a stated accuracy of  $\pm \frac{1}{2}$  the contour interval (U.S. Bureau of the Budget, 1947). While linear interpolation was used to estimate the topography in areas without data, flat triangles led to anomalous area and volume calculations at the boundary elevation of 1,183.0 feet. Therefore, areas between 1,180.2 feet and 1,183.0 feet (NGVD29) were linearly interpolated between the computed values, and volumes above 1,180.2 feet were calculated based on the corrected areas for the 1997 survey (Texas Water Development Board, 2016). On October 1, 2010, the USGS converted the reservoir elevation gage *USGS*

08086400 Hubbard Ck Res nr Breckenridge, TX to the NAVD88 datum from the historically used NGVD29 datum, resulting in a nominal elevation change of +0.31 feet (U.S. Geological Survey, 2018). The 1997 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. For comparative purposes, elevations in Appendices A-D have been converted to the NAVD88 datum.

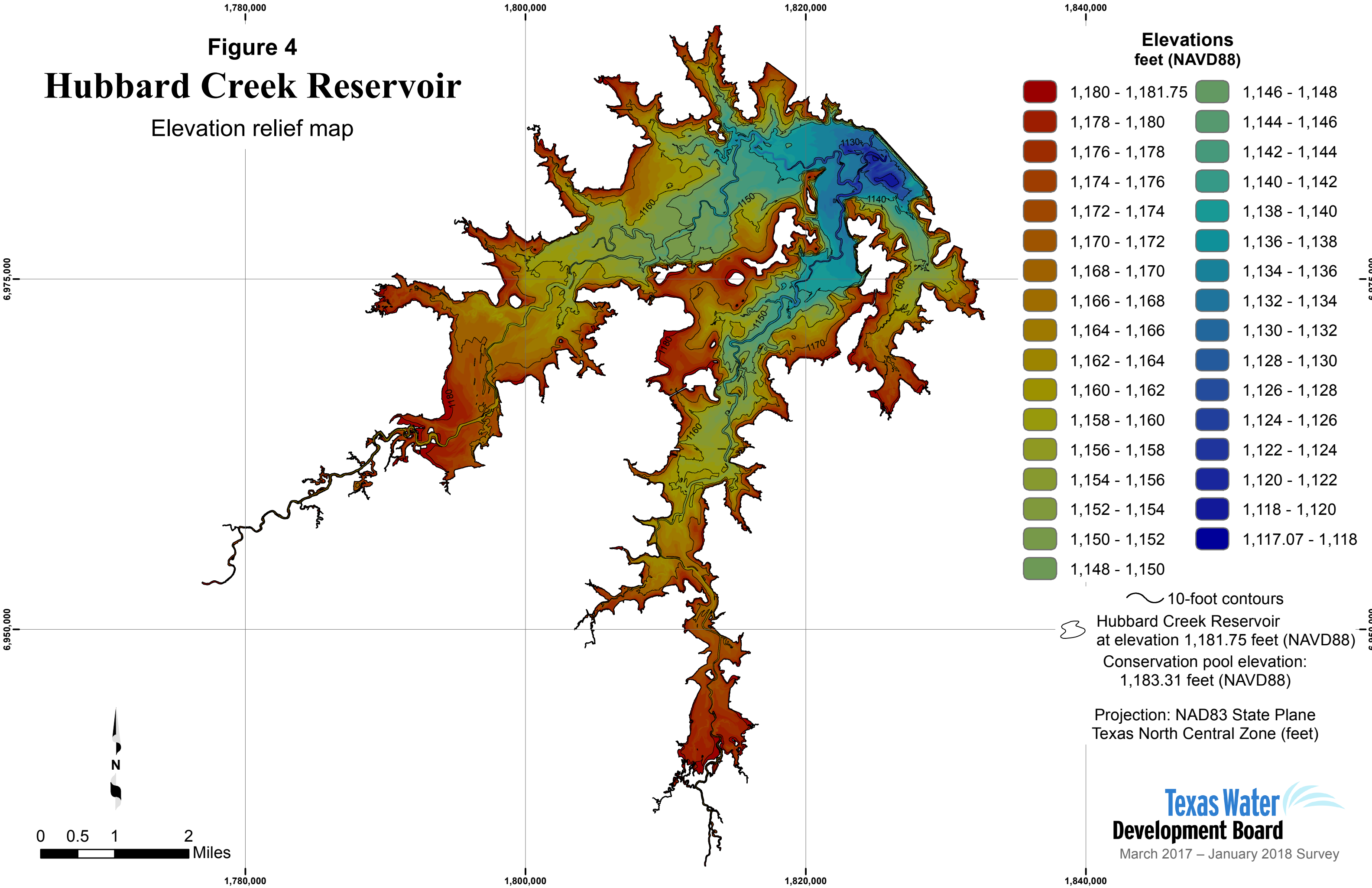
### **Area, volume, and contour calculation**

Using ArcInfo software and the TIN model, volumes and areas were computed for the entire reservoir at 0.01-foot intervals, from 1,117.05 to 1,181.75 feet. While linear interpolation was used to estimate topography in areas that were inaccessible by boat or too shallow for the instruments to work properly, development of some flat triangles (triangles whose vertices all have the same elevation) in the TIN model are unavoidable. The flat triangles in turn lead to anomalous calculations of surface area and volume at the boundary elevation 1,181.75 feet. To eliminate the effects of the flat triangles on area and volume calculations, areas between elevations 1,178.90 and 1,181.75 feet were linearly interpolated between the computed values, and volumes above elevation 1,178.90 feet were calculated based on the corrected areas. Areas above elevation 1,181.75 feet were linearly extrapolated and capacities were calculated from the extrapolated areas. The elevation-capacity table and elevation-area table, based on the 2017–2018 survey and analysis, are presented in Appendices E and F, respectively. The capacity curve is presented in Appendix G, and the area curve is presented in Appendix H.



The TIN model was converted to a raster representation using a cell size of 2 feet by 2 feet. The raster data then was 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 shaded depth ranges for Hubbard Creek Reservoir (Figure 5); and, (3) a 5-foot contour map (Figure 6).

# Figure 4 Hubbard Creek Reservoir

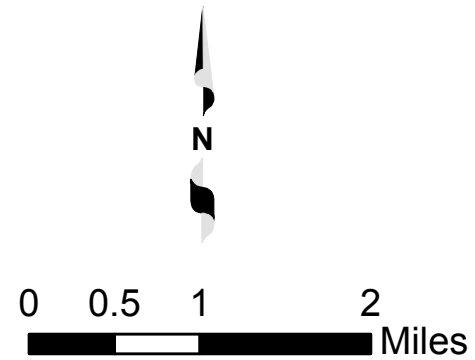
Elevation relief map



Elevations feet (NAVD88)	
1,180 - 1,181.75	1,146 - 1,148
1,178 - 1,180	1,144 - 1,146
1,176 - 1,178	1,142 - 1,144
1,174 - 1,176	1,140 - 1,142
1,172 - 1,174	1,138 - 1,140
1,170 - 1,172	1,136 - 1,138
1,168 - 1,170	1,134 - 1,136
1,166 - 1,168	1,132 - 1,134
1,164 - 1,166	1,130 - 1,132
1,162 - 1,164	1,128 - 1,130
1,160 - 1,162	1,126 - 1,128
1,158 - 1,160	1,124 - 1,126
1,156 - 1,158	1,122 - 1,124
1,154 - 1,156	1,120 - 1,122
1,152 - 1,154	1,118 - 1,120
1,150 - 1,152	1,117.07 - 1,118
1,148 - 1,150	

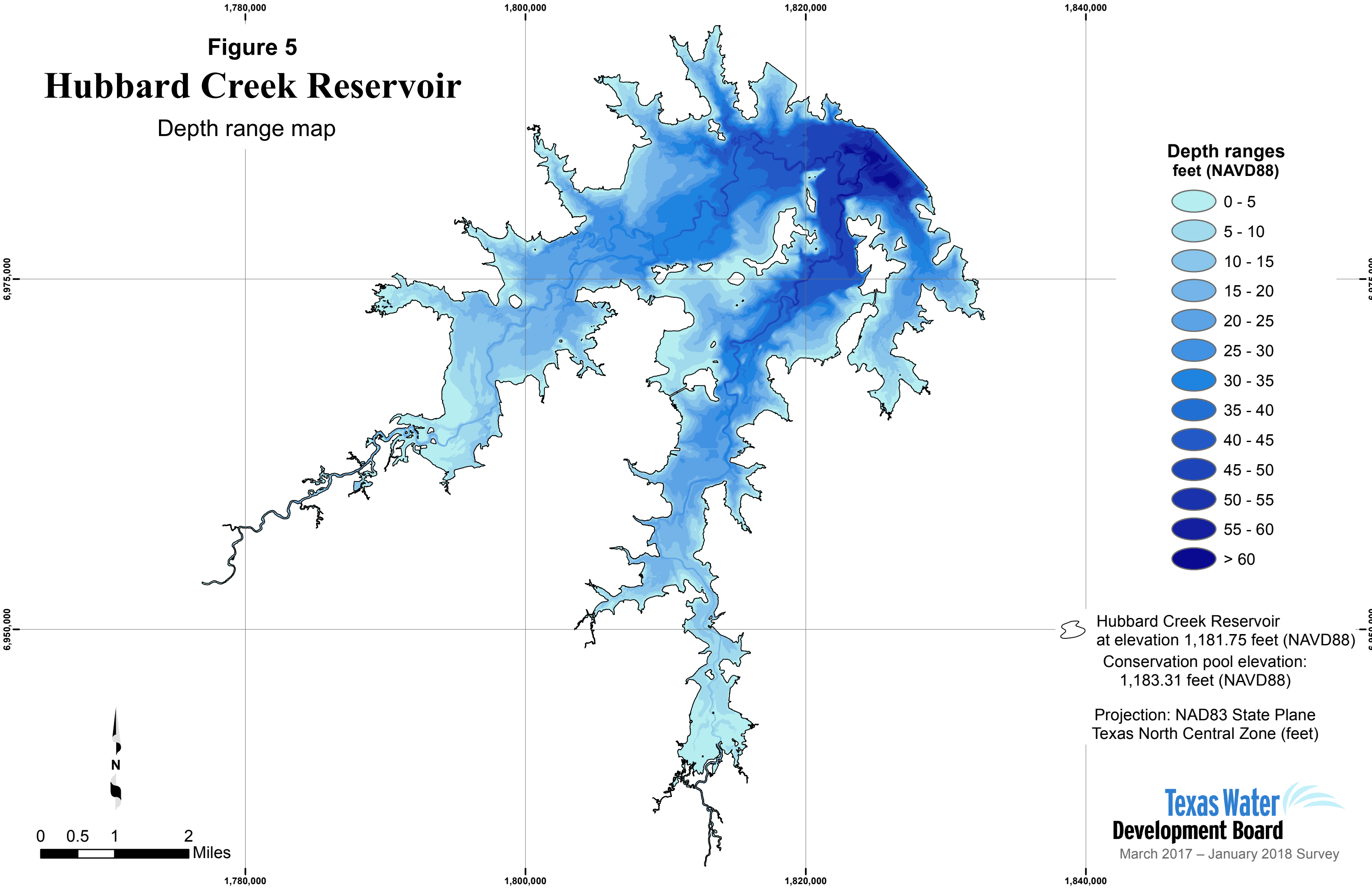
 10-foot contours  
 Hubbard Creek Reservoir  
 at elevation 1,181.75 feet (NAVD88)  
 Conservation pool elevation:  
 1,183.31 feet (NAVD88)

Projection: NAD83 State Plane  
Texas North Central Zone (feet)



# Figure 5 Hubbard Creek Reservoir

Depth range map



Hubbard Creek Reservoir  
at elevation 1,181.75 feet (NAVD88)

Conservation pool elevation:  
1,183.31 feet (NAVD88)

Projection: NAD83 State Plane  
Texas North Central Zone (feet)



## Survey results

### Volumetric survey

The 2017–2018 TWDB volumetric survey indicates that Hubbard Creek Reservoir has a total reservoir capacity of 318,174 acre-feet and encompasses 15,687 acres at conservation pool elevation (1,183.31 feet NAVD88). Previous capacity estimates include the original design estimate of 317,750 acre-feet and a TWDB survey in 1997. The 1997 TWDB survey was re-evaluated using current processing procedures resulting in an updated capacity estimate of 329,807 acre-feet, or a 1.48 percent increase in total capacity (Table 2). A comparison of the 1997 TWDB survey with the 2017–2018 TWDB survey indicates Hubbard Creek Reservoir may currently be losing capacity at 554 acre-feet per year or 0.50 acre-feet per square mile of drainage area per year. Differences in surface area are most likely attributable to differences in reservoir boundary delineation methods. 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. Current and previous survey capacity and surface area estimates for Hubbard Creek Reservoir.**

Top of conservation pool elevation (1,183.31 feet, NAVD88)			
Survey	Surface area (acres)	Total capacity (acre-feet)	Source
Original design	15,250	317,750	Texas Water Development Board, 1973
TWDB 1997	14,922	324,983	Texas Water Development Board, 1997
TWDB 1997 (re-calculated)	14,956	329,807	Texas Water Development Board, 2016
TWDB 2017–2018	15,687	318,174	

## **Sediment range lines**

In 1997, the TWDB established four sediment range lines in Hubbard Creek Reservoir to estimate sediment accumulation over time. A cross-sectional comparison of the four sediment range lines comparing the current surfaces from the TWDB 2017–2018 survey and the TWDB 1997 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 Hubbard Creek Reservoir in 10 years or after a major flood 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**

More information about the Hydrographic Survey Program can be found at:  
<http://www.twdb.texas.gov/surfacewater/surveys/index.asp>

Any questions regarding the TWDB Hydrographic Survey Program may be addressed to:  
[Hydrosurvey@twdb.texas.gov](mailto:Hydrosurvey@twdb.texas.gov)

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U.S. Geological Survey, 2018, U.S. Geological Survey National Water Information System: Web Interface, *USGS 08086400 Hubbard Ck Res nr Breckenridge, TX*, accessed January 29, 2018, at

[https://nwis.waterdata.usgs.gov/usa/nwis/uv/?cb\\_62615=on&format=rdb&site\\_no=08086400&period=&begin\\_date=2017-03-13&end\\_date=2018-01-26](https://nwis.waterdata.usgs.gov/usa/nwis/uv/?cb_62615=on&format=rdb&site_no=08086400&period=&begin_date=2017-03-13&end_date=2018-01-26).

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Appendix A  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

February 1997 Survey re-calculated October 2016

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,111.8	0	0	0	0	0	0	0	0	0	0
1,111.9	0	0	0	0	0	0	0	0	0	0
1,112	0	0	0	0	0	0	0	0	0	0
1,112.1	0	0	0	0	0	0	0	0	0	0
1,112.2	0	0	0	0	0	0	0	0	0	0
1,112.3	0	0	0	0	0	0	0	0	0	0
1,112.4	0	0	0	0	0	0	0	0	0	0
1,112.5	0	0	0	0	0	0	0	0	0	0
1,112.6	0	0	0	0	0	0	0	0	0	0
1,112.7	0	0	0	0	0	0	0	0	0	0
1,112.8	0	0	0	0	0	0	0	0	0	0
1,112.9	0	0	0	0	0	0	0	0	0	0
1,113	0	0	0	0	0	0	0	0	0	0
1,113.1	0	0	0	0	0	0	0	0	0	0
1,113.2	0	0	0	0	0	0	0	0	0	0
1,113.3	0	0	0	0	0	0	0	0	0	0
1,113.4	0	0	0	0	0	0	0	0	0	0
1,113.5	0	0	0	0	0	0	0	0	0	0
1,113.6	0	0	0	0	0	0	0	0	0	0
1,113.7	0	1	1	1	1	1	1	1	1	1
1,113.8	1	1	1	1	1	1	1	1	1	1
1,113.9	1	1	1	1	1	1	1	1	1	1
1,114	1	1	1	1	1	1	1	1	1	1
1,114.1	1	1	1	1	1	1	1	1	1	1
1,114.2	1	1	1	1	1	1	1	1	1	1
1,114.3	1	1	1	1	1	1	1	1	1	1
1,114.4	1	2	2	2	2	2	2	2	2	2
1,114.5	2	2	2	2	2	2	2	2	2	2
1,114.6	2	3	3	3	3	3	3	3	3	3
1,114.7	3	3	3	3	4	4	4	4	4	4
1,114.8	4	4	4	4	5	5	5	5	5	5
1,114.9	5	5	5	5	5	6	6	6	6	6
1,115	6	6	6	6	7	7	7	7	7	7
1,115.1	7	7	7	8	8	8	8	8	8	8
1,115.2	8	8	9	9	9	9	9	9	9	9
1,115.3	10	10	10	10	10	10	10	10	10	11
1,115.4	11	11	11	11	11	11	12	12	12	12
1,115.5	12	12	12	12	13	13	13	13	13	13
1,115.6	13	14	14	14	14	14	14	14	15	15
1,115.7	15	15	15	15	15	16	16	16	16	16
1,115.8	16	17	17	17	17	17	17	17	18	18
1,115.9	18	18	18	18	19	19	19	19	19	19
1,116	20	20	20	20	20	20	21	21	21	21
1,116.1	21	21	22	22	22	22	22	23	23	23
1,116.2	23	23	23	24	24	24	24	24	25	25
1,116.3	25	25	25	25	26	26	26	26	26	27
1,116.4	27	27	27	27	28	28	28	28	28	29
1,116.5	29	29	29	29	30	30	30	30	30	31
1,116.6	31	31	31	31	32	32	32	32	33	33
1,116.7	33	33	33	34	34	34	34	35	35	35
1,116.8	35	35	36	36	36	36	37	37	37	37
1,116.9	37	38	38	38	38	39	39	39	39	40
1,117	40	40	40	41	41	41	41	42	42	42
1,117.1	42	42	43	43	43	44	44	44	44	45
1,117.2	45	45	45	46	46	46	46	47	47	47
1,117.3	47	48	48	48	49	49	49	49	50	50
1,117.4	50	51	51	51	51	52	52	52	53	53
1,117.5	53	53	54	54	54	55	55	55	56	56
1,117.6	56	56	57	57	57	58	58	58	59	59
1,117.7	59	60	60	60	61	61	61	62	62	62

Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

February 1997 Survey re-calculated October 2016

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,117.8	63	63	63	64	64	64	65	65	65	66
1,117.9	66	66	67	67	67	68	68	68	69	69
1,118	70	70	70	71	71	71	72	72	72	73
1,118.1	73	74	74	74	75	75	75	76	76	77
1,118.2	77	77	78	78	79	79	79	80	80	81
1,118.3	81	81	82	82	83	83	83	84	84	85
1,118.4	85	86	86	86	87	87	88	88	89	89
1,118.5	89	90	90	91	91	92	92	93	93	93
1,118.6	94	94	95	95	96	96	97	97	98	98
1,118.7	99	99	99	100	100	101	101	102	102	103
1,118.8	103	104	104	105	105	106	106	107	107	108
1,118.9	108	109	109	110	111	111	112	112	113	113
1,119	114	114	115	115	116	116	117	118	118	119
1,119.1	119	120	120	121	121	122	123	123	124	124
1,119.2	125	125	126	127	127	128	128	129	130	130
1,119.3	131	131	132	133	133	134	134	135	136	136
1,119.4	137	137	138	139	139	140	141	141	142	143
1,119.5	143	144	144	145	146	146	147	148	148	149
1,119.6	150	150	151	152	152	153	154	155	155	156
1,119.7	157	157	158	159	159	160	161	161	162	163
1,119.8	164	164	165	166	167	167	168	169	169	170
1,119.9	171	172	172	173	174	175	175	176	177	178
1,120	178	179	180	181	182	182	183	184	185	185
1,120.1	186	187	188	189	189	190	191	192	193	193
1,120.2	194	195	196	197	198	198	199	200	201	202
1,120.3	202	203	204	205	206	207	208	208	209	210
1,120.4	211	212	213	214	214	215	216	217	218	219
1,120.5	220	221	222	222	223	224	225	226	227	228
1,120.6	229	230	231	232	232	233	234	235	236	237
1,120.7	238	239	240	241	242	243	244	245	246	247
1,120.8	248	249	250	251	252	252	253	254	255	256
1,120.9	257	258	259	260	261	262	263	264	265	266
1,121	267	268	269	271	272	273	274	275	276	277
1,121.1	278	279	280	281	282	283	284	285	286	287
1,121.2	288	289	290	292	293	294	295	296	297	298
1,121.3	299	300	301	302	304	305	306	307	308	309
1,121.4	310	311	312	314	315	316	317	318	319	320
1,121.5	321	323	324	325	326	327	328	330	331	332
1,121.6	333	334	335	337	338	339	340	341	342	344
1,121.7	345	346	347	348	350	351	352	353	354	356
1,121.8	357	358	359	361	362	363	364	365	367	368
1,121.9	369	370	372	373	374	375	377	378	379	380
1,122	382	383	384	385	387	388	389	390	392	393
1,122.1	394	396	397	398	399	401	402	403	405	406
1,122.2	407	409	410	411	412	414	415	416	418	419
1,122.3	420	422	423	424	426	427	428	430	431	432
1,122.4	434	435	436	438	439	441	442	443	445	446
1,122.5	447	449	450	451	453	454	456	457	458	460
1,122.6	461	463	464	465	467	468	470	471	472	474
1,122.7	475	477	478	479	481	482	484	485	487	488
1,122.8	489	491	492	494	495	497	498	500	501	502
1,122.9	504	505	507	508	510	511	513	514	516	517
1,123	519	520	521	523	524	526	527	529	530	532
1,123.1	533	535	536	538	539	541	542	544	545	547
1,123.2	549	550	552	553	555	556	558	559	561	562
1,123.3	564	565	567	568	570	572	573	575	576	578
1,123.4	579	581	583	584	586	587	589	590	592	594
1,123.5	595	597	598	600	602	603	605	606	608	610
1,123.6	611	613	614	616	618	619	621	623	624	626
1,123.7	627	629	631	632	634	636	637	639	641	642

Appendix A (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

February 1997 Survey re-calculated October 2016

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,123.8	644	646	647	649	651	652	654	656	657	659
1,123.9	661	662	664	666	667	669	671	672	674	676
1,124	677	679	681	683	684	686	688	689	691	693
1,124.1	695	696	698	700	702	703	705	707	709	710
1,124.2	712	714	716	717	719	721	723	724	726	728
1,124.3	730	731	733	735	737	739	740	742	744	746
1,124.4	747	749	751	753	755	756	758	760	762	764
1,124.5	766	767	769	771	773	775	777	778	780	782
1,124.6	784	786	788	789	791	793	795	797	799	801
1,124.7	802	804	806	808	810	812	814	816	818	819
1,124.8	821	823	825	827	829	831	833	835	837	839
1,124.9	841	842	844	846	848	850	852	854	856	858
1,125	860	862	864	866	868	870	872	874	876	878
1,125.1	880	882	884	886	888	890	892	894	896	898
1,125.2	900	902	904	906	908	910	912	914	916	918
1,125.3	920	922	924	926	928	930	933	935	937	939
1,125.4	941	943	945	947	949	951	953	955	958	960
1,125.5	962	964	966	968	970	972	974	977	979	981
1,125.6	983	985	987	989	991	994	996	998	1,000	1,002
1,125.7	1,004	1,006	1,009	1,011	1,013	1,015	1,017	1,019	1,022	1,024
1,125.8	1,026	1,028	1,030	1,033	1,035	1,037	1,039	1,041	1,044	1,046
1,125.9	1,048	1,050	1,052	1,055	1,057	1,059	1,061	1,063	1,066	1,068
1,126	1,070	1,072	1,075	1,077	1,079	1,081	1,084	1,086	1,088	1,090
1,126.1	1,093	1,095	1,097	1,099	1,102	1,104	1,106	1,108	1,111	1,113
1,126.2	1,115	1,118	1,120	1,122	1,124	1,127	1,129	1,131	1,134	1,136
1,126.3	1,138	1,140	1,143	1,145	1,147	1,150	1,152	1,154	1,157	1,159
1,126.4	1,161	1,164	1,166	1,168	1,171	1,173	1,175	1,178	1,180	1,182
1,126.5	1,185	1,187	1,189	1,192	1,194	1,197	1,199	1,201	1,204	1,206
1,126.6	1,208	1,211	1,213	1,216	1,218	1,220	1,223	1,225	1,228	1,230
1,126.7	1,232	1,235	1,237	1,240	1,242	1,244	1,247	1,249	1,252	1,254
1,126.8	1,257	1,259	1,261	1,264	1,266	1,269	1,271	1,274	1,276	1,279
1,126.9	1,281	1,283	1,286	1,288	1,291	1,293	1,296	1,298	1,301	1,303
1,127	1,306	1,308	1,311	1,313	1,316	1,318	1,321	1,323	1,326	1,328
1,127.1	1,331	1,333	1,336	1,338	1,341	1,343	1,346	1,348	1,351	1,353
1,127.2	1,356	1,359	1,361	1,364	1,366	1,369	1,371	1,374	1,376	1,379
1,127.3	1,382	1,384	1,387	1,389	1,392	1,394	1,397	1,400	1,402	1,405
1,127.4	1,407	1,410	1,413	1,415	1,418	1,420	1,423	1,426	1,428	1,431
1,127.5	1,434	1,436	1,439	1,442	1,444	1,447	1,449	1,452	1,455	1,457
1,127.6	1,460	1,463	1,465	1,468	1,471	1,474	1,476	1,479	1,482	1,484
1,127.7	1,487	1,490	1,492	1,495	1,498	1,501	1,503	1,506	1,509	1,511
1,127.8	1,514	1,517	1,520	1,522	1,525	1,528	1,531	1,533	1,536	1,539
1,127.9	1,542	1,545	1,547	1,550	1,553	1,556	1,559	1,561	1,564	1,567
1,128	1,570	1,573	1,575	1,578	1,581	1,584	1,587	1,590	1,592	1,595
1,128.1	1,598	1,601	1,604	1,607	1,610	1,612	1,615	1,618	1,621	1,624
1,128.2	1,627	1,630	1,633	1,636	1,638	1,641	1,644	1,647	1,650	1,653
1,128.3	1,656	1,659	1,662	1,665	1,668	1,671	1,674	1,677	1,680	1,683
1,128.4	1,686	1,689	1,692	1,695	1,698	1,701	1,704	1,707	1,710	1,713
1,128.5	1,716	1,719	1,722	1,725	1,728	1,731	1,734	1,737	1,740	1,743
1,128.6	1,746	1,749	1,752	1,755	1,758	1,761	1,764	1,768	1,771	1,774
1,128.7	1,777	1,780	1,783	1,786	1,789	1,792	1,796	1,799	1,802	1,805
1,128.8	1,808	1,811	1,815	1,818	1,821	1,824	1,827	1,830	1,834	1,837
1,128.9	1,840	1,843	1,846	1,850	1,853	1,856	1,859	1,863	1,866	1,869
1,129	1,872	1,876	1,879	1,882	1,885	1,889	1,892	1,895	1,898	1,902
1,129.1	1,905	1,908	1,912	1,915	1,918	1,922	1,925	1,928	1,932	1,935
1,129.2	1,938	1,942	1,945	1,948	1,952	1,955	1,959	1,962	1,965	1,969
1,129.3	1,972	1,976	1,979	1,982	1,986	1,989	1,993	1,996	2,000	2,003
1,129.4	2,007	2,010	2,014	2,017	2,021	2,024	2,028	2,031	2,035	2,038
1,129.5	2,042	2,045	2,049	2,052	2,056	2,060	2,063	2,067	2,070	2,074
1,129.6	2,078	2,081	2,085	2,088	2,092	2,096	2,099	2,103	2,107	2,110
1,129.7	2,114	2,118	2,121	2,125	2,129	2,133	2,136	2,140	2,144	2,148

## Appendix A (continued)

**Hubbard Creek Reservoir****RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

February 1997 Survey re-calculated October 2016

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,129.8	2,151	2,155	2,159	2,163	2,166	2,170	2,174	2,178	2,182	2,185
1,129.9	2,189	2,193	2,197	2,201	2,205	2,208	2,212	2,216	2,220	2,224
1,130	2,228	2,232	2,236	2,240	2,244	2,247	2,251	2,255	2,259	2,263
1,130.1	2,267	2,271	2,275	2,279	2,283	2,287	2,291	2,295	2,299	2,303
1,130.2	2,307	2,311	2,315	2,319	2,324	2,328	2,332	2,336	2,340	2,344
1,130.3	2,348	2,352	2,356	2,361	2,365	2,369	2,373	2,377	2,381	2,386
1,130.4	2,390	2,394	2,398	2,402	2,407	2,411	2,415	2,419	2,424	2,428
1,130.5	2,432	2,436	2,441	2,445	2,449	2,454	2,458	2,462	2,467	2,471
1,130.6	2,475	2,480	2,484	2,488	2,493	2,497	2,502	2,506	2,510	2,515
1,130.7	2,519	2,524	2,528	2,533	2,537	2,542	2,546	2,551	2,555	2,560
1,130.8	2,564	2,569	2,573	2,578	2,582	2,587	2,591	2,596	2,601	2,605
1,130.9	2,610	2,614	2,619	2,624	2,628	2,633	2,638	2,642	2,647	2,652
1,131	2,656	2,661	2,666	2,670	2,675	2,680	2,685	2,689	2,694	2,699
1,131.1	2,704	2,709	2,714	2,718	2,723	2,728	2,733	2,738	2,743	2,748
1,131.2	2,753	2,758	2,763	2,768	2,773	2,777	2,782	2,787	2,793	2,798
1,131.3	2,803	2,808	2,813	2,818	2,823	2,828	2,833	2,838	2,843	2,849
1,131.4	2,854	2,859	2,864	2,869	2,874	2,880	2,885	2,890	2,895	2,901
1,131.5	2,906	2,911	2,916	2,922	2,927	2,932	2,938	2,943	2,948	2,954
1,131.6	2,959	2,965	2,970	2,975	2,981	2,986	2,992	2,997	3,003	3,008
1,131.7	3,013	3,019	3,024	3,030	3,036	3,041	3,047	3,052	3,058	3,063
1,131.8	3,069	3,075	3,080	3,086	3,091	3,097	3,103	3,109	3,114	3,120
1,131.9	3,126	3,131	3,137	3,143	3,149	3,155	3,160	3,166	3,172	3,178
1,132	3,184	3,190	3,196	3,202	3,208	3,213	3,219	3,225	3,231	3,237
1,132.1	3,243	3,249	3,255	3,261	3,267	3,274	3,280	3,286	3,292	3,298
1,132.2	3,304	3,310	3,316	3,323	3,329	3,335	3,341	3,347	3,354	3,360
1,132.3	3,366	3,372	3,379	3,385	3,391	3,398	3,404	3,410	3,417	3,423
1,132.4	3,429	3,436	3,442	3,449	3,455	3,462	3,468	3,475	3,481	3,488
1,132.5	3,494	3,501	3,507	3,514	3,520	3,527	3,534	3,540	3,547	3,554
1,132.6	3,560	3,567	3,574	3,580	3,587	3,594	3,600	3,607	3,614	3,621
1,132.7	3,628	3,634	3,641	3,648	3,655	3,662	3,669	3,676	3,682	3,689
1,132.8	3,696	3,703	3,710	3,717	3,724	3,731	3,738	3,745	3,752	3,759
1,132.9	3,766	3,773	3,780	3,788	3,795	3,802	3,809	3,816	3,823	3,830
1,133	3,837	3,845	3,852	3,859	3,866	3,874	3,881	3,888	3,895	3,903
1,133.1	3,910	3,917	3,925	3,932	3,939	3,947	3,954	3,962	3,969	3,976
1,133.2	3,984	3,991	3,999	4,006	4,014	4,021	4,029	4,036	4,044	4,051
1,133.3	4,059	4,067	4,074	4,082	4,090	4,097	4,105	4,113	4,120	4,128
1,133.4	4,136	4,143	4,151	4,159	4,167	4,174	4,182	4,190	4,198	4,206
1,133.5	4,214	4,222	4,229	4,237	4,245	4,253	4,261	4,269	4,277	4,285
1,133.6	4,293	4,302	4,310	4,318	4,326	4,334	4,342	4,350	4,358	4,367
1,133.7	4,375	4,383	4,391	4,400	4,408	4,416	4,425	4,433	4,441	4,450
1,133.8	4,458	4,466	4,475	4,483	4,492	4,500	4,509	4,517	4,526	4,534
1,133.9	4,543	4,552	4,560	4,569	4,578	4,586	4,595	4,604	4,612	4,621
1,134	4,630	4,639	4,647	4,656	4,665	4,674	4,683	4,692	4,700	4,709
1,134.1	4,718	4,727	4,736	4,745	4,754	4,763	4,772	4,781	4,790	4,799
1,134.2	4,808	4,818	4,827	4,836	4,845	4,854	4,863	4,872	4,882	4,891
1,134.3	4,900	4,909	4,919	4,928	4,937	4,947	4,956	4,965	4,974	4,984
1,134.4	4,993	5,003	5,012	5,021	5,031	5,040	5,050	5,059	5,069	5,078
1,134.5	5,088	5,097	5,107	5,116	5,126	5,136	5,145	5,155	5,164	5,174
1,134.6	5,184	5,193	5,203	5,213	5,223	5,232	5,242	5,252	5,262	5,271
1,134.7	5,281	5,291	5,301	5,311	5,321	5,330	5,340	5,350	5,360	5,370
1,134.8	5,380	5,390	5,400	5,410	5,420	5,430	5,440	5,450	5,460	5,470
1,134.9	5,480	5,490	5,500	5,510	5,521	5,531	5,541	5,551	5,561	5,572
1,135	5,582	5,592	5,602	5,612	5,623	5,633	5,643	5,654	5,664	5,674
1,135.1	5,685	5,695	5,705	5,716	5,726	5,737	5,747	5,757	5,768	5,778
1,135.2	5,789	5,799	5,810	5,820	5,831	5,841	5,852	5,863	5,873	5,884
1,135.3	5,895	5,905	5,916	5,927	5,937	5,948	5,959	5,970	5,980	5,991
1,135.4	6,002	6,013	6,023	6,034	6,045	6,056	6,067	6,078	6,089	6,100
1,135.5	6,110	6,121	6,132	6,143	6,154	6,165	6,176	6,188	6,199	6,210
1,135.6	6,221	6,232	6,243	6,254	6,265	6,276	6,288	6,299	6,310	6,321
1,135.7	6,332	6,344	6,355	6,366	6,378	6,389	6,400	6,411	6,423	6,434



Appendix A (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

February 1997 Survey re-calculated October 2016

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,135.8	6,446	6,457	6,468	6,480	6,491	6,503	6,514	6,526	6,537	6,549
1,135.9	6,560	6,572	6,584	6,595	6,607	6,618	6,630	6,642	6,654	6,665
1,136	6,677	6,689	6,700	6,712	6,724	6,736	6,747	6,759	6,771	6,783
1,136.1	6,795	6,807	6,819	6,830	6,842	6,854	6,866	6,878	6,890	6,902
1,136.2	6,914	6,926	6,938	6,950	6,962	6,974	6,986	6,999	7,011	7,023
1,136.3	7,035	7,047	7,059	7,072	7,084	7,096	7,108	7,121	7,133	7,145
1,136.4	7,157	7,170	7,182	7,194	7,207	7,219	7,232	7,244	7,256	7,269
1,136.5	7,281	7,294	7,306	7,319	7,331	7,344	7,356	7,369	7,382	7,394
1,136.6	7,407	7,419	7,432	7,445	7,457	7,470	7,483	7,496	7,508	7,521
1,136.7	7,534	7,547	7,560	7,572	7,585	7,598	7,611	7,624	7,637	7,650
1,136.8	7,663	7,675	7,688	7,701	7,714	7,728	7,741	7,754	7,767	7,780
1,136.9	7,793	7,806	7,819	7,832	7,845	7,859	7,872	7,885	7,898	7,911
1,137	7,925	7,938	7,951	7,965	7,978	7,991	8,005	8,018	8,031	8,045
1,137.1	8,058	8,072	8,085	8,099	8,112	8,126	8,139	8,153	8,166	8,180
1,137.2	8,194	8,207	8,221	8,235	8,249	8,262	8,276	8,290	8,304	8,317
1,137.3	8,331	8,345	8,359	8,373	8,387	8,401	8,415	8,429	8,443	8,457
1,137.4	8,471	8,485	8,499	8,513	8,527	8,541	8,555	8,570	8,584	8,598
1,137.5	8,612	8,626	8,640	8,655	8,669	8,683	8,697	8,712	8,726	8,740
1,137.6	8,755	8,769	8,783	8,798	8,812	8,827	8,841	8,855	8,870	8,884
1,137.7	8,899	8,913	8,928	8,943	8,957	8,972	8,986	9,001	9,015	9,030
1,137.8	9,045	9,059	9,074	9,089	9,103	9,118	9,133	9,148	9,162	9,177
1,137.9	9,192	9,207	9,221	9,236	9,251	9,266	9,281	9,296	9,311	9,326
1,138	9,340	9,355	9,370	9,385	9,400	9,415	9,430	9,445	9,460	9,476
1,138.1	9,491	9,506	9,521	9,536	9,551	9,566	9,581	9,596	9,612	9,627
1,138.2	9,642	9,657	9,673	9,688	9,703	9,718	9,733	9,749	9,764	9,779
1,138.3	9,795	9,810	9,826	9,841	9,856	9,872	9,887	9,903	9,918	9,934
1,138.4	9,949	9,965	9,980	9,996	10,011	10,027	10,042	10,058	10,074	10,089
1,138.5	10,105	10,120	10,136	10,152	10,168	10,183	10,199	10,215	10,231	10,246
1,138.6	10,262	10,278	10,294	10,310	10,325	10,341	10,357	10,373	10,389	10,405
1,138.7	10,421	10,437	10,453	10,469	10,485	10,501	10,517	10,533	10,549	10,565
1,138.8	10,582	10,598	10,614	10,630	10,646	10,662	10,679	10,695	10,711	10,727
1,138.9	10,744	10,760	10,776	10,793	10,809	10,825	10,842	10,858	10,875	10,891
1,139	10,907	10,924	10,940	10,957	10,973	10,990	11,007	11,023	11,040	11,056
1,139.1	11,073	11,090	11,106	11,123	11,140	11,156	11,173	11,190	11,207	11,223
1,139.2	11,240	11,257	11,274	11,291	11,308	11,324	11,341	11,358	11,375	11,392
1,139.3	11,409	11,426	11,443	11,460	11,477	11,494	11,511	11,528	11,545	11,562
1,139.4	11,580	11,597	11,614	11,631	11,648	11,666	11,683	11,700	11,717	11,735
1,139.5	11,752	11,769	11,786	11,804	11,821	11,839	11,856	11,873	11,891	11,908
1,139.6	11,926	11,943	11,961	11,978	11,996	12,013	12,031	12,048	12,066	12,084
1,139.7	12,101	12,119	12,137	12,155	12,172	12,190	12,208	12,225	12,243	12,261
1,139.8	12,279	12,297	12,315	12,333	12,350	12,368	12,386	12,404	12,422	12,440
1,139.9	12,458	12,476	12,494	12,512	12,530	12,548	12,567	12,585	12,603	12,621
1,140	12,639	12,657	12,675	12,694	12,712	12,730	12,748	12,767	12,785	12,803
1,140.1	12,822	12,840	12,858	12,877	12,895	12,913	12,932	12,950	12,969	12,987
1,140.2	13,006	13,024	13,043	13,061	13,080	13,098	13,117	13,136	13,154	13,173
1,140.3	13,192	13,210	13,229	13,248	13,267	13,285	13,304	13,323	13,342	13,360
1,140.4	13,379	13,398	13,417	13,436	13,455	13,474	13,493	13,512	13,531	13,550
1,140.5	13,569	13,588	13,607	13,626	13,645	13,664	13,683	13,702	13,721	13,740
1,140.6	13,760	13,779	13,798	13,817	13,836	13,856	13,875	13,894	13,913	13,933
1,140.7	13,952	13,971	13,991	14,010	14,030	14,049	14,068	14,088	14,107	14,127
1,140.8	14,146	14,165	14,185	14,205	14,224	14,244	14,263	14,283	14,302	14,322
1,140.9	14,341	14,361	14,381	14,400	14,420	14,440	14,460	14,479	14,499	14,519
1,141	14,538	14,558	14,578	14,598	14,618	14,638	14,658	14,677	14,697	14,717
1,141.1	14,737	14,757	14,777	14,797	14,817	14,837	14,857	14,877	14,897	14,917
1,141.2	14,938	14,958	14,978	14,998	15,018	15,038	15,058	15,079	15,099	15,119
1,141.3	15,139	15,160	15,180	15,200	15,221	15,241	15,262	15,282	15,302	15,323
1,141.4	15,343	15,363	15,384	15,404	15,425	15,445	15,466	15,487	15,507	15,528
1,141.5	15,548	15,569	15,589	15,610	15,631	15,651	15,672	15,693	15,713	15,734
1,141.6	15,755	15,776	15,797	15,817	15,838	15,859	15,880	15,901	15,921	15,942
1,141.7	15,963	15,984	16,005	16,026	16,047	16,068	16,089	16,110	16,131	16,152

Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,141.8	16,173	16,194	16,215	16,236	16,257	16,278	16,299	16,321	16,341	16,363
1,141.9	16,384	16,405	16,426	16,447	16,469	16,490	16,511	16,532	16,554	16,575
1,142	16,596	16,617	16,639	16,660	16,682	16,703	16,724	16,746	16,767	16,789
1,142.1	16,810	16,832	16,853	16,874	16,896	16,917	16,939	16,960	16,982	17,004
1,142.2	17,025	17,047	17,068	17,090	17,112	17,133	17,155	17,176	17,198	17,220
1,142.3	17,242	17,263	17,285	17,307	17,329	17,350	17,372	17,394	17,416	17,437
1,142.4	17,459	17,481	17,503	17,525	17,547	17,569	17,591	17,613	17,634	17,656
1,142.5	17,678	17,700	17,722	17,744	17,766	17,788	17,810	17,832	17,855	17,877
1,142.6	17,899	17,921	17,943	17,965	17,987	18,009	18,031	18,054	18,076	18,098
1,142.7	18,120	18,143	18,165	18,187	18,210	18,232	18,254	18,276	18,299	18,321
1,142.8	18,343	18,366	18,388	18,411	18,433	18,455	18,478	18,500	18,523	18,545
1,142.9	18,568	18,590	18,613	18,635	18,658	18,680	18,703	18,726	18,748	18,771
1,143	18,793	18,816	18,838	18,861	18,884	18,907	18,929	18,952	18,975	18,998
1,143.1	19,020	19,043	19,066	19,088	19,111	19,134	19,157	19,180	19,203	19,225
1,143.2	19,248	19,271	19,294	19,317	19,340	19,363	19,386	19,409	19,432	19,455
1,143.3	19,478	19,501	19,524	19,547	19,570	19,593	19,616	19,639	19,662	19,685
1,143.4	19,708	19,732	19,755	19,778	19,801	19,824	19,848	19,871	19,894	19,917
1,143.5	19,940	19,964	19,987	20,010	20,034	20,057	20,080	20,104	20,127	20,150
1,143.6	20,174	20,197	20,220	20,244	20,267	20,290	20,314	20,337	20,361	20,384
1,143.7	20,408	20,431	20,455	20,478	20,502	20,525	20,549	20,572	20,596	20,620
1,143.8	20,643	20,667	20,690	20,714	20,738	20,761	20,785	20,809	20,832	20,856
1,143.9	20,880	20,903	20,927	20,951	20,975	20,998	21,022	21,046	21,070	21,094
1,144	21,117	21,141	21,165	21,189	21,213	21,237	21,261	21,285	21,309	21,332
1,144.1	21,356	21,380	21,404	21,428	21,452	21,476	21,500	21,524	21,548	21,572
1,144.2	21,597	21,621	21,645	21,669	21,693	21,717	21,741	21,765	21,789	21,814
1,144.3	21,838	21,862	21,886	21,911	21,935	21,959	21,983	22,008	22,032	22,056
1,144.4	22,080	22,105	22,129	22,153	22,178	22,202	22,227	22,251	22,276	22,300
1,144.5	22,324	22,349	22,373	22,398	22,422	22,447	22,471	22,496	22,521	22,545
1,144.6	22,570	22,594	22,619	22,643	22,668	22,693	22,717	22,742	22,767	22,792
1,144.7	22,816	22,841	22,866	22,891	22,916	22,940	22,965	22,990	23,015	23,040
1,144.8	23,065	23,089	23,114	23,139	23,164	23,189	23,214	23,239	23,264	23,289
1,144.9	23,314	23,339	23,364	23,389	23,414	23,439	23,465	23,490	23,515	23,540
1,145	23,565	23,590	23,615	23,640	23,666	23,691	23,716	23,741	23,767	23,792
1,145.1	23,817	23,843	23,868	23,893	23,918	23,944	23,969	23,995	24,020	24,045
1,145.2	24,071	24,096	24,122	24,147	24,173	24,198	24,224	24,249	24,275	24,300
1,145.3	24,326	24,351	24,377	24,403	24,428	24,454	24,480	24,505	24,531	24,557
1,145.4	24,582	24,608	24,634	24,660	24,685	24,711	24,737	24,763	24,789	24,815
1,145.5	24,840	24,866	24,892	24,918	24,944	24,970	24,996	25,022	25,048	25,074
1,145.6	25,100	25,126	25,152	25,177	25,203	25,230	25,256	25,282	25,308	25,334
1,145.7	25,360	25,386	25,413	25,439	25,465	25,491	25,517	25,543	25,570	25,596
1,145.8	25,622	25,648	25,675	25,701	25,727	25,754	25,780	25,807	25,833	25,859
1,145.9	25,885	25,912	25,938	25,965	25,991	26,018	26,044	26,071	26,097	26,124
1,146	26,150	26,177	26,203	26,230	26,257	26,283	26,310	26,337	26,363	26,390
1,146.1	26,417	26,444	26,470	26,497	26,524	26,550	26,577	26,604	26,631	26,658
1,146.2	26,685	26,711	26,738	26,765	26,792	26,819	26,846	26,873	26,900	26,927
1,146.3	26,954	26,981	27,008	27,035	27,062	27,089	27,117	27,144	27,171	27,198
1,146.4	27,225	27,252	27,280	27,307	27,334	27,361	27,389	27,416	27,443	27,471
1,146.5	27,498	27,525	27,552	27,580	27,607	27,635	27,662	27,690	27,717	27,745
1,146.6	27,772	27,800	27,827	27,855	27,882	27,910	27,937	27,965	27,993	28,020
1,146.7	28,048	28,076	28,104	28,131	28,159	28,186	28,214	28,242	28,270	28,298
1,146.8	28,326	28,354	28,381	28,409	28,437	28,465	28,493	28,521	28,549	28,577
1,146.9	28,605	28,633	28,661	28,689	28,717	28,745	28,773	28,802	28,830	28,858
1,147	28,886	28,914	28,942	28,971	28,999	29,027	29,056	29,084	29,112	29,141
1,147.1	29,169	29,197	29,226	29,254	29,282	29,311	29,339	29,368	29,397	29,425
1,147.2	29,454	29,482	29,511	29,540	29,568	29,597	29,625	29,654	29,683	29,712
1,147.3	29,740	29,769	29,798	29,827	29,856	29,885	29,914	29,943	29,971	30,000
1,147.4	30,029	30,058	30,087	30,116	30,145	30,174	30,203	30,233	30,262	30,291
1,147.5	30,320	30,349	30,378	30,407	30,437	30,466	30,495	30,524	30,554	30,583
1,147.6	30,612	30,642	30,671	30,700	30,730	30,759	30,789	30,818	30,848	30,877
1,147.7	30,907	30,937	30,966	30,996	31,025	31,055	31,084	31,114	31,144	31,174

Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,147.8	31,203	31,233	31,263	31,293	31,323	31,353	31,382	31,412	31,442	31,472
1,147.9	31,502	31,532	31,562	31,592	31,622	31,652	31,682	31,712	31,743	31,773
1,148	31,803	31,833	31,863	31,893	31,924	31,954	31,984	32,015	32,045	32,075
1,148.1	32,106	32,136	32,167	32,197	32,227	32,258	32,288	32,319	32,350	32,380
1,148.2	32,411	32,442	32,472	32,503	32,534	32,564	32,595	32,625	32,656	32,687
1,148.3	32,718	32,749	32,779	32,810	32,841	32,872	32,903	32,934	32,965	32,996
1,148.4	33,027	33,058	33,089	33,120	33,151	33,182	33,213	33,244	33,275	33,307
1,148.5	33,337	33,369	33,400	33,431	33,462	33,494	33,525	33,556	33,588	33,619
1,148.6	33,651	33,682	33,714	33,745	33,776	33,808	33,839	33,871	33,902	33,934
1,148.7	33,966	33,997	34,029	34,061	34,092	34,124	34,156	34,187	34,219	34,251
1,148.8	34,283	34,315	34,347	34,379	34,411	34,443	34,475	34,507	34,538	34,570
1,148.9	34,602	34,635	34,667	34,699	34,731	34,763	34,796	34,828	34,860	34,892
1,149	34,924	34,957	34,989	35,021	35,054	35,086	35,119	35,151	35,184	35,216
1,149.1	35,249	35,281	35,314	35,346	35,379	35,411	35,444	35,477	35,510	35,542
1,149.2	35,575	35,608	35,641	35,674	35,707	35,739	35,772	35,805	35,838	35,871
1,149.3	35,904	35,937	35,970	36,003	36,036	36,069	36,102	36,136	36,168	36,202
1,149.4	36,235	36,268	36,302	36,335	36,368	36,402	36,435	36,468	36,502	36,535
1,149.5	36,568	36,602	36,635	36,669	36,702	36,736	36,770	36,803	36,837	36,871
1,149.6	36,904	36,938	36,972	37,005	37,039	37,073	37,106	37,140	37,174	37,208
1,149.7	37,242	37,276	37,310	37,344	37,378	37,412	37,446	37,480	37,514	37,548
1,149.8	37,582	37,616	37,650	37,685	37,719	37,753	37,787	37,822	37,856	37,890
1,149.9	37,924	37,959	37,993	38,028	38,062	38,097	38,131	38,166	38,201	38,235
1,150	38,269	38,304	38,339	38,373	38,408	38,443	38,478	38,513	38,547	38,582
1,150.1	38,617	38,652	38,687	38,722	38,757	38,792	38,827	38,862	38,897	38,932
1,150.2	38,967	39,002	39,037	39,073	39,108	39,143	39,178	39,213	39,248	39,284
1,150.3	39,319	39,355	39,390	39,425	39,461	39,496	39,532	39,567	39,603	39,638
1,150.4	39,674	39,709	39,745	39,781	39,816	39,852	39,888	39,924	39,959	39,995
1,150.5	40,031	40,067	40,102	40,138	40,174	40,210	40,246	40,282	40,318	40,354
1,150.6	40,390	40,426	40,462	40,498	40,534	40,571	40,607	40,643	40,679	40,715
1,150.7	40,752	40,788	40,824	40,861	40,897	40,933	40,969	41,006	41,042	41,079
1,150.8	41,115	41,152	41,189	41,225	41,262	41,298	41,335	41,372	41,408	41,445
1,150.9	41,481	41,518	41,555	41,592	41,629	41,666	41,702	41,739	41,776	41,813
1,151	41,850	41,887	41,924	41,961	41,998	42,035	42,072	42,109	42,146	42,183
1,151.1	42,221	42,258	42,295	42,332	42,369	42,406	42,444	42,481	42,519	42,556
1,151.2	42,593	42,631	42,668	42,706	42,743	42,780	42,818	42,856	42,893	42,931
1,151.3	42,969	43,006	43,044	43,082	43,120	43,157	43,195	43,233	43,270	43,308
1,151.4	43,346	43,384	43,422	43,460	43,498	43,536	43,574	43,612	43,650	43,689
1,151.5	43,726	43,765	43,803	43,841	43,879	43,918	43,956	43,994	44,033	44,071
1,151.6	44,109	44,148	44,186	44,224	44,263	44,301	44,340	44,379	44,417	44,456
1,151.7	44,495	44,533	44,572	44,611	44,650	44,688	44,727	44,766	44,804	44,843
1,151.8	44,882	44,921	44,960	44,999	45,038	45,077	45,116	45,155	45,194	45,233
1,151.9	45,272	45,311	45,350	45,390	45,429	45,468	45,507	45,547	45,586	45,625
1,152	45,664	45,703	45,743	45,782	45,822	45,861	45,901	45,940	45,980	46,019
1,152.1	46,059	46,098	46,138	46,177	46,217	46,256	46,296	46,336	46,376	46,415
1,152.2	46,455	46,495	46,535	46,575	46,615	46,654	46,694	46,734	46,774	46,814
1,152.3	46,854	46,894	46,934	46,974	47,014	47,054	47,094	47,134	47,174	47,214
1,152.4	47,254	47,295	47,335	47,375	47,416	47,456	47,496	47,537	47,577	47,617
1,152.5	47,657	47,698	47,738	47,779	47,819	47,860	47,900	47,941	47,982	48,022
1,152.6	48,063	48,103	48,144	48,184	48,225	48,266	48,307	48,347	48,388	48,429
1,152.7	48,470	48,511	48,552	48,593	48,634	48,674	48,715	48,756	48,797	48,838
1,152.8	48,879	48,920	48,962	49,003	49,044	49,085	49,126	49,168	49,208	49,250
1,152.9	49,291	49,332	49,374	49,415	49,456	49,498	49,539	49,581	49,622	49,664
1,153	49,705	49,746	49,788	49,830	49,871	49,913	49,955	49,996	50,038	50,080
1,153.1	50,122	50,163	50,205	50,246	50,288	50,330	50,372	50,414	50,456	50,498
1,153.2	50,540	50,582	50,624	50,666	50,708	50,750	50,792	50,834	50,876	50,919
1,153.3	50,961	51,003	51,046	51,088	51,130	51,173	51,215	51,257	51,299	51,342
1,153.4	51,384	51,427	51,469	51,512	51,554	51,597	51,640	51,682	51,725	51,768
1,153.5	51,810	51,852	51,895	51,938	51,981	52,024	52,066	52,109	52,152	52,195
1,153.6	52,238	52,281	52,324	52,366	52,410	52,453	52,496	52,539	52,582	52,625
1,153.7	52,668	52,711	52,755	52,798	52,841	52,884	52,927	52,971	53,014	53,057

Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,153.8	53,101	53,144	53,188	53,231	53,275	53,318	53,362	53,405	53,448	53,492
1,153.9	53,536	53,579	53,623	53,667	53,711	53,754	53,798	53,842	53,886	53,930
1,154	53,973	54,017	54,061	54,105	54,149	54,193	54,237	54,281	54,325	54,369
1,154.1	54,414	54,458	54,502	54,546	54,590	54,634	54,679	54,723	54,767	54,812
1,154.2	54,856	54,900	54,945	54,989	55,034	55,078	55,123	55,167	55,212	55,256
1,154.3	55,301	55,346	55,391	55,435	55,480	55,525	55,570	55,615	55,659	55,704
1,154.4	55,749	55,794	55,839	55,884	55,929	55,974	56,019	56,064	56,110	56,155
1,154.5	56,200	56,245	56,290	56,335	56,381	56,426	56,471	56,517	56,562	56,608
1,154.6	56,653	56,699	56,744	56,789	56,835	56,880	56,926	56,972	57,017	57,063
1,154.7	57,109	57,155	57,200	57,246	57,292	57,337	57,383	57,429	57,475	57,521
1,154.8	57,567	57,613	57,659	57,705	57,751	57,797	57,843	57,889	57,935	57,981
1,154.9	58,028	58,074	58,120	58,166	58,213	58,259	58,306	58,352	58,399	58,445
1,155	58,491	58,537	58,584	58,631	58,677	58,724	58,771	58,817	58,864	58,911
1,155.1	58,958	59,004	59,051	59,097	59,144	59,191	59,238	59,285	59,332	59,379
1,155.2	59,426	59,473	59,520	59,568	59,615	59,661	59,709	59,756	59,803	59,850
1,155.3	59,898	59,945	59,993	60,040	60,088	60,135	60,183	60,230	60,277	60,325
1,155.4	60,372	60,420	60,468	60,515	60,563	60,611	60,659	60,707	60,755	60,802
1,155.5	60,850	60,898	60,946	60,994	61,042	61,090	61,138	61,186	61,234	61,282
1,155.6	61,330	61,379	61,427	61,475	61,523	61,571	61,620	61,668	61,716	61,765
1,155.7	61,813	61,862	61,910	61,959	62,007	62,055	62,104	62,152	62,201	62,250
1,155.8	62,298	62,347	62,396	62,445	62,493	62,542	62,591	62,640	62,688	62,737
1,155.9	62,786	62,835	62,884	62,933	62,982	63,031	63,080	63,129	63,179	63,228
1,156	63,276	63,325	63,375	63,424	63,473	63,522	63,572	63,621	63,670	63,720
1,156.1	63,769	63,819	63,868	63,917	63,966	64,016	64,066	64,115	64,165	64,214
1,156.2	64,264	64,314	64,363	64,413	64,463	64,512	64,562	64,611	64,661	64,711
1,156.3	64,761	64,811	64,861	64,911	64,960	65,010	65,060	65,110	65,160	65,210
1,156.4	65,260	65,310	65,360	65,410	65,461	65,511	65,561	65,611	65,662	65,712
1,156.5	65,762	65,812	65,862	65,913	65,963	66,014	66,064	66,115	66,165	66,216
1,156.6	66,266	66,317	66,367	66,417	66,468	66,519	66,570	66,620	66,671	66,722
1,156.7	66,773	66,824	66,874	66,925	66,976	67,027	67,078	67,129	67,180	67,231
1,156.8	67,282	67,333	67,384	67,435	67,486	67,538	67,589	67,640	67,691	67,742
1,156.9	67,793	67,845	67,896	67,948	67,999	68,050	68,102	68,153	68,205	68,257
1,157	68,308	68,359	68,411	68,463	68,514	68,566	68,618	68,670	68,722	68,773
1,157.1	68,825	68,877	68,929	68,981	69,033	69,085	69,137	69,189	69,241	69,293
1,157.2	69,345	69,398	69,450	69,502	69,555	69,606	69,659	69,711	69,763	69,816
1,157.3	69,868	69,921	69,974	70,026	70,079	70,131	70,184	70,237	70,289	70,342
1,157.4	70,394	70,447	70,500	70,553	70,606	70,659	70,712	70,765	70,818	70,871
1,157.5	70,923	70,976	71,029	71,083	71,136	71,189	71,242	71,296	71,349	71,402
1,157.6	71,456	71,509	71,562	71,615	71,669	71,722	71,776	71,829	71,883	71,937
1,157.7	71,990	72,044	72,098	72,152	72,206	72,259	72,313	72,366	72,420	72,474
1,157.8	72,528	72,582	72,636	72,691	72,745	72,799	72,853	72,907	72,961	73,015
1,157.9	73,069	73,124	73,178	73,233	73,287	73,341	73,396	73,450	73,505	73,560
1,158	73,614	73,668	73,723	73,778	73,832	73,887	73,942	73,997	74,052	74,106
1,158.1	74,161	74,216	74,271	74,326	74,381	74,436	74,491	74,546	74,601	74,657
1,158.2	74,712	74,767	74,822	74,878	74,933	74,988	75,043	75,099	75,154	75,210
1,158.3	75,265	75,321	75,377	75,432	75,488	75,544	75,599	75,655	75,710	75,766
1,158.4	75,822	75,878	75,934	75,990	76,046	76,102	76,158	76,215	76,271	76,327
1,158.5	76,383	76,439	76,495	76,551	76,608	76,664	76,721	76,777	76,834	76,890
1,158.6	76,947	77,003	77,060	77,116	77,173	77,230	77,286	77,343	77,400	77,457
1,158.7	77,514	77,571	77,628	77,685	77,742	77,798	77,855	77,912	77,970	78,027
1,158.8	78,084	78,141	78,199	78,256	78,313	78,371	78,428	78,486	78,542	78,600
1,158.9	78,657	78,715	78,773	78,830	78,888	78,946	79,004	79,061	79,119	79,177
1,159	79,234	79,292	79,350	79,408	79,466	79,524	79,582	79,641	79,699	79,757
1,159.1	79,815	79,874	79,932	79,989	80,048	80,106	80,165	80,223	80,282	80,340
1,159.2	80,399	80,458	80,516	80,575	80,634	80,692	80,751	80,809	80,868	80,927
1,159.3	80,986	81,045	81,104	81,163	81,222	81,281	81,340	81,400	81,458	81,517
1,159.4	81,577	81,636	81,695	81,755	81,814	81,874	81,933	81,993	82,052	82,112
1,159.5	82,171	82,230	82,290	82,350	82,409	82,469	82,529	82,589	82,649	82,709
1,159.6	82,769	82,829	82,889	82,948	83,008	83,068	83,128	83,188	83,249	83,309
1,159.7	83,369	83,429	83,490	83,550	83,610	83,670	83,730	83,791	83,851	83,912

Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,159.8	83,973	84,033	84,094	84,154	84,215	84,276	84,337	84,397	84,458	84,518
1,159.9	84,579	84,640	84,701	84,762	84,823	84,884	84,945	85,006	85,067	85,129
1,160	85,189	85,250	85,312	85,373	85,434	85,495	85,557	85,618	85,680	85,741
1,160.1	85,803	85,864	85,926	85,987	86,048	86,110	86,172	86,233	86,295	86,357
1,160.2	86,419	86,481	86,543	86,605	86,667	86,728	86,790	86,852	86,914	86,976
1,160.3	87,038	87,101	87,163	87,225	87,287	87,350	87,412	87,475	87,536	87,599
1,160.4	87,661	87,724	87,786	87,849	87,912	87,974	88,037	88,100	88,163	88,226
1,160.5	88,288	88,351	88,414	88,477	88,540	88,603	88,666	88,729	88,792	88,855
1,160.6	88,919	88,982	89,045	89,108	89,171	89,234	89,298	89,361	89,425	89,488
1,160.7	89,552	89,615	89,679	89,743	89,806	89,869	89,933	89,997	90,061	90,124
1,160.8	90,188	90,252	90,316	90,380	90,444	90,508	90,572	90,636	90,700	90,764
1,160.9	90,828	90,893	90,957	91,021	91,085	91,150	91,214	91,279	91,343	91,408
1,161	91,471	91,536	91,601	91,665	91,730	91,795	91,859	91,924	91,989	92,054
1,161.1	92,119	92,184	92,249	92,313	92,378	92,443	92,508	92,573	92,638	92,704
1,161.2	92,769	92,834	92,900	92,965	93,030	93,095	93,160	93,226	93,291	93,357
1,161.3	93,422	93,488	93,554	93,619	93,685	93,751	93,817	93,883	93,948	94,013
1,161.4	94,079	94,145	94,211	94,278	94,344	94,410	94,476	94,542	94,608	94,675
1,161.5	94,740	94,807	94,873	94,939	95,006	95,072	95,139	95,206	95,272	95,339
1,161.6	95,406	95,472	95,539	95,605	95,672	95,739	95,806	95,873	95,940	96,007
1,161.7	96,074	96,141	96,208	96,276	96,343	96,409	96,477	96,544	96,612	96,679
1,161.8	96,747	96,814	96,882	96,949	97,017	97,084	97,152	97,220	97,287	97,355
1,161.9	97,422	97,490	97,558	97,626	97,694	97,762	97,830	97,898	97,966	98,034
1,162	98,102	98,170	98,238	98,307	98,375	98,443	98,512	98,580	98,648	98,717
1,162.1	98,785	98,854	98,923	98,990	99,059	99,128	99,196	99,265	99,334	99,403
1,162.2	99,472	99,541	99,609	99,678	99,747	99,816	99,885	99,954	100,023	100,092
1,162.3	100,161	100,230	100,300	100,369	100,438	100,508	100,577	100,646	100,715	100,784
1,162.4	100,854	100,923	100,993	101,063	101,132	101,202	101,272	101,341	101,411	101,481
1,162.5	101,550	101,620	101,689	101,759	101,829	101,899	101,969	102,039	102,109	102,180
1,162.6	102,250	102,320	102,390	102,459	102,530	102,600	102,670	102,741	102,811	102,881
1,162.7	102,952	103,022	103,093	103,163	103,234	103,304	103,374	103,445	103,516	103,586
1,162.8	103,657	103,728	103,799	103,870	103,941	104,011	104,082	104,153	104,223	104,295
1,162.9	104,366	104,437	104,508	104,579	104,650	104,721	104,793	104,864	104,935	105,007
1,163	105,077	105,149	105,220	105,291	105,363	105,435	105,506	105,578	105,649	105,721
1,163.1	105,793	105,864	105,936	106,007	106,079	106,151	106,223	106,295	106,367	106,439
1,163.2	106,511	106,583	106,655	106,727	106,799	106,870	106,943	107,015	107,087	107,159
1,163.3	107,232	107,304	107,377	107,449	107,521	107,594	107,667	107,739	107,811	107,883
1,163.4	107,956	108,029	108,102	108,174	108,247	108,320	108,393	108,466	108,539	108,611
1,163.5	108,684	108,757	108,830	108,903	108,976	109,049	109,122	109,195	109,268	109,342
1,163.6	109,415	109,488	109,562	109,634	109,708	109,781	109,854	109,928	110,001	110,075
1,163.7	110,149	110,222	110,296	110,370	110,443	110,516	110,590	110,664	110,738	110,812
1,163.8	110,886	110,960	111,034	111,108	111,182	111,256	111,330	111,404	111,477	111,552
1,163.9	111,626	111,700	111,774	111,849	111,923	111,997	112,072	112,146	112,221	112,295
1,164	112,369	112,444	112,518	112,593	112,668	112,742	112,817	112,892	112,967	113,042
1,164.1	113,116	113,191	113,266	113,340	113,415	113,490	113,565	113,640	113,716	113,791
1,164.2	113,866	113,941	114,016	114,092	114,167	114,241	114,317	114,392	114,468	114,543
1,164.3	114,619	114,694	114,770	114,845	114,921	114,997	115,072	115,148	115,223	115,299
1,164.4	115,375	115,450	115,526	115,602	115,678	115,754	115,830	115,906	115,983	116,059
1,164.5	116,134	116,210	116,286	116,363	116,439	116,515	116,592	116,668	116,744	116,821
1,164.6	116,897	116,974	117,050	117,126	117,203	117,279	117,356	117,433	117,510	117,586
1,164.7	117,663	117,740	117,817	117,894	117,971	118,047	118,124	118,201	118,278	118,355
1,164.8	118,432	118,509	118,587	118,664	118,741	118,818	118,896	118,973	119,050	119,127
1,164.9	119,205	119,282	119,360	119,437	119,515	119,593	119,670	119,748	119,826	119,904
1,165	119,981	120,059	120,136	120,214	120,292	120,371	120,449	120,527	120,605	120,683
1,165.1	120,761	120,840	120,918	120,995	121,074	121,152	121,231	121,309	121,388	121,466
1,165.2	121,545	121,623	121,702	121,781	121,859	121,937	122,016	122,095	122,174	122,253
1,165.3	122,332	122,411	122,490	122,569	122,648	122,727	122,806	122,885	122,964	123,043
1,165.4	123,122	123,202	123,281	123,360	123,440	123,519	123,599	123,679	123,758	123,838
1,165.5	123,917	123,996	124,076	124,156	124,236	124,316	124,396	124,476	124,556	124,636
1,165.6	124,716	124,796	124,876	124,955	125,036	125,116	125,196	125,277	125,357	125,437
1,165.7	125,518	125,598	125,679	125,759	125,840	125,920	126,000	126,081	126,162	126,243





Appendix A (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,177.8	252,404	252,535	252,666	252,797	252,928	253,059	253,190	253,321	253,451	253,582
1,177.9	253,713	253,844	253,976	254,107	254,238	254,370	254,501	254,633	254,764	254,896
1,178	255,026	255,158	255,289	255,421	255,553	255,684	255,816	255,948	256,080	256,212
1,178.1	256,344	256,476	256,608	256,738	256,871	257,003	257,135	257,267	257,399	257,532
1,178.2	257,664	257,796	257,929	258,061	258,194	258,325	258,457	258,590	258,722	258,855
1,178.3	258,988	259,120	259,253	259,386	259,519	259,652	259,784	259,917	260,049	260,182
1,178.4	260,315	260,448	260,581	260,714	260,847	260,981	261,114	261,247	261,380	261,514
1,178.5	261,646	261,779	261,912	262,046	262,179	262,313	262,447	262,580	262,714	262,848
1,178.6	262,981	263,115	263,249	263,381	263,515	263,649	263,783	263,917	264,051	264,185
1,178.7	264,319	264,453	264,588	264,722	264,856	264,989	265,123	265,257	265,392	265,526
1,178.8	265,661	265,795	265,930	266,064	266,199	266,333	266,468	266,603	266,736	266,871
1,178.9	267,005	267,140	267,275	267,410	267,545	267,680	267,815	267,950	268,085	268,220
1,179	268,354	268,489	268,624	268,759	268,895	269,030	269,165	269,301	269,436	269,572
1,179.1	269,707	269,843	269,978	270,112	270,248	270,384	270,519	270,655	270,791	270,927
1,179.2	271,063	271,199	271,335	271,471	271,607	271,741	271,877	272,013	272,150	272,286
1,179.3	272,422	272,558	272,695	272,831	272,967	273,104	273,240	273,377	273,512	273,648
1,179.4	273,785	273,922	274,058	274,195	274,332	274,468	274,605	274,742	274,879	275,016
1,179.5	275,151	275,288	275,425	275,562	275,700	275,837	275,974	276,111	276,248	276,386
1,179.6	276,523	276,660	276,798	276,934	277,071	277,209	277,346	277,484	277,621	277,759
1,179.7	277,897	278,035	278,172	278,310	278,448	278,585	278,722	278,861	278,999	279,137
1,179.8	279,275	279,413	279,551	279,689	279,828	279,966	280,105	280,243	280,380	280,518
1,179.9	280,657	280,795	280,934	281,073	281,211	281,350	281,489	281,628	281,767	281,906
1,180	282,043	282,182	282,321	282,460	282,599	282,738	282,877	283,016	283,156	283,295
1,180.1	283,434	283,574	283,713	283,851	283,990	284,130	284,269	284,409	284,549	284,688
1,180.2	284,828	284,968	285,108	285,247	285,387	285,526	285,665	285,805	285,945	286,086
1,180.3	286,226	286,366	286,506	286,646	286,786	286,927	287,067	287,207	287,346	287,487
1,180.4	287,627	287,768	287,908	288,049	288,189	288,330	288,471	288,611	288,752	288,893
1,180.5	289,032	289,172	289,313	289,454	289,595	289,735	289,876	290,017	290,158	290,299
1,180.6	290,440	290,581	290,722	290,863	291,004	291,145	291,286	291,428	291,569	291,710
1,180.7	291,851	291,993	292,134	292,275	292,417	292,558	292,700	292,841	292,983	293,124
1,180.8	293,266	293,407	293,549	293,691	293,832	293,974	294,116	294,258	294,400	294,541
1,180.9	294,683	294,825	294,967	295,109	295,251	295,393	295,535	295,678	295,820	295,962
1,181	296,104	296,246	296,389	296,531	296,673	296,816	296,958	297,101	297,243	297,386
1,181.1	297,528	297,671	297,813	297,956	298,099	298,241	298,384	298,527	298,670	298,812
1,181.2	298,955	299,098	299,241	299,384	299,527	299,670	299,813	299,956	300,099	300,242
1,181.3	300,386	300,529	300,672	300,815	300,959	301,102	301,245	301,389	301,532	301,675
1,181.4	301,819	301,963	302,106	302,250	302,393	302,537	302,681	302,824	302,968	303,112
1,181.5	303,256	303,399	303,543	303,687	303,831	303,975	304,119	304,263	304,407	304,551
1,181.6	304,695	304,840	304,984	305,128	305,272	305,417	305,561	305,705	305,850	305,994
1,181.7	306,138	306,283	306,427	306,572	306,717	306,861	307,006	307,150	307,295	307,440
1,181.8	307,585	307,729	307,874	308,019	308,164	308,309	308,454	308,599	308,744	308,889
1,181.9	309,034	309,179	309,324	309,469	309,615	309,760	309,905	310,050	310,196	310,341
1,182	310,486	310,632	310,777	310,923	311,068	311,214	311,359	311,505	311,651	311,796
1,182.1	311,942	312,088	312,234	312,379	312,525	312,671	312,817	312,963	313,109	313,255
1,182.2	313,401	313,547	313,693	313,839	313,985	314,131	314,278	314,424	314,570	314,717
1,182.3	314,863	315,009	315,156	315,302	315,449	315,595	315,742	315,888	316,035	316,181
1,182.4	316,328	316,475	316,621	316,768	316,915	317,062	317,209	317,356	317,502	317,649
1,182.5	317,796	317,943	318,090	318,238	318,385	318,532	318,679	318,826	318,973	319,121
1,182.6	319,268	319,415	319,563	319,710	319,857	320,005	320,152	320,300	320,447	320,595
1,182.7	320,743	320,890	321,038	321,186	321,333	321,481	321,629	321,777	321,925	322,072
1,182.8	322,220	322,368	322,516	322,664	322,812	322,961	323,109	323,257	323,405	323,553
1,182.9	323,701	323,850	323,998	324,146	324,295	324,443	324,592	324,740	324,889	325,037
1,183	325,186	325,334	325,483	325,631	325,780	325,929	326,078	326,226	326,375	326,524
1,183.1	326,673	326,822	326,971	327,120	327,269	327,418	327,567	327,716	327,865	328,014
1,183.2	328,164	328,313	328,462	328,611	328,761	328,910	329,059	329,209	329,358	329,508
1,183.3	329,657	329,807								

Note: Capacities above elevation 1,180.51 feet (formerly 1,180.2 feet, NGVD29) calculated from interpolated areas



Appendix B  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,111.8	0	0	0	0	0	0	0	0	0	0
1,111.9	0	0	0	0	0	0	0	0	0	0
1,112	0	0	0	0	0	0	0	0	0	0
1,112.1	0	0	0	0	0	0	0	0	0	0
1,112.2	0	0	0	0	0	0	0	0	0	0
1,112.3	0	0	0	0	0	0	0	0	0	0
1,112.4	0	0	0	0	0	0	0	0	0	0
1,112.5	0	0	0	0	0	0	0	0	0	0
1,112.6	0	0	0	0	0	0	0	0	0	0
1,112.7	0	0	0	0	0	0	0	0	0	0
1,112.8	0	0	0	0	0	0	0	0	0	0
1,112.9	0	0	0	0	0	0	0	0	0	0
1,113	0	0	0	0	0	0	0	0	0	0
1,113.1	0	0	0	0	0	0	0	1	1	1
1,113.2	1	1	1	1	1	1	1	1	1	1
1,113.3	1	1	1	1	1	1	1	1	1	1
1,113.4	1	1	1	1	1	1	1	1	1	1
1,113.5	1	1	1	1	1	1	1	1	1	1
1,113.6	1	1	1	1	1	1	1	1	1	1
1,113.7	1	1	1	1	1	1	1	1	1	1
1,113.8	1	1	1	1	1	1	1	1	1	1
1,113.9	1	1	1	1	1	1	1	1	1	1
1,114	1	1	1	1	1	1	1	1	1	1
1,114.1	1	1	1	1	1	1	1	1	1	1
1,114.2	1	1	1	2	2	2	2	2	2	2
1,114.3	2	3	3	3	3	3	3	3	4	4
1,114.4	4	4	4	4	4	4	5	5	5	5
1,114.5	5	5	5	5	6	6	6	6	6	6
1,114.6	7	7	7	7	7	7	8	8	8	8
1,114.7	8	9	9	9	9	9	9	9	9	9
1,114.8	9	9	9	9	10	10	10	10	10	10
1,114.9	10	10	10	10	10	10	10	10	10	10
1,115	10	11	11	11	11	11	11	11	11	11
1,115.1	11	11	11	11	11	11	11	11	11	12
1,115.2	12	12	12	12	12	12	12	12	12	12
1,115.3	12	12	12	12	12	12	13	13	13	13
1,115.4	13	13	13	13	13	13	13	13	13	13
1,115.5	13	13	14	14	14	14	14	14	14	14
1,115.6	14	14	14	14	14	14	14	15	15	15
1,115.7	15	15	15	15	15	15	15	15	15	15
1,115.8	15	15	16	16	16	16	16	16	16	16
1,115.9	16	16	16	16	16	16	16	17	17	17
1,116	17	17	17	17	17	17	17	17	17	17
1,116.1	17	18	18	18	18	18	18	18	18	18
1,116.2	18	18	18	18	18	18	18	19	19	19
1,116.3	19	19	19	19	19	19	19	19	19	19
1,116.4	19	19	20	20	20	20	20	20	20	20
1,116.5	20	20	20	20	20	20	21	21	21	21
1,116.6	21	21	21	21	21	21	21	21	21	22
1,116.7	22	22	22	22	22	22	22	22	22	22
1,116.8	22	22	23	23	23	23	23	23	23	23
1,116.9	23	23	23	23	23	24	24	24	24	24
1,117	24	24	24	24	24	24	25	25	25	25
1,117.1	25	25	25	25	25	25	26	26	26	26
1,117.2	26	26	26	26	27	27	27	27	27	27
1,117.3	27	27	27	28	28	28	28	28	28	28
1,117.4	28	29	29	29	29	29	29	29	29	30
1,117.5	30	30	30	30	30	30	30	31	31	31
1,117.6	31	31	31	31	31	32	32	32	32	32
1,117.7	32	32	32	33	33	33	33	33	33	33

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,117.8	33	34	34	34	34	34	34	34	34	35
1,117.9	35	35	35	35	35	35	36	36	36	36
1,118	36	36	36	36	37	37	37	37	37	37
1,118.1	37	38	38	38	38	38	38	38	39	39
1,118.2	39	39	39	39	39	40	40	40	40	40
1,118.3	40	41	41	41	41	41	41	42	42	42
1,118.4	42	42	42	43	43	43	43	43	43	44
1,118.5	44	44	44	44	45	45	45	45	45	45
1,118.6	46	46	46	46	46	47	47	47	47	47
1,118.7	48	48	48	48	48	49	49	49	49	49
1,118.8	50	50	50	50	50	51	51	51	51	51
1,118.9	52	52	52	52	52	53	53	53	53	53
1,119	54	54	54	54	54	55	55	55	55	56
1,119.1	56	56	56	56	57	57	57	57	57	58
1,119.2	58	58	58	58	59	59	59	59	59	60
1,119.3	60	60	60	61	61	61	61	62	62	62
1,119.4	62	62	63	63	63	63	64	64	64	64
1,119.5	65	65	65	65	66	66	66	66	66	67
1,119.6	67	67	67	68	68	68	68	69	69	69
1,119.7	69	70	70	70	70	70	71	71	71	71
1,119.8	72	72	72	72	73	73	73	73	74	74
1,119.9	74	74	75	75	75	75	76	76	76	76
1,120	76	77	77	77	77	78	78	78	78	79
1,120.1	79	79	79	80	80	80	80	81	81	81
1,120.2	81	82	82	82	82	83	83	83	83	84
1,120.3	84	84	84	85	85	85	85	86	86	86
1,120.4	86	87	87	87	87	88	88	88	89	89
1,120.5	89	89	90	90	90	90	91	91	91	91
1,120.6	92	92	92	92	93	93	93	93	94	94
1,120.7	94	94	95	95	95	95	96	96	96	96
1,120.8	97	97	97	97	98	98	98	98	99	99
1,120.9	99	99	100	100	100	100	101	101	101	101
1,121	102	102	102	102	103	103	103	103	104	104
1,121.1	104	104	105	105	105	105	106	106	106	106
1,121.2	107	107	107	108	108	108	108	109	109	109
1,121.3	109	110	110	110	110	111	111	111	111	112
1,121.4	112	112	112	113	113	113	113	114	114	114
1,121.5	114	115	115	115	115	116	116	116	116	117
1,121.6	117	117	117	117	118	118	118	118	119	119
1,121.7	119	119	120	120	120	120	120	121	121	121
1,121.8	121	122	122	122	122	122	123	123	123	123
1,121.9	124	124	124	124	125	125	125	125	125	126
1,122	126	126	126	126	127	127	127	127	128	128
1,122.1	128	128	129	129	129	129	129	130	130	130
1,122.2	130	131	131	131	131	131	132	132	132	132
1,122.3	133	133	133	133	133	134	134	134	134	135
1,122.4	135	135	135	135	136	136	136	136	137	137
1,122.5	137	137	137	138	138	138	138	139	139	139
1,122.6	139	139	140	140	140	140	141	141	141	141
1,122.7	141	142	142	142	142	142	143	143	143	143
1,122.8	143	144	144	144	144	145	145	145	145	145
1,122.9	146	146	146	146	146	147	147	147	147	148
1,123	148	148	148	148	149	149	149	149	149	150
1,123.1	150	150	150	151	151	151	151	151	152	152
1,123.2	152	152	153	153	153	153	153	154	154	154
1,123.3	154	155	155	155	155	155	156	156	156	156
1,123.4	157	157	157	157	158	158	158	158	158	159
1,123.5	159	159	159	160	160	160	160	161	161	161
1,123.6	161	161	162	162	162	162	163	163	163	163
1,123.7	164	164	164	164	164	165	165	165	165	166

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,123.8	166	166	166	166	167	167	167	167	168	168
1,123.9	168	168	168	169	169	169	169	170	170	170
1,124	170	170	171	171	171	171	172	172	172	172
1,124.1	173	173	173	173	173	174	174	174	174	175
1,124.2	175	175	175	176	176	176	176	177	177	177
1,124.3	177	178	178	178	178	178	179	179	179	179
1,124.4	180	180	180	180	181	181	181	181	182	182
1,124.5	182	182	183	183	183	183	184	184	184	184
1,124.6	185	185	185	186	186	186	186	187	187	187
1,124.7	188	188	188	188	189	189	189	190	190	190
1,124.8	190	191	191	191	192	192	192	192	193	193
1,124.9	193	194	194	194	194	195	195	195	196	196
1,125	196	196	197	197	197	198	198	198	198	199
1,125.1	199	199	200	200	200	201	201	201	201	202
1,125.2	202	202	203	203	203	204	204	204	204	205
1,125.3	205	205	206	206	206	206	207	207	207	207
1,125.4	208	208	208	209	209	209	209	210	210	210
1,125.5	210	211	211	211	211	212	212	212	212	213
1,125.6	213	213	213	214	214	214	214	215	215	215
1,125.7	215	216	216	216	217	217	217	217	218	218
1,125.8	218	218	219	219	219	219	220	220	220	220
1,125.9	221	221	221	221	222	222	222	222	223	223
1,126	223	223	224	224	224	224	225	225	225	225
1,126.1	226	226	226	226	227	227	227	227	228	228
1,126.2	228	228	229	229	229	229	230	230	230	230
1,126.3	231	231	231	231	232	232	232	232	233	233
1,126.4	233	233	234	234	234	234	235	235	235	235
1,126.5	236	236	236	236	237	237	237	237	238	238
1,126.6	238	238	239	239	239	239	240	240	240	240
1,126.7	241	241	241	241	242	242	242	242	243	243
1,126.8	243	243	244	244	244	245	245	245	245	246
1,126.9	246	246	246	247	247	247	247	248	248	248
1,127	248	249	249	249	250	250	250	250	251	251
1,127.1	251	252	252	252	252	253	253	253	254	254
1,127.2	254	254	255	255	255	256	256	256	257	257
1,127.3	257	257	258	258	258	259	259	259	260	260
1,127.4	260	261	261	261	262	262	262	263	263	263
1,127.5	263	264	264	264	265	265	265	266	266	266
1,127.6	267	267	267	268	268	268	269	269	269	270
1,127.7	270	271	271	271	272	272	272	273	273	274
1,127.8	274	274	275	275	276	276	276	277	277	277
1,127.9	278	278	279	279	279	280	280	281	281	281
1,128	282	282	282	283	283	284	284	284	285	285
1,128.1	286	286	286	287	287	288	288	288	289	289
1,128.2	289	290	290	291	291	292	292	292	293	293
1,128.3	294	294	294	295	295	296	296	297	297	297
1,128.4	298	298	299	299	300	300	300	301	301	302
1,128.5	302	303	303	304	304	304	305	305	306	306
1,128.6	307	307	307	308	308	309	309	310	310	311
1,128.7	311	311	312	312	313	313	314	314	315	315
1,128.8	316	316	316	317	317	318	318	319	319	320
1,128.9	320	321	321	322	322	323	323	323	324	324
1,129	325	325	326	326	327	327	328	328	329	330
1,129.1	330	331	331	332	332	333	333	334	335	335
1,129.2	336	336	337	337	338	339	339	340	340	341
1,129.3	342	342	343	344	344	345	345	346	347	347
1,129.4	348	349	349	350	351	351	352	353	353	354
1,129.5	355	355	356	357	357	358	359	360	360	361
1,129.6	362	362	363	364	365	365	366	367	367	368
1,129.7	369	369	370	371	372	372	373	374	374	375

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,129.8	376	377	377	378	379	379	380	381	381	382
1,129.9	383	384	384	385	386	386	387	388	388	389
1,130	390	390	391	392	393	393	394	395	395	396
1,130.1	397	398	398	399	400	401	401	402	403	404
1,130.2	404	405	406	407	408	408	409	410	411	411
1,130.3	412	413	414	415	415	416	417	418	418	419
1,130.4	420	421	421	422	423	424	424	425	426	427
1,130.5	428	428	429	430	431	432	432	433	434	435
1,130.6	436	437	437	438	439	440	441	442	442	443
1,130.7	444	445	446	446	447	448	449	450	451	451
1,130.8	452	453	454	455	456	457	457	458	459	460
1,130.9	461	462	463	464	465	466	466	467	468	469
1,131	470	471	473	474	475	476	477	478	479	481
1,131.1	482	483	484	486	487	488	489	490	491	493
1,131.2	494	495	496	497	498	499	500	502	503	504
1,131.3	505	507	508	509	510	511	512	513	514	516
1,131.4	517	518	519	520	521	522	523	524	525	526
1,131.5	527	528	529	530	531	532	534	535	536	537
1,131.6	538	539	540	541	542	543	544	545	546	547
1,131.7	549	550	551	552	553	554	555	557	558	559
1,131.8	561	562	564	565	567	568	569	571	572	574
1,131.9	575	576	578	579	580	582	583	585	586	587
1,132	589	590	591	593	594	595	596	597	599	600
1,132.1	601	602	603	605	606	607	608	609	611	612
1,132.2	613	614	616	617	618	620	621	622	624	625
1,132.3	626	628	629	631	632	634	635	636	638	639
1,132.4	641	642	643	645	646	647	649	650	652	653
1,132.5	654	656	657	658	660	661	662	664	665	666
1,132.6	668	669	670	672	673	674	676	677	678	679
1,132.7	681	682	683	684	686	687	688	689	691	692
1,132.8	693	695	696	697	698	700	701	702	703	705
1,132.9	706	707	709	710	711	712	714	715	716	718
1,133	719	720	722	723	724	725	727	728	729	730
1,133.1	732	733	734	735	737	738	739	741	742	743
1,133.2	745	746	747	749	750	751	753	754	756	757
1,133.3	759	760	761	763	764	766	767	769	770	772
1,133.4	773	774	776	777	779	781	782	784	786	787
1,133.5	789	791	793	794	796	798	800	801	803	805
1,133.6	806	808	810	811	813	815	816	818	820	821
1,133.7	823	825	826	828	830	831	833	835	837	839
1,133.8	840	843	844	846	848	850	852	853	855	857
1,133.9	859	861	862	864	866	868	869	871	873	875
1,134	876	878	880	881	883	885	886	888	890	891
1,134.1	893	894	896	898	899	901	903	905	906	908
1,134.2	910	911	913	914	916	917	919	920	922	923
1,134.3	924	926	927	928	930	931	932	934	935	937
1,134.4	938	939	941	942	944	945	947	948	950	951
1,134.5	953	954	956	957	959	960	961	963	964	966
1,134.6	967	969	970	972	973	975	976	977	979	980
1,134.7	982	983	984	985	987	988	989	991	992	993
1,134.8	995	996	997	999	1,000	1,001	1,003	1,004	1,006	1,007
1,134.9	1,008	1,010	1,011	1,013	1,014	1,015	1,017	1,018	1,019	1,021
1,135	1,022	1,024	1,025	1,027	1,028	1,029	1,031	1,032	1,033	1,035
1,135.1	1,036	1,037	1,039	1,040	1,041	1,042	1,044	1,045	1,046	1,048
1,135.2	1,049	1,051	1,052	1,053	1,055	1,056	1,058	1,059	1,061	1,063
1,135.3	1,064	1,066	1,068	1,069	1,071	1,073	1,074	1,075	1,077	1,078
1,135.4	1,080	1,081	1,083	1,084	1,086	1,087	1,089	1,090	1,092	1,093
1,135.5	1,095	1,096	1,098	1,099	1,101	1,102	1,104	1,105	1,106	1,108
1,135.6	1,109	1,111	1,112	1,113	1,115	1,116	1,118	1,119	1,121	1,122
1,135.7	1,124	1,126	1,127	1,129	1,130	1,132	1,134	1,135	1,137	1,139

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,135.8	1,140	1,142	1,144	1,146	1,147	1,149	1,151	1,152	1,154	1,155
1,135.9	1,157	1,158	1,160	1,161	1,163	1,164	1,166	1,167	1,169	1,170
1,136	1,172	1,173	1,174	1,176	1,177	1,179	1,180	1,182	1,183	1,185
1,136.1	1,186	1,188	1,189	1,191	1,192	1,194	1,195	1,197	1,198	1,200
1,136.2	1,201	1,203	1,204	1,206	1,207	1,209	1,210	1,212	1,213	1,214
1,136.3	1,216	1,217	1,219	1,220	1,222	1,224	1,225	1,227	1,228	1,230
1,136.4	1,232	1,233	1,235	1,236	1,238	1,239	1,241	1,242	1,244	1,245
1,136.5	1,247	1,248	1,250	1,252	1,253	1,255	1,257	1,258	1,260	1,261
1,136.6	1,263	1,265	1,266	1,268	1,269	1,271	1,273	1,274	1,276	1,277
1,136.7	1,279	1,280	1,282	1,284	1,285	1,287	1,288	1,290	1,291	1,293
1,136.8	1,295	1,296	1,298	1,300	1,301	1,303	1,304	1,306	1,307	1,309
1,136.9	1,311	1,312	1,314	1,315	1,317	1,319	1,320	1,322	1,323	1,325
1,137	1,327	1,328	1,330	1,332	1,333	1,335	1,337	1,339	1,341	1,343
1,137.1	1,345	1,347	1,349	1,351	1,353	1,355	1,357	1,359	1,361	1,364
1,137.2	1,366	1,368	1,370	1,372	1,375	1,377	1,379	1,381	1,382	1,384
1,137.3	1,386	1,388	1,390	1,392	1,394	1,395	1,397	1,399	1,400	1,402
1,137.4	1,403	1,405	1,406	1,408	1,409	1,411	1,413	1,414	1,416	1,417
1,137.5	1,419	1,421	1,422	1,424	1,426	1,427	1,429	1,430	1,432	1,433
1,137.6	1,435	1,436	1,438	1,439	1,441	1,443	1,444	1,446	1,447	1,449
1,137.7	1,450	1,452	1,453	1,454	1,456	1,457	1,459	1,460	1,461	1,463
1,137.8	1,464	1,466	1,467	1,469	1,470	1,472	1,473	1,475	1,476	1,478
1,137.9	1,479	1,481	1,482	1,484	1,485	1,487	1,488	1,489	1,491	1,492
1,138	1,494	1,495	1,497	1,498	1,499	1,501	1,502	1,504	1,505	1,506
1,138.1	1,508	1,509	1,510	1,512	1,513	1,515	1,516	1,517	1,519	1,520
1,138.2	1,521	1,523	1,524	1,526	1,527	1,528	1,530	1,531	1,532	1,534
1,138.3	1,535	1,537	1,538	1,540	1,541	1,543	1,544	1,545	1,547	1,548
1,138.4	1,550	1,551	1,553	1,554	1,556	1,557	1,559	1,560	1,562	1,564
1,138.5	1,565	1,567	1,568	1,570	1,572	1,573	1,575	1,576	1,578	1,580
1,138.6	1,581	1,583	1,584	1,586	1,587	1,589	1,590	1,592	1,594	1,595
1,138.7	1,597	1,598	1,600	1,601	1,603	1,605	1,606	1,608	1,610	1,611
1,138.8	1,613	1,615	1,616	1,618	1,620	1,621	1,623	1,625	1,626	1,628
1,138.9	1,630	1,632	1,633	1,635	1,637	1,639	1,640	1,642	1,643	1,645
1,139	1,647	1,648	1,650	1,652	1,653	1,655	1,657	1,658	1,660	1,662
1,139.1	1,664	1,665	1,667	1,669	1,671	1,672	1,674	1,676	1,677	1,679
1,139.2	1,681	1,682	1,684	1,686	1,687	1,689	1,690	1,692	1,694	1,696
1,139.3	1,697	1,699	1,700	1,702	1,704	1,705	1,707	1,709	1,710	1,712
1,139.4	1,714	1,715	1,717	1,719	1,720	1,722	1,724	1,725	1,727	1,728
1,139.5	1,730	1,732	1,734	1,735	1,737	1,739	1,740	1,742	1,744	1,746
1,139.6	1,747	1,749	1,751	1,753	1,755	1,757	1,759	1,761	1,762	1,764
1,139.7	1,766	1,768	1,770	1,772	1,774	1,775	1,777	1,779	1,781	1,782
1,139.8	1,784	1,786	1,787	1,789	1,791	1,792	1,794	1,796	1,797	1,799
1,139.9	1,801	1,802	1,804	1,806	1,807	1,809	1,810	1,812	1,814	1,815
1,140	1,817	1,819	1,820	1,822	1,824	1,826	1,827	1,829	1,831	1,832
1,140.1	1,834	1,835	1,837	1,839	1,840	1,842	1,843	1,845	1,847	1,848
1,140.2	1,850	1,852	1,854	1,855	1,857	1,859	1,861	1,863	1,864	1,866
1,140.3	1,868	1,870	1,871	1,873	1,875	1,876	1,878	1,880	1,881	1,883
1,140.4	1,885	1,886	1,888	1,890	1,891	1,893	1,895	1,896	1,898	1,899
1,140.5	1,901	1,903	1,904	1,906	1,908	1,909	1,911	1,912	1,914	1,916
1,140.6	1,917	1,919	1,920	1,922	1,923	1,925	1,926	1,928	1,929	1,931
1,140.7	1,932	1,934	1,935	1,937	1,938	1,940	1,941	1,943	1,944	1,946
1,140.8	1,947	1,949	1,951	1,952	1,954	1,955	1,957	1,958	1,960	1,961
1,140.9	1,963	1,964	1,966	1,967	1,969	1,971	1,972	1,974	1,975	1,977
1,141	1,978	1,980	1,982	1,983	1,985	1,987	1,988	1,990	1,992	1,993
1,141.1	1,995	1,996	1,998	2,000	2,001	2,003	2,005	2,006	2,008	2,010
1,141.2	2,011	2,013	2,015	2,016	2,018	2,019	2,021	2,023	2,024	2,026
1,141.3	2,028	2,029	2,031	2,032	2,034	2,036	2,037	2,039	2,040	2,042
1,141.4	2,043	2,045	2,047	2,048	2,050	2,051	2,053	2,054	2,056	2,058
1,141.5	2,059	2,061	2,063	2,064	2,066	2,067	2,069	2,071	2,072	2,074
1,141.6	2,075	2,077	2,078	2,079	2,081	2,082	2,084	2,085	2,087	2,088
1,141.7	2,089	2,091	2,092	2,094	2,095	2,096	2,098	2,099	2,101	2,102

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,141.8	2,103	2,105	2,106	2,108	2,109	2,110	2,112	2,113	2,115	2,116
1,141.9	2,118	2,119	2,120	2,122	2,123	2,124	2,126	2,127	2,128	2,130
1,142	2,131	2,132	2,134	2,135	2,136	2,138	2,139	2,140	2,142	2,143
1,142.1	2,144	2,146	2,147	2,148	2,150	2,151	2,152	2,154	2,155	2,156
1,142.2	2,158	2,159	2,160	2,162	2,163	2,164	2,166	2,167	2,168	2,170
1,142.3	2,171	2,172	2,173	2,175	2,176	2,177	2,178	2,180	2,181	2,182
1,142.4	2,184	2,185	2,186	2,188	2,189	2,190	2,191	2,193	2,194	2,195
1,142.5	2,197	2,198	2,199	2,201	2,202	2,204	2,205	2,206	2,208	2,209
1,142.6	2,210	2,211	2,213	2,214	2,215	2,217	2,218	2,219	2,221	2,222
1,142.7	2,223	2,225	2,226	2,227	2,229	2,230	2,231	2,233	2,234	2,235
1,142.8	2,237	2,238	2,239	2,241	2,242	2,243	2,245	2,246	2,247	2,248
1,142.9	2,250	2,251	2,252	2,254	2,255	2,256	2,258	2,259	2,260	2,261
1,143	2,263	2,264	2,265	2,266	2,268	2,269	2,270	2,271	2,273	2,274
1,143.1	2,275	2,277	2,278	2,279	2,280	2,282	2,283	2,284	2,286	2,287
1,143.2	2,288	2,289	2,291	2,292	2,293	2,294	2,296	2,297	2,298	2,300
1,143.3	2,301	2,302	2,304	2,305	2,306	2,308	2,309	2,310	2,311	2,313
1,143.4	2,314	2,315	2,316	2,317	2,318	2,319	2,321	2,322	2,323	2,324
1,143.5	2,325	2,326	2,327	2,329	2,330	2,331	2,332	2,333	2,334	2,335
1,143.6	2,337	2,338	2,339	2,340	2,341	2,342	2,343	2,344	2,346	2,347
1,143.7	2,348	2,349	2,350	2,351	2,352	2,354	2,355	2,356	2,357	2,358
1,143.8	2,360	2,361	2,362	2,363	2,364	2,365	2,367	2,368	2,369	2,370
1,143.9	2,371	2,372	2,374	2,375	2,376	2,377	2,378	2,380	2,381	2,382
1,144	2,383	2,384	2,386	2,387	2,388	2,389	2,390	2,392	2,393	2,394
1,144.1	2,395	2,397	2,398	2,399	2,400	2,401	2,403	2,404	2,405	2,406
1,144.2	2,407	2,409	2,410	2,411	2,412	2,413	2,415	2,416	2,417	2,418
1,144.3	2,420	2,421	2,422	2,424	2,425	2,426	2,427	2,429	2,430	2,431
1,144.4	2,432	2,434	2,435	2,436	2,438	2,439	2,440	2,442	2,443	2,445
1,144.5	2,446	2,447	2,449	2,450	2,452	2,453	2,454	2,456	2,457	2,459
1,144.6	2,460	2,462	2,463	2,464	2,466	2,467	2,469	2,470	2,472	2,473
1,144.7	2,475	2,476	2,478	2,479	2,480	2,482	2,483	2,484	2,486	2,487
1,144.8	2,488	2,490	2,491	2,493	2,494	2,495	2,497	2,498	2,499	2,501
1,144.9	2,502	2,503	2,505	2,506	2,507	2,509	2,510	2,511	2,513	2,514
1,145	2,515	2,517	2,518	2,520	2,521	2,522	2,524	2,525	2,526	2,528
1,145.1	2,529	2,530	2,532	2,533	2,535	2,536	2,537	2,539	2,540	2,542
1,145.2	2,543	2,545	2,546	2,548	2,549	2,551	2,552	2,554	2,555	2,556
1,145.3	2,558	2,559	2,561	2,562	2,564	2,565	2,566	2,568	2,569	2,571
1,145.4	2,572	2,573	2,575	2,576	2,577	2,579	2,580	2,582	2,583	2,584
1,145.5	2,586	2,587	2,588	2,590	2,591	2,593	2,594	2,595	2,597	2,598
1,145.6	2,599	2,601	2,602	2,604	2,605	2,607	2,608	2,609	2,611	2,612
1,145.7	2,613	2,615	2,616	2,618	2,619	2,620	2,622	2,623	2,624	2,626
1,145.8	2,627	2,628	2,630	2,631	2,632	2,634	2,635	2,637	2,638	2,639
1,145.9	2,641	2,642	2,644	2,645	2,647	2,648	2,650	2,651	2,653	2,654
1,146	2,656	2,657	2,659	2,660	2,661	2,663	2,664	2,666	2,668	2,669
1,146.1	2,671	2,672	2,674	2,676	2,677	2,679	2,681	2,682	2,684	2,685
1,146.2	2,687	2,688	2,690	2,692	2,693	2,695	2,697	2,698	2,700	2,701
1,146.3	2,703	2,705	2,706	2,708	2,709	2,711	2,713	2,714	2,716	2,717
1,146.4	2,719	2,721	2,722	2,724	2,725	2,727	2,728	2,730	2,732	2,733
1,146.5	2,735	2,736	2,738	2,740	2,741	2,743	2,744	2,746	2,748	2,749
1,146.6	2,751	2,753	2,754	2,756	2,758	2,759	2,761	2,763	2,764	2,766
1,146.7	2,768	2,769	2,771	2,773	2,775	2,776	2,778	2,779	2,781	2,783
1,146.8	2,785	2,786	2,788	2,790	2,791	2,793	2,795	2,796	2,798	2,800
1,146.9	2,802	2,803	2,805	2,807	2,809	2,810	2,812	2,814	2,816	2,817
1,147	2,819	2,821	2,823	2,825	2,827	2,829	2,831	2,833	2,835	2,837
1,147.1	2,839	2,840	2,842	2,844	2,846	2,848	2,850	2,852	2,854	2,856
1,147.2	2,858	2,860	2,862	2,864	2,866	2,868	2,870	2,872	2,874	2,876
1,147.3	2,878	2,880	2,882	2,883	2,885	2,887	2,889	2,891	2,893	2,895
1,147.4	2,897	2,899	2,901	2,903	2,905	2,906	2,908	2,910	2,912	2,914
1,147.5	2,916	2,918	2,920	2,922	2,923	2,925	2,927	2,929	2,931	2,933
1,147.6	2,935	2,937	2,939	2,941	2,943	2,945	2,947	2,949	2,951	2,953
1,147.7	2,955	2,957	2,959	2,961	2,963	2,965	2,967	2,969	2,971	2,973

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,147.8	2,975	2,978	2,980	2,982	2,984	2,986	2,988	2,990	2,992	2,995
1,147.9	2,997	2,999	3,001	3,003	3,005	3,008	3,010	3,012	3,014	3,016
1,148	3,018	3,021	3,023	3,025	3,027	3,029	3,031	3,033	3,036	3,038
1,148.1	3,040	3,042	3,045	3,047	3,049	3,051	3,053	3,055	3,057	3,059
1,148.2	3,061	3,063	3,065	3,067	3,068	3,070	3,072	3,074	3,076	3,078
1,148.3	3,079	3,081	3,083	3,085	3,087	3,089	3,091	3,093	3,095	3,096
1,148.4	3,098	3,100	3,102	3,104	3,106	3,108	3,110	3,112	3,115	3,117
1,148.5	3,119	3,121	3,123	3,125	3,127	3,129	3,132	3,134	3,136	3,138
1,148.6	3,140	3,142	3,145	3,147	3,149	3,151	3,153	3,156	3,158	3,160
1,148.7	3,162	3,165	3,167	3,169	3,172	3,174	3,176	3,178	3,181	3,183
1,148.8	3,185	3,187	3,189	3,191	3,194	3,196	3,198	3,200	3,203	3,205
1,148.9	3,207	3,209	3,212	3,214	3,216	3,218	3,221	3,223	3,226	3,228
1,149	3,230	3,232	3,235	3,237	3,239	3,241	3,244	3,246	3,248	3,251
1,149.1	3,253	3,255	3,258	3,260	3,262	3,265	3,267	3,270	3,272	3,274
1,149.2	3,276	3,279	3,281	3,284	3,286	3,288	3,291	3,293	3,295	3,298
1,149.3	3,300	3,302	3,305	3,307	3,309	3,312	3,314	3,316	3,318	3,321
1,149.4	3,323	3,325	3,327	3,330	3,332	3,334	3,336	3,338	3,341	3,343
1,149.5	3,345	3,347	3,350	3,352	3,354	3,357	3,359	3,361	3,363	3,365
1,149.6	3,368	3,370	3,372	3,374	3,377	3,379	3,381	3,383	3,386	3,388
1,149.7	3,390	3,392	3,395	3,397	3,399	3,401	3,404	3,406	3,408	3,411
1,149.8	3,413	3,415	3,417	3,420	3,422	3,425	3,427	3,429	3,432	3,434
1,149.9	3,437	3,439	3,442	3,444	3,447	3,450	3,452	3,455	3,457	3,460
1,150	3,463	3,465	3,468	3,470	3,473	3,475	3,477	3,480	3,482	3,485
1,150.1	3,487	3,490	3,492	3,494	3,497	3,499	3,502	3,504	3,506	3,509
1,150.2	3,511	3,513	3,516	3,518	3,520	3,523	3,525	3,527	3,530	3,532
1,150.3	3,534	3,537	3,539	3,541	3,544	3,546	3,549	3,551	3,553	3,556
1,150.4	3,558	3,561	3,563	3,565	3,568	3,570	3,572	3,575	3,577	3,579
1,150.5	3,581	3,584	3,586	3,588	3,590	3,593	3,595	3,597	3,600	3,602
1,150.6	3,604	3,606	3,609	3,611	3,613	3,615	3,617	3,620	3,622	3,624
1,150.7	3,626	3,629	3,631	3,633	3,635	3,638	3,640	3,642	3,645	3,647
1,150.8	3,650	3,652	3,654	3,657	3,659	3,661	3,663	3,666	3,668	3,670
1,150.9	3,672	3,675	3,677	3,679	3,681	3,683	3,686	3,688	3,690	3,692
1,151	3,694	3,697	3,699	3,701	3,703	3,706	3,708	3,710	3,712	3,715
1,151.1	3,717	3,719	3,722	3,724	3,726	3,729	3,731	3,734	3,736	3,738
1,151.2	3,741	3,743	3,746	3,748	3,750	3,753	3,755	3,758	3,760	3,763
1,151.3	3,765	3,768	3,770	3,772	3,775	3,777	3,780	3,782	3,784	3,787
1,151.4	3,789	3,792	3,794	3,797	3,799	3,802	3,804	3,807	3,809	3,812
1,151.5	3,814	3,817	3,820	3,822	3,825	3,827	3,830	3,832	3,835	3,837
1,151.6	3,840	3,843	3,845	3,848	3,850	3,853	3,855	3,858	3,860	3,863
1,151.7	3,865	3,868	3,870	3,873	3,875	3,877	3,879	3,882	3,884	3,886
1,151.8	3,888	3,890	3,893	3,895	3,897	3,899	3,901	3,904	3,906	3,908
1,151.9	3,910	3,912	3,914	3,917	3,919	3,921	3,923	3,925	3,928	3,930
1,152	3,932	3,934	3,937	3,939	3,941	3,943	3,946	3,948	3,950	3,952
1,152.1	3,954	3,957	3,959	3,961	3,963	3,965	3,967	3,969	3,972	3,974
1,152.2	3,976	3,978	3,980	3,982	3,985	3,987	3,989	3,991	3,993	3,995
1,152.3	3,997	3,999	4,002	4,004	4,006	4,008	4,010	4,012	4,014	4,016
1,152.4	4,018	4,021	4,023	4,025	4,027	4,029	4,031	4,034	4,036	4,038
1,152.5	4,040	4,042	4,045	4,047	4,049	4,051	4,053	4,055	4,058	4,060
1,152.6	4,062	4,064	4,066	4,068	4,071	4,073	4,075	4,077	4,079	4,082
1,152.7	4,084	4,086	4,088	4,090	4,092	4,095	4,097	4,099	4,101	4,103
1,152.8	4,106	4,108	4,110	4,112	4,115	4,117	4,119	4,121	4,124	4,126
1,152.9	4,128	4,130	4,133	4,135	4,137	4,140	4,142	4,145	4,147	4,149
1,153	4,152	4,154	4,156	4,159	4,161	4,163	4,165	4,168	4,170	4,172
1,153.1	4,175	4,177	4,179	4,182	4,184	4,186	4,189	4,191	4,193	4,196
1,153.2	4,198	4,200	4,203	4,205	4,208	4,210	4,212	4,215	4,217	4,219
1,153.3	4,222	4,224	4,226	4,229	4,231	4,233	4,236	4,238	4,240	4,243
1,153.4	4,245	4,247	4,249	4,252	4,254	4,256	4,259	4,261	4,263	4,265
1,153.5	4,268	4,270	4,272	4,275	4,277	4,279	4,282	4,284	4,286	4,289
1,153.6	4,291	4,293	4,296	4,298	4,300	4,303	4,305	4,307	4,310	4,312
1,153.7	4,315	4,317	4,319	4,322	4,324	4,327	4,329	4,331	4,334	4,336

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,153.8	4,339	4,341	4,344	4,346	4,349	4,351	4,354	4,356	4,358	4,361
1,153.9	4,363	4,366	4,368	4,370	4,373	4,375	4,378	4,380	4,382	4,385
1,154	4,387	4,390	4,392	4,395	4,397	4,400	4,402	4,405	4,407	4,410
1,154.1	4,412	4,415	4,418	4,420	4,423	4,425	4,428	4,430	4,433	4,436
1,154.2	4,438	4,441	4,444	4,446	4,449	4,452	4,454	4,457	4,460	4,463
1,154.3	4,466	4,469	4,472	4,474	4,477	4,480	4,482	4,485	4,488	4,490
1,154.4	4,493	4,496	4,498	4,501	4,504	4,507	4,509	4,512	4,514	4,517
1,154.5	4,520	4,522	4,525	4,528	4,530	4,533	4,535	4,538	4,540	4,543
1,154.6	4,545	4,548	4,550	4,552	4,555	4,557	4,560	4,562	4,564	4,567
1,154.7	4,569	4,572	4,574	4,577	4,579	4,582	4,584	4,587	4,590	4,592
1,154.8	4,595	4,598	4,600	4,603	4,606	4,608	4,611	4,613	4,616	4,619
1,154.9	4,621	4,624	4,627	4,629	4,632	4,635	4,637	4,640	4,643	4,645
1,155	4,648	4,651	4,653	4,656	4,659	4,661	4,664	4,667	4,669	4,672
1,155.1	4,675	4,678	4,680	4,683	4,686	4,689	4,691	4,694	4,697	4,700
1,155.2	4,702	4,705	4,708	4,711	4,714	4,716	4,719	4,722	4,725	4,729
1,155.3	4,732	4,735	4,738	4,741	4,743	4,746	4,749	4,752	4,755	4,758
1,155.4	4,761	4,764	4,767	4,769	4,772	4,775	4,778	4,781	4,784	4,786
1,155.5	4,789	4,792	4,794	4,797	4,800	4,802	4,805	4,808	4,810	4,813
1,155.6	4,815	4,818	4,821	4,823	4,826	4,828	4,831	4,833	4,836	4,839
1,155.7	4,841	4,844	4,846	4,849	4,851	4,854	4,856	4,859	4,862	4,864
1,155.8	4,867	4,869	4,872	4,874	4,876	4,879	4,881	4,883	4,886	4,888
1,155.9	4,890	4,893	4,895	4,898	4,900	4,902	4,905	4,907	4,909	4,912
1,156	4,914	4,916	4,918	4,921	4,923	4,925	4,927	4,930	4,932	4,934
1,156.1	4,936	4,939	4,941	4,943	4,945	4,947	4,950	4,952	4,954	4,956
1,156.2	4,959	4,961	4,963	4,966	4,968	4,970	4,973	4,975	4,977	4,980
1,156.3	4,982	4,984	4,986	4,989	4,991	4,993	4,996	4,998	5,000	5,003
1,156.4	5,005	5,007	5,010	5,012	5,015	5,017	5,019	5,022	5,024	5,026
1,156.5	5,029	5,031	5,034	5,036	5,038	5,041	5,043	5,046	5,048	5,051
1,156.6	5,053	5,056	5,058	5,061	5,064	5,066	5,069	5,071	5,074	5,077
1,156.7	5,079	5,082	5,084	5,087	5,089	5,092	5,094	5,097	5,099	5,102
1,156.8	5,104	5,107	5,109	5,112	5,115	5,117	5,120	5,123	5,125	5,128
1,156.9	5,130	5,133	5,136	5,139	5,141	5,144	5,147	5,150	5,152	5,155
1,157	5,158	5,161	5,164	5,166	5,169	5,172	5,175	5,178	5,181	5,184
1,157.1	5,187	5,190	5,193	5,196	5,199	5,202	5,205	5,208	5,211	5,214
1,157.2	5,217	5,220	5,223	5,226	5,228	5,231	5,234	5,237	5,240	5,243
1,157.3	5,246	5,249	5,252	5,255	5,257	5,260	5,263	5,266	5,269	5,272
1,157.4	5,275	5,278	5,281	5,283	5,286	5,289	5,292	5,295	5,299	5,302
1,157.5	5,305	5,308	5,311	5,314	5,317	5,319	5,322	5,325	5,328	5,331
1,157.6	5,334	5,337	5,340	5,343	5,346	5,349	5,353	5,356	5,359	5,362
1,157.7	5,365	5,368	5,371	5,374	5,378	5,381	5,384	5,387	5,390	5,393
1,157.8	5,396	5,399	5,402	5,405	5,408	5,411	5,414	5,418	5,421	5,424
1,157.9	5,427	5,430	5,433	5,436	5,439	5,442	5,446	5,449	5,452	5,455
1,158	5,458	5,461	5,464	5,467	5,470	5,473	5,477	5,480	5,483	5,486
1,158.1	5,489	5,492	5,495	5,499	5,502	5,505	5,508	5,512	5,515	5,518
1,158.2	5,521	5,525	5,528	5,531	5,534	5,537	5,540	5,543	5,547	5,550
1,158.3	5,553	5,556	5,559	5,563	5,566	5,570	5,574	5,577	5,581	5,584
1,158.4	5,587	5,591	5,594	5,598	5,601	5,605	5,608	5,611	5,615	5,618
1,158.5	5,621	5,625	5,628	5,631	5,635	5,638	5,641	5,644	5,648	5,651
1,158.6	5,654	5,657	5,661	5,664	5,667	5,671	5,674	5,677	5,681	5,684
1,158.7	5,687	5,690	5,693	5,697	5,700	5,703	5,706	5,709	5,713	5,716
1,158.8	5,719	5,723	5,726	5,729	5,733	5,736	5,739	5,743	5,746	5,749
1,158.9	5,753	5,756	5,759	5,763	5,766	5,769	5,773	5,776	5,780	5,783
1,159	5,787	5,790	5,793	5,797	5,801	5,804	5,808	5,811	5,815	5,818
1,159.1	5,822	5,825	5,828	5,832	5,835	5,839	5,842	5,846	5,849	5,852
1,159.2	5,856	5,859	5,863	5,866	5,870	5,873	5,877	5,880	5,883	5,887
1,159.3	5,890	5,894	5,897	5,900	5,904	5,907	5,910	5,914	5,917	5,921
1,159.4	5,924	5,927	5,931	5,934	5,938	5,941	5,944	5,948	5,951	5,954
1,159.5	5,958	5,961	5,964	5,967	5,971	5,974	5,977	5,980	5,983	5,987
1,159.6	5,990	5,993	5,996	5,999	6,003	6,006	6,009	6,012	6,015	6,019
1,159.7	6,022	6,025	6,028	6,031	6,034	6,037	6,041	6,044	6,047	6,050



Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,159.8	6,053	6,056	6,059	6,062	6,065	6,068	6,071	6,074	6,077	6,080
1,159.9	6,084	6,087	6,090	6,093	6,096	6,099	6,102	6,105	6,109	6,112
1,160	6,115	6,118	6,121	6,124	6,127	6,130	6,134	6,137	6,140	6,143
1,160.1	6,147	6,150	6,154	6,157	6,160	6,163	6,166	6,170	6,173	6,176
1,160.2	6,179	6,183	6,186	6,189	6,193	6,196	6,199	6,203	6,206	6,210
1,160.3	6,213	6,217	6,220	6,224	6,227	6,231	6,234	6,238	6,241	6,245
1,160.4	6,249	6,252	6,256	6,260	6,263	6,267	6,270	6,274	6,277	6,281
1,160.5	6,284	6,288	6,291	6,295	6,298	6,301	6,305	6,308	6,311	6,315
1,160.6	6,318	6,321	6,325	6,328	6,331	6,335	6,338	6,341	6,344	6,348
1,160.7	6,351	6,354	6,357	6,361	6,364	6,367	6,370	6,374	6,377	6,380
1,160.8	6,384	6,387	6,391	6,394	6,397	6,401	6,404	6,407	6,410	6,414
1,160.9	6,417	6,420	6,424	6,427	6,430	6,433	6,437	6,440	6,444	6,447
1,161	6,450	6,454	6,457	6,461	6,464	6,468	6,471	6,475	6,478	6,482
1,161.1	6,485	6,489	6,492	6,495	6,499	6,502	6,506	6,509	6,512	6,516
1,161.2	6,519	6,523	6,526	6,530	6,533	6,537	6,540	6,543	6,547	6,550
1,161.3	6,554	6,557	6,561	6,564	6,568	6,572	6,576	6,579	6,583	6,587
1,161.4	6,590	6,594	6,598	6,601	6,605	6,609	6,613	6,617	6,620	6,624
1,161.5	6,628	6,632	6,636	6,640	6,644	6,647	6,651	6,655	6,659	6,663
1,161.6	6,667	6,671	6,675	6,679	6,683	6,687	6,691	6,695	6,699	6,703
1,161.7	6,707	6,711	6,715	6,719	6,722	6,726	6,729	6,733	6,736	6,740
1,161.8	6,743	6,747	6,750	6,754	6,757	6,761	6,764	6,768	6,771	6,775
1,161.9	6,778	6,782	6,785	6,789	6,792	6,795	6,799	6,803	6,806	6,809
1,162	6,813	6,816	6,820	6,823	6,826	6,830	6,833	6,837	6,840	6,843
1,162.1	6,847	6,850	6,854	6,857	6,860	6,864	6,867	6,870	6,874	6,877
1,162.2	6,880	6,884	6,887	6,890	6,893	6,897	6,900	6,903	6,906	6,910
1,162.3	6,913	6,916	6,919	6,923	6,926	6,929	6,932	6,935	6,938	6,941
1,162.4	6,945	6,948	6,951	6,954	6,957	6,960	6,963	6,967	6,970	6,973
1,162.5	6,976	6,979	6,983	6,986	6,989	6,992	6,995	6,999	7,002	7,005
1,162.6	7,008	7,011	7,014	7,017	7,021	7,024	7,027	7,030	7,033	7,036
1,162.7	7,039	7,042	7,045	7,049	7,052	7,055	7,058	7,061	7,064	7,067
1,162.8	7,070	7,074	7,077	7,080	7,083	7,086	7,089	7,092	7,096	7,099
1,162.9	7,102	7,105	7,108	7,111	7,114	7,117	7,120	7,123	7,126	7,129
1,163	7,133	7,136	7,139	7,142	7,145	7,148	7,152	7,155	7,158	7,161
1,163.1	7,164	7,167	7,171	7,174	7,177	7,180	7,184	7,187	7,190	7,194
1,163.2	7,197	7,201	7,204	7,207	7,211	7,214	7,217	7,220	7,223	7,227
1,163.3	7,230	7,233	7,236	7,239	7,242	7,245	7,248	7,252	7,255	7,258
1,163.4	7,261	7,264	7,267	7,270	7,273	7,276	7,279	7,282	7,285	7,288
1,163.5	7,292	7,295	7,298	7,301	7,304	7,307	7,310	7,313	7,316	7,320
1,163.6	7,323	7,326	7,329	7,332	7,336	7,339	7,342	7,345	7,348	7,352
1,163.7	7,355	7,358	7,362	7,365	7,368	7,372	7,375	7,378	7,381	7,384
1,163.8	7,387	7,391	7,394	7,397	7,400	7,403	7,406	7,409	7,413	7,416
1,163.9	7,419	7,422	7,425	7,428	7,432	7,435	7,438	7,441	7,444	7,447
1,164	7,450	7,454	7,457	7,460	7,463	7,466	7,469	7,472	7,475	7,478
1,164.1	7,482	7,485	7,488	7,491	7,494	7,497	7,500	7,504	7,507	7,510
1,164.2	7,513	7,516	7,519	7,522	7,526	7,529	7,532	7,535	7,539	7,542
1,164.3	7,545	7,548	7,552	7,555	7,558	7,562	7,565	7,568	7,572	7,575
1,164.4	7,579	7,582	7,585	7,589	7,592	7,595	7,598	7,602	7,605	7,608
1,164.5	7,611	7,614	7,618	7,621	7,624	7,627	7,630	7,634	7,637	7,640
1,164.6	7,643	7,647	7,650	7,653	7,656	7,659	7,663	7,666	7,669	7,673
1,164.7	7,676	7,679	7,682	7,686	7,689	7,692	7,696	7,699	7,702	7,706
1,164.8	7,709	7,713	7,716	7,720	7,723	7,727	7,730	7,734	7,737	7,740
1,164.9	7,744	7,747	7,751	7,755	7,758	7,762	7,765	7,769	7,773	7,776
1,165	7,780	7,783	7,787	7,791	7,795	7,800	7,803	7,807	7,811	7,814
1,165.1	7,818	7,822	7,825	7,829	7,832	7,836	7,839	7,843	7,846	7,850
1,165.2	7,853	7,857	7,860	7,864	7,867	7,871	7,874	7,878	7,882	7,885
1,165.3	7,889	7,893	7,896	7,900	7,904	7,908	7,912	7,916	7,920	7,924
1,165.4	7,927	7,931	7,935	7,939	7,942	7,946	7,950	7,954	7,958	7,961
1,165.5	7,965	7,969	7,973	7,977	7,980	7,984	7,988	7,992	7,996	7,999
1,165.6	8,003	8,007	8,010	8,014	8,018	8,021	8,025	8,029	8,033	8,036
1,165.7	8,040	8,044	8,047	8,051	8,055	8,059	8,063	8,067	8,071	8,074

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,165.8	8,078	8,082	8,086	8,090	8,093	8,097	8,101	8,105	8,109	8,113
1,165.9	8,116	8,120	8,124	8,128	8,132	8,136	8,139	8,143	8,147	8,151
1,166	8,155	8,158	8,162	8,166	8,170	8,174	8,178	8,181	8,185	8,189
1,166.1	8,193	8,196	8,200	8,204	8,208	8,211	8,215	8,219	8,223	8,226
1,166.2	8,230	8,234	8,237	8,241	8,245	8,249	8,252	8,256	8,260	8,264
1,166.3	8,267	8,271	8,275	8,279	8,282	8,286	8,290	8,293	8,297	8,301
1,166.4	8,304	8,308	8,312	8,315	8,319	8,323	8,326	8,330	8,334	8,337
1,166.5	8,341	8,345	8,348	8,352	8,356	8,359	8,363	8,366	8,370	8,374
1,166.6	8,377	8,381	8,384	8,388	8,392	8,395	8,399	8,403	8,407	8,411
1,166.7	8,414	8,418	8,422	8,426	8,430	8,434	8,438	8,441	8,445	8,449
1,166.8	8,453	8,457	8,461	8,465	8,469	8,472	8,476	8,480	8,484	8,487
1,166.9	8,491	8,495	8,499	8,502	8,506	8,510	8,514	8,517	8,521	8,525
1,167	8,529	8,532	8,536	8,540	8,544	8,548	8,552	8,556	8,560	8,564
1,167.1	8,567	8,571	8,575	8,579	8,582	8,586	8,590	8,594	8,598	8,602
1,167.2	8,606	8,609	8,613	8,617	8,621	8,625	8,629	8,633	8,637	8,641
1,167.3	8,645	8,649	8,653	8,657	8,661	8,664	8,668	8,672	8,676	8,680
1,167.4	8,684	8,688	8,692	8,696	8,701	8,705	8,709	8,713	8,717	8,721
1,167.5	8,725	8,729	8,733	8,737	8,741	8,745	8,750	8,754	8,758	8,763
1,167.6	8,767	8,771	8,776	8,780	8,784	8,789	8,793	8,798	8,803	8,807
1,167.7	8,812	8,817	8,822	8,827	8,832	8,837	8,842	8,847	8,852	8,858
1,167.8	8,863	8,868	8,873	8,878	8,883	8,888	8,893	8,898	8,903	8,908
1,167.9	8,913	8,917	8,922	8,927	8,931	8,936	8,941	8,946	8,951	8,955
1,168	8,959	8,964	8,968	8,973	8,977	8,981	8,985	8,990	8,994	8,998
1,168.1	9,003	9,007	9,011	9,016	9,020	9,025	9,029	9,033	9,038	9,042
1,168.2	9,047	9,051	9,056	9,060	9,065	9,069	9,073	9,078	9,082	9,086
1,168.3	9,091	9,095	9,100	9,104	9,108	9,113	9,117	9,122	9,126	9,131
1,168.4	9,136	9,141	9,146	9,151	9,156	9,161	9,166	9,171	9,175	9,180
1,168.5	9,184	9,189	9,193	9,198	9,202	9,207	9,211	9,216	9,220	9,225
1,168.6	9,230	9,234	9,239	9,243	9,247	9,252	9,256	9,260	9,263	9,267
1,168.7	9,271	9,274	9,278	9,282	9,285	9,289	9,292	9,296	9,300	9,303
1,168.8	9,307	9,310	9,314	9,317	9,321	9,324	9,328	9,331	9,335	9,338
1,168.9	9,342	9,345	9,349	9,352	9,355	9,359	9,362	9,366	9,369	9,372
1,169	9,376	9,379	9,383	9,386	9,389	9,393	9,396	9,400	9,403	9,407
1,169.1	9,410	9,413	9,417	9,420	9,424	9,427	9,431	9,435	9,438	9,442
1,169.2	9,446	9,450	9,453	9,457	9,461	9,465	9,469	9,473	9,477	9,481
1,169.3	9,485	9,489	9,493	9,497	9,501	9,504	9,508	9,512	9,516	9,519
1,169.4	9,523	9,527	9,531	9,534	9,538	9,542	9,546	9,549	9,553	9,557
1,169.5	9,561	9,565	9,569	9,573	9,577	9,581	9,585	9,589	9,593	9,597
1,169.6	9,601	9,605	9,609	9,613	9,617	9,620	9,624	9,628	9,632	9,635
1,169.7	9,639	9,643	9,647	9,650	9,654	9,658	9,661	9,665	9,669	9,673
1,169.8	9,676	9,680	9,684	9,687	9,691	9,695	9,698	9,702	9,706	9,709
1,169.9	9,713	9,717	9,720	9,724	9,728	9,731	9,735	9,738	9,742	9,746
1,170	9,749	9,753	9,756	9,760	9,764	9,767	9,771	9,775	9,779	9,782
1,170.1	9,786	9,790	9,793	9,797	9,801	9,804	9,808	9,811	9,815	9,819
1,170.2	9,822	9,826	9,830	9,834	9,837	9,841	9,845	9,849	9,852	9,856
1,170.3	9,860	9,864	9,868	9,872	9,876	9,879	9,883	9,887	9,891	9,895
1,170.4	9,899	9,903	9,907	9,911	9,915	9,919	9,923	9,927	9,931	9,935
1,170.5	9,939	9,942	9,946	9,950	9,954	9,958	9,962	9,966	9,970	9,974
1,170.6	9,978	9,981	9,985	9,989	9,993	9,997	10,001	10,005	10,009	10,013
1,170.7	10,017	10,021	10,025	10,029	10,033	10,037	10,041	10,045	10,049	10,053
1,170.8	10,058	10,062	10,066	10,070	10,075	10,079	10,083	10,087	10,091	10,095
1,170.9	10,099	10,103	10,107	10,111	10,116	10,120	10,125	10,129	10,133	10,138
1,171	10,143	10,147	10,151	10,156	10,160	10,164	10,168	10,172	10,176	10,180
1,171.1	10,184	10,188	10,192	10,196	10,201	10,205	10,209	10,213	10,217	10,221
1,171.2	10,225	10,229	10,233	10,237	10,242	10,246	10,250	10,254	10,258	10,262
1,171.3	10,266	10,270	10,274	10,278	10,282	10,286	10,290	10,294	10,298	10,302
1,171.4	10,306	10,310	10,315	10,319	10,323	10,327	10,331	10,335	10,340	10,344
1,171.5	10,348	10,352	10,356	10,360	10,364	10,368	10,372	10,376	10,380	10,384
1,171.6	10,388	10,393	10,397	10,401	10,405	10,409	10,413	10,417	10,421	10,425
1,171.7	10,429	10,433	10,437	10,442	10,446	10,450	10,454	10,459	10,463	10,468

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,171.8	10,472	10,476	10,481	10,486	10,490	10,494	10,498	10,503	10,507	10,511
1,171.9	10,515	10,519	10,523	10,528	10,532	10,536	10,540	10,544	10,548	10,552
1,172	10,556	10,560	10,564	10,568	10,572	10,577	10,581	10,585	10,589	10,594
1,172.1	10,598	10,602	10,606	10,610	10,614	10,618	10,622	10,626	10,630	10,634
1,172.2	10,638	10,642	10,646	10,650	10,654	10,658	10,662	10,666	10,670	10,674
1,172.3	10,678	10,682	10,686	10,690	10,695	10,699	10,703	10,707	10,711	10,715
1,172.4	10,719	10,723	10,727	10,731	10,735	10,739	10,743	10,747	10,751	10,755
1,172.5	10,759	10,763	10,767	10,771	10,775	10,779	10,783	10,787	10,791	10,795
1,172.6	10,799	10,803	10,807	10,811	10,815	10,818	10,822	10,826	10,830	10,834
1,172.7	10,838	10,842	10,846	10,850	10,854	10,858	10,862	10,866	10,870	10,874
1,172.8	10,878	10,882	10,886	10,891	10,895	10,899	10,904	10,908	10,912	10,916
1,172.9	10,921	10,925	10,929	10,933	10,937	10,941	10,946	10,950	10,954	10,958
1,173	10,962	10,967	10,971	10,975	10,979	10,983	10,987	10,991	10,995	10,999
1,173.1	11,003	11,007	11,011	11,015	11,019	11,024	11,028	11,032	11,036	11,039
1,173.2	11,043	11,047	11,051	11,055	11,059	11,063	11,067	11,071	11,075	11,079
1,173.3	11,083	11,087	11,091	11,095	11,099	11,102	11,106	11,110	11,114	11,118
1,173.4	11,122	11,126	11,130	11,134	11,138	11,142	11,146	11,150	11,154	11,158
1,173.5	11,162	11,166	11,170	11,174	11,178	11,182	11,186	11,190	11,194	11,199
1,173.6	11,203	11,207	11,211	11,215	11,219	11,223	11,227	11,231	11,235	11,239
1,173.7	11,243	11,247	11,251	11,256	11,260	11,264	11,268	11,273	11,277	11,281
1,173.8	11,285	11,289	11,293	11,297	11,301	11,305	11,310	11,314	11,318	11,322
1,173.9	11,326	11,330	11,335	11,339	11,343	11,348	11,352	11,356	11,360	11,364
1,174	11,368	11,372	11,376	11,380	11,384	11,388	11,392	11,396	11,400	11,404
1,174.1	11,408	11,412	11,415	11,419	11,423	11,427	11,431	11,435	11,439	11,444
1,174.2	11,448	11,452	11,456	11,460	11,465	11,469	11,473	11,477	11,482	11,486
1,174.3	11,490	11,494	11,498	11,502	11,506	11,510	11,514	11,518	11,522	11,526
1,174.4	11,530	11,534	11,538	11,542	11,546	11,550	11,554	11,559	11,563	11,567
1,174.5	11,571	11,575	11,579	11,583	11,587	11,591	11,595	11,599	11,603	11,607
1,174.6	11,612	11,616	11,620	11,624	11,628	11,632	11,636	11,640	11,645	11,649
1,174.7	11,653	11,657	11,661	11,666	11,670	11,675	11,679	11,683	11,687	11,692
1,174.8	11,696	11,701	11,705	11,709	11,713	11,717	11,721	11,725	11,729	11,733
1,174.9	11,737	11,741	11,745	11,749	11,753	11,757	11,762	11,766	11,770	11,774
1,175	11,778	11,782	11,786	11,790	11,795	11,799	11,803	11,807	11,811	11,816
1,175.1	11,820	11,825	11,829	11,833	11,838	11,842	11,847	11,851	11,856	11,860
1,175.2	11,865	11,870	11,874	11,879	11,884	11,888	11,893	11,898	11,902	11,907
1,175.3	11,912	11,917	11,922	11,927	11,932	11,937	11,941	11,946	11,951	11,956
1,175.4	11,960	11,965	11,970	11,975	11,980	11,985	11,990	11,995	12,000	12,005
1,175.5	12,010	12,014	12,019	12,024	12,029	12,034	12,039	12,044	12,048	12,053
1,175.6	12,058	12,063	12,068	12,073	12,078	12,083	12,088	12,093	12,098	12,103
1,175.7	12,108	12,113	12,118	12,123	12,128	12,133	12,138	12,143	12,148	12,153
1,175.8	12,158	12,163	12,168	12,173	12,178	12,183	12,188	12,193	12,197	12,203
1,175.9	12,208	12,214	12,220	12,226	12,232	12,237	12,242	12,248	12,253	12,259
1,176	12,264	12,269	12,275	12,280	12,286	12,291	12,296	12,301	12,306	12,310
1,176.1	12,315	12,320	12,325	12,330	12,335	12,340	12,345	12,350	12,355	12,360
1,176.2	12,366	12,371	12,376	12,381	12,386	12,391	12,396	12,401	12,406	12,411
1,176.3	12,416	12,421	12,426	12,431	12,436	12,441	12,446	12,451	12,456	12,462
1,176.4	12,467	12,472	12,477	12,482	12,488	12,493	12,499	12,504	12,509	12,514
1,176.5	12,519	12,524	12,530	12,535	12,540	12,545	12,551	12,556	12,560	12,565
1,176.6	12,571	12,575	12,580	12,585	12,590	12,595	12,599	12,604	12,609	12,613
1,176.7	12,618	12,622	12,627	12,631	12,636	12,640	12,645	12,650	12,654	12,659
1,176.8	12,663	12,668	12,672	12,676	12,681	12,685	12,690	12,694	12,698	12,703
1,176.9	12,707	12,711	12,716	12,720	12,724	12,729	12,733	12,737	12,742	12,746
1,177	12,751	12,755	12,759	12,764	12,768	12,772	12,777	12,781	12,785	12,789
1,177.1	12,794	12,798	12,802	12,806	12,811	12,815	12,819	12,823	12,828	12,832
1,177.2	12,836	12,840	12,844	12,849	12,853	12,857	12,862	12,866	12,870	12,874
1,177.3	12,879	12,883	12,887	12,892	12,896	12,900	12,904	12,908	12,912	12,916
1,177.4	12,920	12,924	12,928	12,932	12,936	12,941	12,945	12,949	12,953	12,957
1,177.5	12,961	12,965	12,969	12,973	12,977	12,981	12,985	12,989	12,993	12,997
1,177.6	13,001	13,005	13,009	13,013	13,017	13,021	13,024	13,028	13,032	13,036
1,177.7	13,040	13,044	13,047	13,051	13,055	13,059	13,062	13,066	13,070	13,073

Appendix B (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

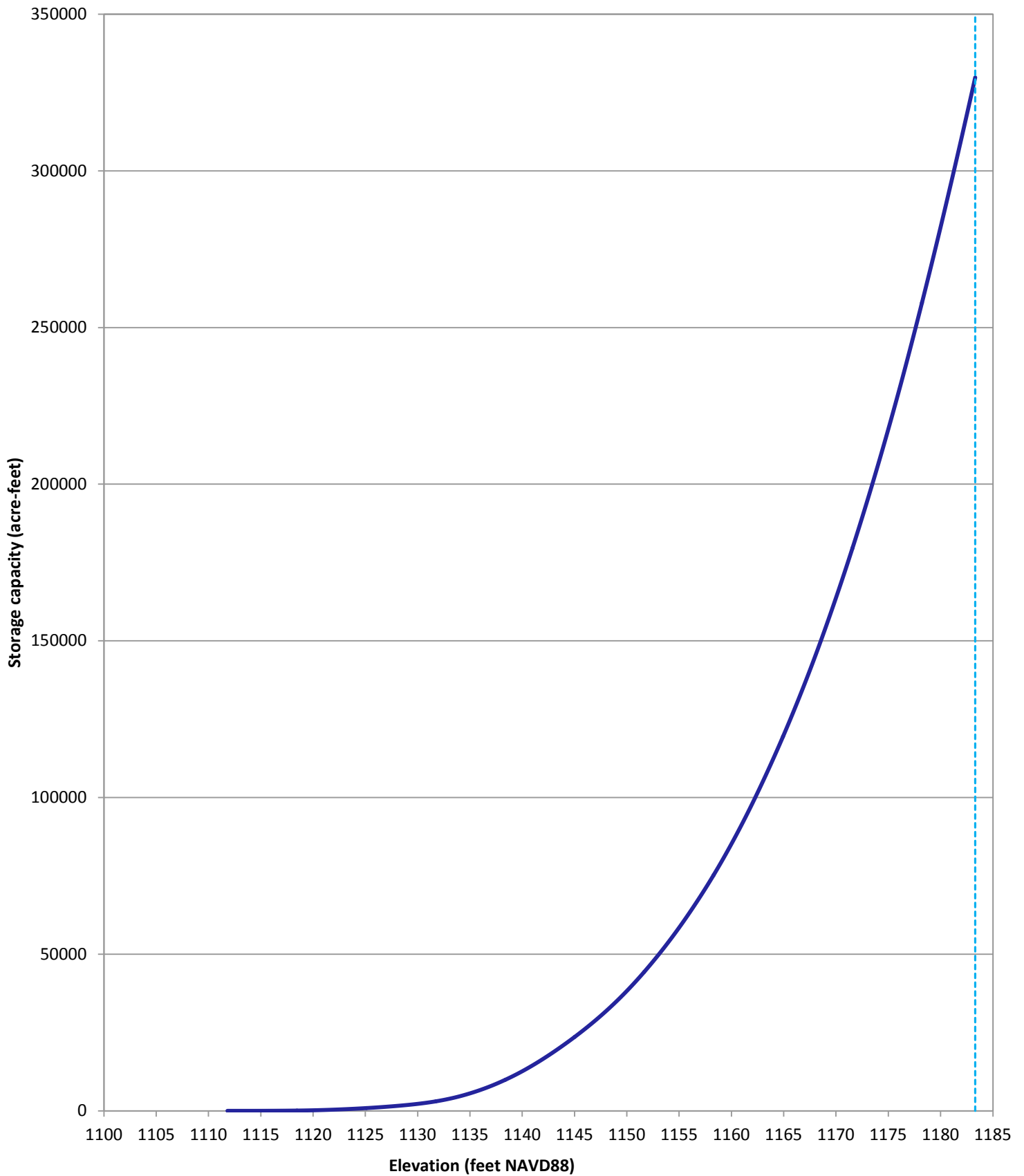
TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

February 1997 Survey re-calculated October 2016  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

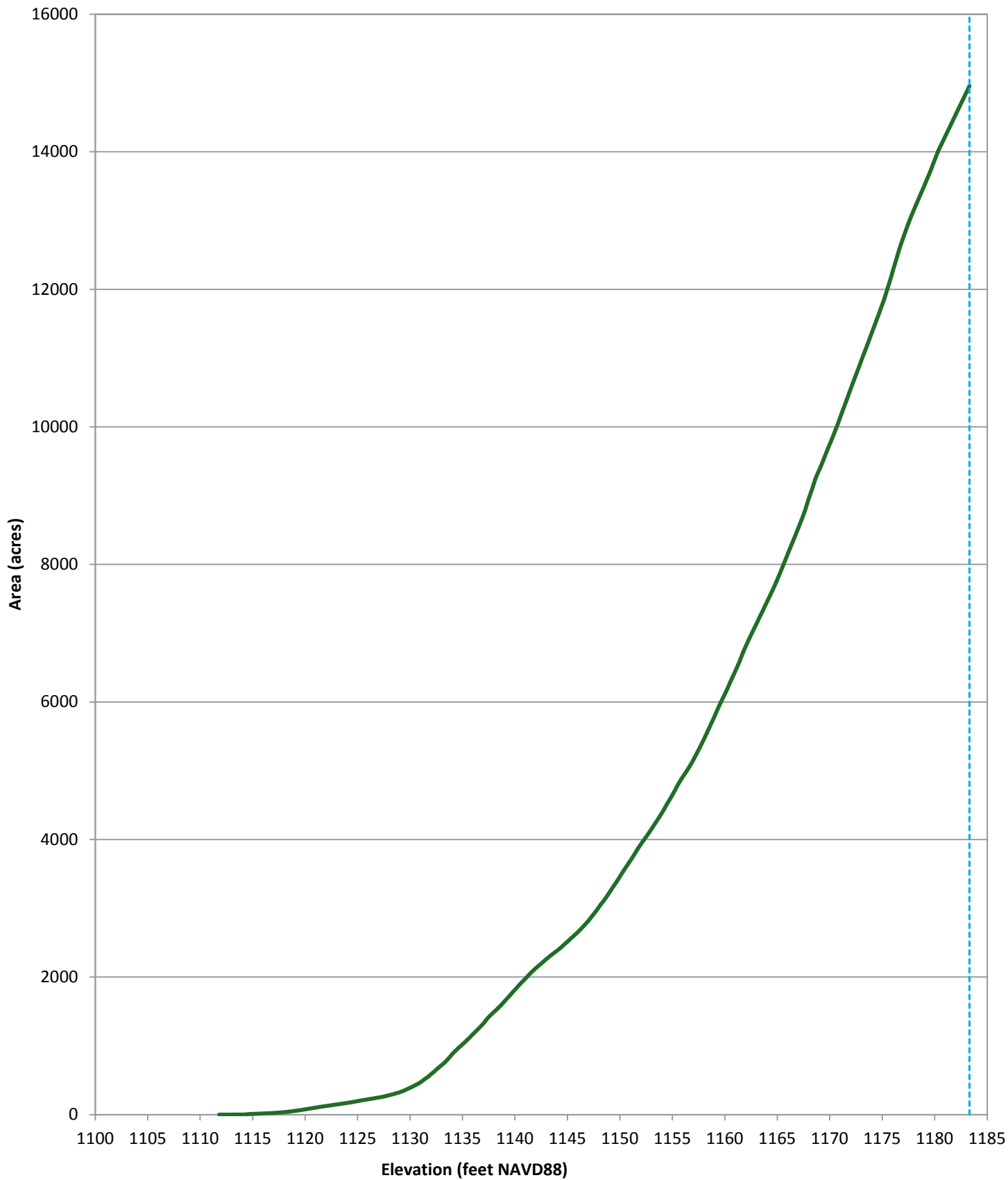
ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,177.8	13,077	13,081	13,084	13,088	13,092	13,095	13,099	13,102	13,106	13,110
1,177.9	13,113	13,117	13,121	13,124	13,128	13,132	13,135	13,139	13,142	13,146
1,178	13,150	13,153	13,157	13,160	13,164	13,168	13,171	13,175	13,178	13,182
1,178.1	13,186	13,190	13,193	13,197	13,200	13,204	13,208	13,211	13,215	13,218
1,178.2	13,222	13,225	13,229	13,232	13,236	13,239	13,243	13,246	13,250	13,253
1,178.3	13,257	13,261	13,264	13,268	13,271	13,275	13,279	13,282	13,286	13,289
1,178.4	13,293	13,297	13,300	13,304	13,308	13,311	13,315	13,318	13,322	13,325
1,178.5	13,329	13,332	13,336	13,339	13,343	13,346	13,350	13,354	13,357	13,361
1,178.6	13,364	13,368	13,371	13,374	13,378	13,381	13,385	13,388	13,392	13,395
1,178.7	13,399	13,402	13,406	13,409	13,413	13,417	13,420	13,424	13,427	13,431
1,178.8	13,434	13,437	13,441	13,444	13,447	13,451	13,454	13,457	13,461	13,464
1,178.9	13,468	13,471	13,475	13,478	13,482	13,485	13,489	13,493	13,496	13,500
1,179	13,504	13,508	13,512	13,515	13,519	13,523	13,527	13,530	13,534	13,538
1,179.1	13,541	13,545	13,548	13,552	13,556	13,559	13,563	13,567	13,570	13,574
1,179.2	13,578	13,581	13,585	13,589	13,592	13,596	13,599	13,603	13,607	13,611
1,179.3	13,614	13,618	13,621	13,625	13,629	13,632	13,636	13,639	13,643	13,646
1,179.4	13,650	13,653	13,657	13,660	13,664	13,667	13,671	13,674	13,678	13,682
1,179.5	13,686	13,689	13,693	13,697	13,701	13,704	13,708	13,712	13,715	13,719
1,179.6	13,723	13,726	13,730	13,734	13,738	13,741	13,745	13,749	13,753	13,758
1,179.7	13,762	13,766	13,770	13,774	13,778	13,782	13,786	13,791	13,795	13,799
1,179.8	13,803	13,807	13,811	13,815	13,819	13,823	13,828	13,832	13,836	13,840
1,179.9	13,844	13,848	13,852	13,855	13,859	13,863	13,867	13,870	13,874	13,878
1,180	13,882	13,886	13,890	13,894	13,898	13,902	13,906	13,910	13,914	13,917
1,180.1	13,921	13,926	13,929	13,933	13,937	13,941	13,945	13,949	13,952	13,956
1,180.2	13,960	13,965	13,968	13,972	13,975	13,979	13,982	13,986	13,989	13,993
1,180.3	13,997	14,005	14,008	14,012	14,015	14,018	14,021	14,025	14,028	14,031
1,180.4	14,035	14,038	14,041	14,044	14,047	14,050	14,053	14,056	14,059	14,062
1,180.5	14,065	14,068	14,072	14,075	14,078	14,081	14,084	14,088	14,091	14,094
1,180.6	14,097	14,100	14,103	14,107	14,110	14,113	14,116	14,119	14,122	14,126
1,180.7	14,129	14,132	14,135	14,138	14,141	14,145	14,148	14,151	14,154	14,157
1,180.8	14,160	14,164	14,167	14,170	14,173	14,176	14,179	14,183	14,186	14,189
1,180.9	14,192	14,195	14,198	14,202	14,205	14,208	14,211	14,214	14,217	14,221
1,181	14,224	14,227	14,230	14,233	14,236	14,240	14,243	14,246	14,249	14,252
1,181.1	14,255	14,259	14,262	14,265	14,268	14,271	14,275	14,278	14,281	14,284
1,181.2	14,287	14,290	14,294	14,297	14,300	14,303	14,306	14,309	14,313	14,316
1,181.3	14,319	14,322	14,325	14,328	14,332	14,335	14,338	14,341	14,344	14,347
1,181.4	14,351	14,354	14,357	14,360	14,363	14,366	14,370	14,373	14,376	14,379
1,181.5	14,382	14,385	14,389	14,392	14,395	14,398	14,401	14,404	14,408	14,411
1,181.6	14,414	14,417	14,420	14,423	14,427	14,430	14,433	14,436	14,439	14,443
1,181.7	14,446	14,449	14,452	14,455	14,458	14,462	14,465	14,468	14,471	14,474
1,181.8	14,477	14,481	14,484	14,487	14,490	14,493	14,496	14,500	14,503	14,506
1,181.9	14,509	14,512	14,515	14,519	14,522	14,525	14,528	14,531	14,534	14,538
1,182	14,541	14,544	14,547	14,550	14,553	14,557	14,560	14,563	14,566	14,569
1,182.1	14,572	14,576	14,579	14,582	14,585	14,588	14,591	14,595	14,598	14,601
1,182.2	14,604	14,607	14,610	14,614	14,617	14,620	14,623	14,626	14,630	14,633
1,182.3	14,636	14,639	14,642	14,645	14,649	14,652	14,655	14,658	14,661	14,664
1,182.4	14,668	14,671	14,674	14,677	14,680	14,683	14,687	14,690	14,693	14,696
1,182.5	14,699	14,702	14,706	14,709	14,712	14,715	14,718	14,721	14,725	14,728
1,182.6	14,731	14,734	14,737	14,740	14,744	14,747	14,750	14,753	14,756	14,759
1,182.7	14,763	14,766	14,769	14,772	14,775	14,778	14,782	14,785	14,788	14,791
1,182.8	14,794	14,797	14,801	14,804	14,807	14,810	14,813	14,817	14,820	14,823
1,182.9	14,826	14,829	14,832	14,836	14,839	14,842	14,845	14,848	14,851	14,855
1,183	14,858	14,861	14,864	14,867	14,870	14,874	14,877	14,880	14,883	14,886
1,183.1	14,889	14,893	14,896	14,899	14,902	14,905	14,908	14,912	14,915	14,918
1,183.2	14,921	14,924	14,927	14,931	14,934	14,937	14,940	14,943	14,946	14,950
1,183.3	14,953	14,956								

Note: Areas between elevations 1,180.51 and 1,183.31 feet (formerly 1,180.2 and 1,183.0 feet, NGVD29) linearly interpolated



— Total capacity 1997     
 - - - Conservation pool elevation 1,183.31 feet

**Hubbard Creek Reservoir**  
 February 1997 Survey  
 re-calculated October 2016  
 Prepared by: TWDB



— Total area 1997

- - - Conservation pool elevation 1,183.31 feet

**Hubbard Creek Reservoir**  
 February 1997 Survey  
 re-calculated October 2016  
 Prepared by: TWDB

Appendix E  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,117	0	0	0	0	0	0	0	0	0	0
1,117.1	0	0	0	0	0	0	0	0	0	0
1,117.2	0	0	0	0	0	0	0	0	0	0
1,117.3	0	0	0	0	0	0	0	0	0	0
1,117.4	0	0	0	0	0	0	0	0	0	0
1,117.5	0	0	0	0	0	0	0	0	0	0
1,117.6	0	0	0	0	0	0	0	0	0	0
1,117.7	0	0	0	0	1	1	1	1	1	1
1,117.8	1	1	1	1	1	1	1	1	1	1
1,117.9	1	1	1	1	1	1	1	1	1	1
1,118	1	1	1	1	1	1	1	1	1	1
1,118.1	1	1	1	1	1	1	1	1	1	1
1,118.2	1	1	1	1	1	1	1	1	1	1
1,118.3	1	1	1	1	2	2	2	2	2	2
1,118.4	2	2	2	2	2	2	2	2	2	3
1,118.5	3	3	3	3	3	3	3	3	3	4
1,118.6	4	4	4	4	4	4	4	4	5	5
1,118.7	5	5	5	5	5	5	6	6	6	6
1,118.8	6	6	6	7	7	7	7	7	7	7
1,118.9	8	8	8	8	8	8	8	9	9	9
1,119	9	9	9	10	10	10	10	10	10	11
1,119.1	11	11	11	11	12	12	12	12	12	13
1,119.2	13	13	13	13	13	14	14	14	14	14
1,119.3	15	15	15	15	16	16	16	16	16	17
1,119.4	17	17	17	17	18	18	18	18	19	19
1,119.5	19	19	20	20	20	20	20	21	21	21
1,119.6	21	22	22	22	22	23	23	23	23	24
1,119.7	24	24	24	25	25	25	25	26	26	26
1,119.8	27	27	27	27	28	28	28	28	29	29
1,119.9	29	30	30	30	30	31	31	31	31	32
1,120	32	32	33	33	33	34	34	34	34	35
1,120.1	35	35	36	36	36	37	37	37	38	38
1,120.2	38	39	39	39	40	40	40	41	41	41
1,120.3	42	42	42	43	43	43	44	44	44	45
1,120.4	45	45	46	46	47	47	47	48	48	48
1,120.5	49	49	49	50	50	51	51	51	52	52
1,120.6	53	53	53	54	54	54	55	55	56	56
1,120.7	56	57	57	58	58	58	59	59	60	60
1,120.8	60	61	61	62	62	62	63	63	64	64
1,120.9	65	65	65	66	66	67	67	67	68	68
1,121	69	69	70	70	70	71	71	72	72	73
1,121.1	73	74	74	74	75	75	76	76	77	77
1,121.2	78	78	79	79	79	80	80	81	81	82
1,121.3	82	83	83	84	84	85	85	86	86	87
1,121.4	87	88	88	89	89	90	90	91	91	92
1,121.5	92	93	93	94	94	95	95	96	96	97
1,121.6	97	98	98	99	100	100	101	101	102	102
1,121.7	103	103	104	105	105	106	106	107	108	108
1,121.8	109	109	110	111	111	112	112	113	114	114
1,121.9	115	116	116	117	117	118	119	119	120	121
1,122	121	122	123	123	124	125	125	126	127	127
1,122.1	128	129	129	130	131	131	132	133	134	134
1,122.2	135	136	136	137	138	138	139	140	141	141
1,122.3	142	143	144	144	145	146	146	147	148	149
1,122.4	149	150	151	152	152	153	154	155	156	156
1,122.5	157	158	159	159	160	161	162	163	163	164
1,122.6	165	166	166	167	168	169	170	170	171	172
1,122.7	173	174	175	175	176	177	178	179	179	180
1,122.8	181	182	183	184	184	185	186	187	188	189
1,122.9	190	190	191	192	193	194	195	196	196	197

Appendix E (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,123	198	199	200	201	202	203	203	204	205	206
1,123.1	207	208	209	210	211	211	212	213	214	215
1,123.2	216	217	218	219	220	221	222	222	223	224
1,123.3	225	226	227	228	229	230	231	232	233	234
1,123.4	235	236	237	238	239	240	241	242	242	243
1,123.5	244	245	246	247	248	249	250	251	252	253
1,123.6	254	255	256	257	258	259	260	261	262	264
1,123.7	265	266	267	268	269	270	271	272	273	274
1,123.8	275	276	277	278	279	280	281	282	283	285
1,123.9	286	287	288	289	290	291	292	293	294	295
1,124	296	298	299	300	301	302	303	304	305	306
1,124.1	308	309	310	311	312	313	314	316	317	318
1,124.2	319	320	321	322	324	325	326	327	328	329
1,124.3	331	332	333	334	335	336	338	339	340	341
1,124.4	342	344	345	346	347	348	350	351	352	353
1,124.5	355	356	357	358	359	361	362	363	364	366
1,124.6	367	368	369	371	372	373	374	376	377	378
1,124.7	379	381	382	383	384	386	387	388	390	391
1,124.8	392	393	395	396	397	399	400	401	402	404
1,124.9	405	406	408	409	410	412	413	414	416	417
1,125	418	420	421	422	424	425	426	428	429	430
1,125.1	432	433	434	436	437	438	440	441	443	444
1,125.2	445	447	448	449	451	452	453	455	456	458
1,125.3	459	460	462	463	465	466	467	469	470	472
1,125.4	473	474	476	477	479	480	481	483	484	486
1,125.5	487	489	490	491	493	494	496	497	499	500
1,125.6	502	503	504	506	507	509	510	512	513	515
1,125.7	516	518	519	521	522	523	525	526	528	529
1,125.8	531	532	534	535	537	538	540	541	543	544
1,125.9	546	547	549	550	552	553	555	556	558	559
1,126	561	563	564	566	567	569	570	572	573	575
1,126.1	576	578	579	581	583	584	586	587	589	590
1,126.2	592	593	595	597	598	600	601	603	605	606
1,126.3	608	609	611	612	614	616	617	619	620	622
1,126.4	624	625	627	628	630	632	633	635	637	638
1,126.5	640	641	643	645	646	648	650	651	653	655
1,126.6	656	658	660	661	663	664	666	668	670	671
1,126.7	673	675	676	678	680	681	683	685	686	688
1,126.8	690	692	693	695	697	698	700	702	704	705
1,126.9	707	709	710	712	714	716	717	719	721	723
1,127	724	726	728	730	731	733	735	737	739	740
1,127.1	742	744	746	747	749	751	753	755	756	758
1,127.2	760	762	764	765	767	769	771	773	775	776
1,127.3	778	780	782	784	786	787	789	791	793	795
1,127.4	797	799	800	802	804	806	808	810	812	814
1,127.5	815	817	819	821	823	825	827	829	831	833
1,127.6	834	836	838	840	842	844	846	848	850	852
1,127.7	854	856	858	860	862	864	866	868	870	871
1,127.8	873	875	877	879	881	883	885	887	889	891
1,127.9	893	895	897	899	901	903	905	907	909	911
1,128	913	916	918	920	922	924	926	928	930	932
1,128.1	934	936	938	940	942	944	946	948	950	952
1,128.2	954	957	959	961	963	965	967	969	971	973
1,128.3	975	978	980	982	984	986	988	990	992	994
1,128.4	997	999	1,001	1,003	1,005	1,007	1,009	1,012	1,014	1,016
1,128.5	1,018	1,020	1,022	1,025	1,027	1,029	1,031	1,033	1,036	1,038
1,128.6	1,040	1,042	1,044	1,047	1,049	1,051	1,053	1,055	1,058	1,060
1,128.7	1,062	1,064	1,067	1,069	1,071	1,073	1,075	1,078	1,080	1,082
1,128.8	1,084	1,087	1,089	1,091	1,094	1,096	1,098	1,100	1,103	1,105
1,128.9	1,107	1,109	1,112	1,114	1,116	1,119	1,121	1,123	1,126	1,128



Appendix E (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,129	1,130	1,133	1,135	1,137	1,139	1,142	1,144	1,146	1,149	1,151
1,129.1	1,154	1,156	1,158	1,161	1,163	1,165	1,168	1,170	1,172	1,175
1,129.2	1,177	1,180	1,182	1,184	1,187	1,189	1,192	1,194	1,196	1,199
1,129.3	1,201	1,204	1,206	1,208	1,211	1,213	1,216	1,218	1,221	1,223
1,129.4	1,225	1,228	1,230	1,233	1,235	1,238	1,240	1,243	1,245	1,248
1,129.5	1,250	1,253	1,255	1,258	1,260	1,263	1,265	1,268	1,270	1,273
1,129.6	1,275	1,278	1,280	1,283	1,285	1,288	1,290	1,293	1,295	1,298
1,129.7	1,300	1,303	1,306	1,308	1,311	1,313	1,316	1,318	1,321	1,324
1,129.8	1,326	1,329	1,331	1,334	1,336	1,339	1,342	1,344	1,347	1,349
1,129.9	1,352	1,355	1,357	1,360	1,363	1,365	1,368	1,371	1,373	1,376
1,130	1,378	1,381	1,384	1,386	1,389	1,392	1,395	1,397	1,400	1,403
1,130.1	1,405	1,408	1,411	1,413	1,416	1,419	1,422	1,424	1,427	1,430
1,130.2	1,432	1,435	1,438	1,441	1,444	1,446	1,449	1,452	1,455	1,457
1,130.3	1,460	1,463	1,466	1,469	1,471	1,474	1,477	1,480	1,483	1,486
1,130.4	1,488	1,491	1,494	1,497	1,500	1,503	1,505	1,508	1,511	1,514
1,130.5	1,517	1,520	1,523	1,526	1,529	1,532	1,534	1,537	1,540	1,543
1,130.6	1,546	1,549	1,552	1,555	1,558	1,561	1,564	1,567	1,570	1,573
1,130.7	1,576	1,579	1,582	1,585	1,588	1,591	1,594	1,597	1,600	1,603
1,130.8	1,606	1,609	1,612	1,615	1,618	1,621	1,625	1,628	1,631	1,634
1,130.9	1,637	1,640	1,643	1,646	1,649	1,652	1,656	1,659	1,662	1,665
1,131	1,668	1,671	1,674	1,678	1,681	1,684	1,687	1,690	1,693	1,697
1,131.1	1,700	1,703	1,706	1,709	1,713	1,716	1,719	1,722	1,726	1,729
1,131.2	1,732	1,735	1,739	1,742	1,745	1,748	1,752	1,755	1,758	1,762
1,131.3	1,765	1,768	1,772	1,775	1,778	1,782	1,785	1,789	1,792	1,795
1,131.4	1,799	1,802	1,806	1,809	1,812	1,816	1,819	1,823	1,826	1,830
1,131.5	1,833	1,837	1,840	1,844	1,847	1,851	1,855	1,858	1,862	1,865
1,131.6	1,869	1,873	1,876	1,880	1,883	1,887	1,891	1,894	1,898	1,902
1,131.7	1,905	1,909	1,913	1,917	1,920	1,924	1,928	1,932	1,935	1,939
1,131.8	1,943	1,947	1,951	1,954	1,958	1,962	1,966	1,970	1,974	1,978
1,131.9	1,981	1,985	1,989	1,993	1,997	2,001	2,005	2,009	2,013	2,017
1,132	2,020	2,024	2,028	2,032	2,036	2,040	2,044	2,048	2,052	2,056
1,132.1	2,060	2,064	2,068	2,072	2,077	2,081	2,085	2,089	2,093	2,097
1,132.2	2,101	2,105	2,109	2,113	2,118	2,122	2,126	2,130	2,134	2,139
1,132.3	2,143	2,147	2,151	2,156	2,160	2,164	2,168	2,173	2,177	2,181
1,132.4	2,186	2,190	2,194	2,199	2,203	2,207	2,212	2,216	2,221	2,225
1,132.5	2,230	2,234	2,238	2,243	2,247	2,252	2,256	2,261	2,265	2,270
1,132.6	2,274	2,279	2,284	2,288	2,293	2,297	2,302	2,307	2,311	2,316
1,132.7	2,320	2,325	2,330	2,334	2,339	2,344	2,349	2,353	2,358	2,363
1,132.8	2,368	2,373	2,377	2,382	2,387	2,392	2,397	2,402	2,406	2,411
1,132.9	2,416	2,421	2,426	2,431	2,436	2,441	2,446	2,451	2,456	2,461
1,133	2,466	2,471	2,476	2,482	2,487	2,492	2,497	2,502	2,507	2,512
1,133.1	2,518	2,523	2,528	2,533	2,538	2,544	2,549	2,554	2,559	2,565
1,133.2	2,570	2,575	2,581	2,586	2,591	2,597	2,602	2,608	2,613	2,618
1,133.3	2,624	2,629	2,635	2,640	2,646	2,651	2,657	2,662	2,668	2,673
1,133.4	2,679	2,684	2,690	2,695	2,701	2,707	2,712	2,718	2,724	2,729
1,133.5	2,735	2,741	2,746	2,752	2,758	2,764	2,769	2,775	2,781	2,787
1,133.6	2,793	2,799	2,804	2,810	2,816	2,822	2,828	2,834	2,840	2,846
1,133.7	2,852	2,858	2,864	2,870	2,876	2,882	2,888	2,894	2,900	2,906
1,133.8	2,912	2,918	2,924	2,930	2,937	2,943	2,949	2,955	2,961	2,968
1,133.9	2,974	2,980	2,986	2,993	2,999	3,005	3,011	3,018	3,024	3,030
1,134	3,037	3,043	3,049	3,056	3,062	3,069	3,075	3,081	3,088	3,094
1,134.1	3,101	3,107	3,114	3,120	3,127	3,134	3,140	3,147	3,153	3,160
1,134.2	3,166	3,173	3,180	3,186	3,193	3,200	3,207	3,213	3,220	3,227
1,134.3	3,234	3,240	3,247	3,254	3,261	3,268	3,274	3,281	3,288	3,295
1,134.4	3,302	3,309	3,316	3,323	3,330	3,337	3,344	3,351	3,358	3,365
1,134.5	3,372	3,379	3,386	3,393	3,401	3,408	3,415	3,422	3,429	3,436
1,134.6	3,443	3,451	3,458	3,465	3,472	3,480	3,487	3,494	3,502	3,509
1,134.7	3,516	3,524	3,531	3,539	3,546	3,553	3,561	3,568	3,576	3,583
1,134.8	3,591	3,598	3,606	3,613	3,621	3,629	3,636	3,644	3,651	3,659
1,134.9	3,667	3,674	3,682	3,690	3,697	3,705	3,713	3,720	3,728	3,736

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,135	3,744	3,751	3,759	3,767	3,775	3,783	3,791	3,798	3,806	3,814
1,135.1	3,822	3,830	3,838	3,846	3,854	3,862	3,870	3,878	3,886	3,894
1,135.2	3,902	3,910	3,918	3,926	3,934	3,942	3,950	3,959	3,967	3,975
1,135.3	3,983	3,991	3,999	4,008	4,016	4,024	4,032	4,041	4,049	4,057
1,135.4	4,065	4,074	4,082	4,090	4,099	4,107	4,115	4,124	4,132	4,141
1,135.5	4,149	4,157	4,166	4,174	4,183	4,191	4,200	4,208	4,217	4,226
1,135.6	4,234	4,243	4,251	4,260	4,269	4,277	4,286	4,295	4,303	4,312
1,135.7	4,321	4,329	4,338	4,347	4,356	4,364	4,373	4,382	4,391	4,400
1,135.8	4,408	4,417	4,426	4,435	4,444	4,453	4,462	4,471	4,480	4,488
1,135.9	4,497	4,506	4,515	4,524	4,533	4,542	4,551	4,560	4,570	4,579
1,136	4,588	4,597	4,606	4,615	4,624	4,633	4,643	4,652	4,661	4,670
1,136.1	4,679	4,689	4,698	4,707	4,716	4,726	4,735	4,744	4,754	4,763
1,136.2	4,772	4,781	4,791	4,800	4,810	4,819	4,828	4,838	4,847	4,857
1,136.3	4,866	4,876	4,885	4,895	4,904	4,914	4,923	4,933	4,942	4,952
1,136.4	4,962	4,971	4,981	4,990	5,000	5,010	5,019	5,029	5,039	5,048
1,136.5	5,058	5,068	5,078	5,087	5,097	5,107	5,117	5,126	5,136	5,146
1,136.6	5,156	5,166	5,176	5,185	5,195	5,205	5,215	5,225	5,235	5,245
1,136.7	5,255	5,265	5,275	5,285	5,295	5,305	5,315	5,325	5,335	5,345
1,136.8	5,355	5,365	5,375	5,386	5,396	5,406	5,416	5,426	5,437	5,447
1,136.9	5,457	5,467	5,478	5,488	5,498	5,508	5,519	5,529	5,539	5,550
1,137	5,560	5,571	5,581	5,592	5,602	5,612	5,623	5,633	5,644	5,654
1,137.1	5,665	5,675	5,686	5,697	5,707	5,718	5,729	5,739	5,750	5,760
1,137.2	5,771	5,782	5,793	5,803	5,814	5,825	5,836	5,847	5,857	5,868
1,137.3	5,879	5,890	5,901	5,912	5,923	5,934	5,945	5,956	5,967	5,978
1,137.4	5,989	6,000	6,011	6,022	6,033	6,044	6,055	6,067	6,078	6,089
1,137.5	6,100	6,112	6,123	6,134	6,145	6,157	6,168	6,179	6,191	6,202
1,137.6	6,214	6,225	6,236	6,248	6,259	6,271	6,282	6,294	6,305	6,317
1,137.7	6,328	6,340	6,352	6,363	6,375	6,386	6,398	6,410	6,421	6,433
1,137.8	6,445	6,457	6,468	6,480	6,492	6,504	6,515	6,527	6,539	6,551
1,137.9	6,563	6,575	6,586	6,598	6,610	6,622	6,634	6,646	6,658	6,670
1,138	6,682	6,694	6,706	6,718	6,730	6,742	6,754	6,766	6,778	6,790
1,138.1	6,802	6,815	6,827	6,839	6,851	6,863	6,876	6,888	6,900	6,912
1,138.2	6,924	6,937	6,949	6,961	6,974	6,986	6,998	7,011	7,023	7,036
1,138.3	7,048	7,061	7,073	7,085	7,098	7,110	7,123	7,135	7,148	7,161
1,138.4	7,173	7,186	7,198	7,211	7,223	7,236	7,249	7,262	7,274	7,287
1,138.5	7,300	7,312	7,325	7,338	7,351	7,364	7,377	7,389	7,402	7,415
1,138.6	7,428	7,441	7,454	7,467	7,480	7,493	7,506	7,519	7,532	7,545
1,138.7	7,558	7,571	7,584	7,597	7,611	7,624	7,637	7,650	7,663	7,677
1,138.8	7,690	7,703	7,716	7,730	7,743	7,756	7,770	7,783	7,797	7,810
1,138.9	7,823	7,837	7,850	7,864	7,877	7,891	7,905	7,918	7,932	7,945
1,139	7,959	7,973	7,986	8,000	8,014	8,028	8,041	8,055	8,069	8,083
1,139.1	8,097	8,110	8,124	8,138	8,152	8,166	8,180	8,194	8,208	8,222
1,139.2	8,236	8,250	8,264	8,278	8,292	8,306	8,320	8,334	8,349	8,363
1,139.3	8,377	8,391	8,405	8,419	8,434	8,448	8,462	8,476	8,491	8,505
1,139.4	8,519	8,534	8,548	8,562	8,577	8,591	8,605	8,620	8,634	8,649
1,139.5	8,663	8,677	8,692	8,706	8,721	8,735	8,750	8,764	8,779	8,793
1,139.6	8,808	8,822	8,837	8,852	8,866	8,881	8,896	8,910	8,925	8,939
1,139.7	8,954	8,969	8,984	8,998	9,013	9,028	9,043	9,057	9,072	9,087
1,139.8	9,102	9,117	9,131	9,146	9,161	9,176	9,191	9,206	9,221	9,236
1,139.9	9,251	9,266	9,281	9,296	9,311	9,326	9,341	9,356	9,371	9,386
1,140	9,401	9,416	9,431	9,446	9,462	9,477	9,492	9,507	9,522	9,537
1,140.1	9,553	9,568	9,583	9,598	9,614	9,629	9,644	9,660	9,675	9,690
1,140.2	9,706	9,721	9,736	9,752	9,767	9,783	9,798	9,814	9,829	9,845
1,140.3	9,860	9,876	9,891	9,906	9,922	9,938	9,953	9,969	9,984	10,000
1,140.4	10,016	10,031	10,047	10,063	10,078	10,094	10,110	10,125	10,141	10,157
1,140.5	10,173	10,188	10,204	10,220	10,236	10,252	10,268	10,283	10,299	10,315
1,140.6	10,331	10,347	10,363	10,379	10,395	10,411	10,427	10,443	10,459	10,474
1,140.7	10,491	10,507	10,523	10,539	10,555	10,571	10,587	10,603	10,619	10,636
1,140.8	10,652	10,668	10,684	10,700	10,717	10,733	10,749	10,765	10,782	10,798
1,140.9	10,814	10,831	10,847	10,864	10,880	10,896	10,913	10,929	10,946	10,962

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,141	10,979	10,995	11,012	11,028	11,045	11,062	11,078	11,095	11,111	11,128
1,141.1	11,145	11,161	11,178	11,195	11,212	11,228	11,245	11,262	11,279	11,295
1,141.2	11,312	11,329	11,346	11,363	11,380	11,397	11,414	11,431	11,448	11,465
1,141.3	11,482	11,499	11,516	11,533	11,550	11,567	11,584	11,601	11,618	11,636
1,141.4	11,653	11,670	11,687	11,705	11,722	11,739	11,756	11,774	11,791	11,808
1,141.5	11,826	11,843	11,861	11,878	11,895	11,913	11,930	11,948	11,965	11,983
1,141.6	12,000	12,018	12,036	12,053	12,071	12,088	12,106	12,124	12,142	12,159
1,141.7	12,177	12,195	12,212	12,230	12,248	12,266	12,284	12,302	12,320	12,337
1,141.8	12,355	12,373	12,391	12,409	12,427	12,445	12,463	12,481	12,500	12,518
1,141.9	12,536	12,554	12,572	12,590	12,608	12,627	12,645	12,663	12,682	12,700
1,142	12,718	12,737	12,755	12,774	12,792	12,811	12,829	12,847	12,866	12,884
1,142.1	12,903	12,922	12,940	12,959	12,977	12,996	13,015	13,034	13,052	13,071
1,142.2	13,090	13,108	13,127	13,146	13,165	13,184	13,203	13,221	13,240	13,259
1,142.3	13,278	13,297	13,316	13,335	13,354	13,373	13,392	13,411	13,430	13,449
1,142.4	13,469	13,488	13,507	13,526	13,545	13,564	13,584	13,603	13,622	13,641
1,142.5	13,661	13,680	13,699	13,719	13,738	13,758	13,777	13,796	13,816	13,835
1,142.6	13,855	13,874	13,894	13,913	13,933	13,953	13,972	13,992	14,011	14,031
1,142.7	14,051	14,070	14,090	14,110	14,130	14,149	14,169	14,189	14,209	14,229
1,142.8	14,248	14,268	14,288	14,308	14,328	14,348	14,368	14,388	14,407	14,427
1,142.9	14,447	14,467	14,487	14,508	14,527	14,547	14,567	14,588	14,608	14,628
1,143	14,648	14,668	14,688	14,708	14,729	14,749	14,769	14,789	14,809	14,830
1,143.1	14,850	14,870	14,891	14,911	14,931	14,952	14,972	14,992	15,013	15,033
1,143.2	15,053	15,074	15,094	15,115	15,135	15,156	15,177	15,197	15,218	15,238
1,143.3	15,259	15,279	15,300	15,320	15,341	15,362	15,382	15,403	15,424	15,444
1,143.4	15,465	15,486	15,507	15,527	15,548	15,569	15,590	15,610	15,631	15,652
1,143.5	15,673	15,694	15,715	15,736	15,756	15,777	15,798	15,819	15,840	15,861
1,143.6	15,882	15,903	15,924	15,945	15,966	15,987	16,008	16,029	16,051	16,071
1,143.7	16,093	16,114	16,135	16,156	16,177	16,198	16,220	16,241	16,262	16,283
1,143.8	16,305	16,326	16,347	16,368	16,390	16,411	16,433	16,454	16,475	16,497
1,143.9	16,518	16,540	16,561	16,583	16,604	16,625	16,647	16,668	16,690	16,711
1,144	16,733	16,754	16,776	16,798	16,819	16,841	16,862	16,884	16,905	16,927
1,144.1	16,949	16,970	16,992	17,014	17,035	17,057	17,079	17,101	17,122	17,144
1,144.2	17,166	17,188	17,209	17,231	17,253	17,275	17,297	17,319	17,340	17,362
1,144.3	17,384	17,406	17,428	17,450	17,472	17,494	17,516	17,538	17,560	17,582
1,144.4	17,604	17,626	17,648	17,670	17,692	17,715	17,737	17,759	17,781	17,803
1,144.5	17,826	17,848	17,870	17,892	17,915	17,937	17,959	17,981	18,004	18,026
1,144.6	18,048	18,071	18,093	18,115	18,138	18,160	18,183	18,205	18,228	18,250
1,144.7	18,272	18,295	18,317	18,340	18,362	18,385	18,407	18,430	18,452	18,475
1,144.8	18,498	18,520	18,543	18,565	18,588	18,611	18,633	18,656	18,679	18,701
1,144.9	18,724	18,747	18,769	18,792	18,815	18,837	18,860	18,883	18,906	18,929
1,145	18,951	18,974	18,997	19,020	19,043	19,066	19,089	19,111	19,134	19,157
1,145.1	19,180	19,203	19,226	19,249	19,272	19,295	19,318	19,341	19,364	19,387
1,145.2	19,410	19,433	19,456	19,479	19,502	19,525	19,548	19,572	19,595	19,618
1,145.3	19,641	19,664	19,687	19,710	19,734	19,757	19,780	19,803	19,827	19,850
1,145.4	19,873	19,897	19,920	19,943	19,966	19,990	20,013	20,036	20,060	20,083
1,145.5	20,107	20,130	20,154	20,177	20,200	20,224	20,247	20,271	20,294	20,318
1,145.6	20,341	20,365	20,388	20,412	20,435	20,459	20,483	20,506	20,530	20,553
1,145.7	20,577	20,600	20,624	20,648	20,671	20,695	20,719	20,742	20,766	20,790
1,145.8	20,814	20,837	20,861	20,885	20,908	20,932	20,956	20,980	21,004	21,028
1,145.9	21,052	21,075	21,099	21,123	21,147	21,171	21,195	21,219	21,243	21,267
1,146	21,291	21,315	21,339	21,363	21,387	21,411	21,435	21,459	21,483	21,507
1,146.1	21,531	21,555	21,579	21,604	21,628	21,652	21,676	21,700	21,725	21,749
1,146.2	21,773	21,797	21,821	21,846	21,870	21,894	21,919	21,943	21,967	21,992
1,146.3	22,016	22,041	22,065	22,089	22,114	22,138	22,163	22,187	22,212	22,236
1,146.4	22,261	22,285	22,310	22,334	22,359	22,383	22,408	22,432	22,457	22,482
1,146.5	22,506	22,531	22,556	22,580	22,605	22,630	22,655	22,679	22,704	22,729
1,146.6	22,753	22,778	22,803	22,828	22,853	22,878	22,902	22,927	22,952	22,977
1,146.7	23,002	23,027	23,052	23,077	23,102	23,127	23,152	23,177	23,202	23,227
1,146.8	23,252	23,277	23,302	23,327	23,352	23,377	23,402	23,427	23,452	23,478
1,146.9	23,503	23,528	23,553	23,578	23,603	23,629	23,654	23,679	23,705	23,730

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,147	23,755	23,781	23,806	23,832	23,857	23,882	23,908	23,933	23,959	23,984
1,147.1	24,010	24,035	24,061	24,086	24,112	24,137	24,163	24,189	24,214	24,240
1,147.2	24,265	24,291	24,317	24,342	24,368	24,394	24,419	24,445	24,471	24,497
1,147.3	24,523	24,548	24,574	24,600	24,626	24,651	24,677	24,703	24,729	24,755
1,147.4	24,781	24,807	24,833	24,859	24,885	24,911	24,937	24,963	24,989	25,015
1,147.5	25,041	25,067	25,093	25,120	25,146	25,172	25,198	25,224	25,250	25,276
1,147.6	25,303	25,329	25,355	25,382	25,408	25,434	25,461	25,487	25,513	25,540
1,147.7	25,566	25,592	25,619	25,645	25,672	25,698	25,725	25,752	25,778	25,805
1,147.8	25,831	25,858	25,884	25,911	25,938	25,964	25,991	26,018	26,044	26,071
1,147.9	26,098	26,125	26,152	26,178	26,205	26,232	26,259	26,286	26,313	26,340
1,148	26,366	26,393	26,420	26,447	26,474	26,502	26,529	26,555	26,582	26,610
1,148.1	26,637	26,664	26,691	26,718	26,745	26,773	26,800	26,827	26,854	26,881
1,148.2	26,909	26,936	26,963	26,991	27,018	27,045	27,073	27,100	27,128	27,155
1,148.3	27,183	27,210	27,238	27,265	27,293	27,320	27,348	27,375	27,403	27,431
1,148.4	27,458	27,486	27,514	27,542	27,569	27,597	27,625	27,652	27,680	27,708
1,148.5	27,736	27,764	27,792	27,820	27,848	27,876	27,904	27,931	27,960	27,988
1,148.6	28,016	28,044	28,072	28,100	28,128	28,156	28,185	28,213	28,241	28,269
1,148.7	28,297	28,326	28,354	28,382	28,411	28,439	28,467	28,496	28,524	28,553
1,148.8	28,581	28,610	28,638	28,666	28,695	28,724	28,752	28,781	28,810	28,838
1,148.9	28,867	28,896	28,924	28,953	28,982	29,010	29,039	29,068	29,097	29,126
1,149	29,155	29,184	29,213	29,242	29,271	29,300	29,329	29,358	29,387	29,416
1,149.1	29,445	29,474	29,503	29,532	29,562	29,591	29,620	29,649	29,679	29,708
1,149.2	29,737	29,766	29,796	29,825	29,855	29,884	29,914	29,943	29,973	30,002
1,149.3	30,032	30,062	30,091	30,120	30,150	30,180	30,210	30,239	30,269	30,299
1,149.4	30,329	30,359	30,389	30,419	30,448	30,478	30,508	30,538	30,568	30,599
1,149.5	30,629	30,659	30,689	30,719	30,749	30,780	30,810	30,840	30,870	30,900
1,149.6	30,931	30,961	30,991	31,022	31,052	31,083	31,113	31,144	31,174	31,204
1,149.7	31,235	31,266	31,296	31,327	31,358	31,388	31,419	31,450	31,481	31,511
1,149.8	31,542	31,573	31,604	31,634	31,665	31,696	31,727	31,758	31,789	31,820
1,149.9	31,851	31,882	31,914	31,945	31,975	32,007	32,038	32,069	32,100	32,132
1,150	32,163	32,194	32,226	32,257	32,288	32,320	32,351	32,382	32,414	32,446
1,150.1	32,477	32,509	32,540	32,572	32,604	32,635	32,667	32,699	32,730	32,762
1,150.2	32,794	32,826	32,857	32,889	32,921	32,953	32,985	33,017	33,049	33,081
1,150.3	33,113	33,145	33,177	33,209	33,242	33,274	33,306	33,338	33,371	33,403
1,150.4	33,435	33,468	33,500	33,532	33,564	33,597	33,629	33,662	33,694	33,727
1,150.5	33,760	33,792	33,825	33,858	33,890	33,923	33,956	33,988	34,021	34,054
1,150.6	34,087	34,120	34,153	34,186	34,219	34,252	34,285	34,318	34,351	34,384
1,150.7	34,417	34,451	34,484	34,517	34,550	34,584	34,617	34,650	34,684	34,717
1,150.8	34,751	34,784	34,817	34,851	34,884	34,918	34,952	34,985	35,019	35,053
1,150.9	35,086	35,120	35,154	35,188	35,221	35,255	35,289	35,322	35,356	35,390
1,151	35,424	35,458	35,492	35,526	35,560	35,594	35,628	35,662	35,696	35,730
1,151.1	35,765	35,799	35,833	35,867	35,902	35,936	35,970	36,005	36,039	36,073
1,151.2	36,107	36,142	36,176	36,211	36,245	36,280	36,314	36,349	36,383	36,418
1,151.3	36,453	36,487	36,522	36,556	36,591	36,626	36,661	36,695	36,730	36,765
1,151.4	36,800	36,835	36,870	36,905	36,939	36,974	37,009	37,044	37,079	37,114
1,151.5	37,149	37,185	37,220	37,255	37,290	37,325	37,361	37,396	37,431	37,466
1,151.6	37,502	37,537	37,572	37,608	37,643	37,679	37,714	37,750	37,785	37,820
1,151.7	37,856	37,892	37,927	37,963	37,999	38,034	38,070	38,106	38,142	38,177
1,151.8	38,213	38,249	38,285	38,320	38,356	38,392	38,428	38,464	38,500	38,536
1,151.9	38,572	38,608	38,644	38,681	38,716	38,752	38,789	38,825	38,861	38,897
1,152	38,934	38,970	39,006	39,043	39,079	39,115	39,152	39,188	39,224	39,261
1,152.1	39,297	39,334	39,370	39,407	39,444	39,480	39,517	39,554	39,590	39,627
1,152.2	39,664	39,700	39,737	39,774	39,811	39,848	39,885	39,922	39,959	39,996
1,152.3	40,033	40,070	40,107	40,144	40,181	40,218	40,255	40,292	40,330	40,367
1,152.4	40,404	40,442	40,479	40,516	40,553	40,591	40,628	40,665	40,703	40,740
1,152.5	40,778	40,815	40,853	40,891	40,928	40,966	41,003	41,041	41,078	41,116
1,152.6	41,154	41,191	41,229	41,267	41,305	41,343	41,380	41,418	41,456	41,494
1,152.7	41,532	41,570	41,608	41,646	41,684	41,722	41,760	41,798	41,836	41,874
1,152.8	41,912	41,950	41,988	42,026	42,065	42,103	42,141	42,179	42,218	42,256
1,152.9	42,295	42,333	42,371	42,410	42,448	42,486	42,525	42,563	42,602	42,640

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,153	42,679	42,718	42,756	42,795	42,834	42,872	42,911	42,949	42,988	43,027
1,153.1	43,066	43,105	43,144	43,182	43,221	43,260	43,299	43,338	43,377	43,416
1,153.2	43,455	43,494	43,533	43,572	43,611	43,651	43,690	43,729	43,768	43,808
1,153.3	43,847	43,886	43,925	43,965	44,004	44,043	44,083	44,122	44,162	44,201
1,153.4	44,241	44,280	44,320	44,360	44,399	44,438	44,478	44,518	44,557	44,597
1,153.5	44,637	44,677	44,717	44,756	44,796	44,836	44,876	44,915	44,955	44,995
1,153.6	45,035	45,075	45,115	45,155	45,195	45,236	45,276	45,316	45,356	45,396
1,153.7	45,436	45,476	45,517	45,557	45,597	45,638	45,678	45,718	45,759	45,799
1,153.8	45,840	45,880	45,920	45,961	46,001	46,042	46,083	46,123	46,164	46,205
1,153.9	46,245	46,286	46,327	46,368	46,408	46,449	46,490	46,531	46,572	46,613
1,154	46,654	46,695	46,736	46,777	46,818	46,859	46,900	46,941	46,982	47,023
1,154.1	47,064	47,105	47,147	47,188	47,229	47,271	47,312	47,353	47,395	47,436
1,154.2	47,477	47,519	47,560	47,602	47,643	47,685	47,726	47,768	47,810	47,851
1,154.3	47,893	47,935	47,976	48,018	48,059	48,101	48,143	48,185	48,227	48,269
1,154.4	48,311	48,352	48,394	48,436	48,478	48,520	48,562	48,604	48,646	48,688
1,154.5	48,730	48,773	48,815	48,857	48,899	48,941	48,984	49,026	49,068	49,110
1,154.6	49,153	49,195	49,237	49,280	49,322	49,365	49,407	49,450	49,492	49,534
1,154.7	49,577	49,620	49,662	49,705	49,748	49,790	49,833	49,876	49,918	49,961
1,154.8	50,004	50,047	50,089	50,132	50,175	50,218	50,261	50,304	50,347	50,390
1,154.9	50,433	50,476	50,519	50,562	50,605	50,648	50,691	50,735	50,778	50,821
1,155	50,864	50,908	50,951	50,994	51,038	51,081	51,125	51,168	51,211	51,255
1,155.1	51,298	51,342	51,385	51,429	51,472	51,516	51,560	51,604	51,647	51,690
1,155.2	51,734	51,778	51,822	51,866	51,910	51,953	51,997	52,041	52,085	52,129
1,155.3	52,173	52,217	52,261	52,305	52,349	52,393	52,437	52,482	52,526	52,570
1,155.4	52,614	52,659	52,703	52,747	52,791	52,836	52,880	52,925	52,969	53,014
1,155.5	53,058	53,103	53,147	53,192	53,237	53,281	53,326	53,370	53,415	53,460
1,155.6	53,504	53,549	53,594	53,639	53,684	53,729	53,774	53,819	53,864	53,909
1,155.7	53,954	53,999	54,044	54,089	54,134	54,180	54,225	54,270	54,315	54,361
1,155.8	54,406	54,451	54,496	54,542	54,587	54,633	54,678	54,724	54,769	54,815
1,155.9	54,860	54,906	54,952	54,998	55,043	55,088	55,134	55,180	55,226	55,272
1,156	55,318	55,363	55,409	55,455	55,501	55,547	55,593	55,639	55,685	55,731
1,156.1	55,777	55,823	55,870	55,916	55,962	56,008	56,055	56,101	56,147	56,193
1,156.2	56,239	56,286	56,332	56,379	56,425	56,472	56,518	56,565	56,611	56,658
1,156.3	56,705	56,751	56,797	56,844	56,891	56,938	56,985	57,031	57,078	57,125
1,156.4	57,172	57,219	57,266	57,313	57,359	57,406	57,453	57,501	57,548	57,595
1,156.5	57,642	57,689	57,736	57,784	57,831	57,878	57,926	57,973	58,020	58,067
1,156.6	58,115	58,162	58,210	58,257	58,305	58,353	58,400	58,448	58,496	58,543
1,156.7	58,590	58,638	58,686	58,734	58,782	58,830	58,878	58,926	58,974	59,022
1,156.8	59,070	59,118	59,165	59,213	59,262	59,310	59,358	59,406	59,455	59,503
1,156.9	59,551	59,600	59,648	59,696	59,744	59,793	59,841	59,890	59,938	59,987
1,157	60,036	60,084	60,133	60,182	60,230	60,279	60,328	60,376	60,425	60,474
1,157.1	60,523	60,572	60,621	60,670	60,719	60,768	60,817	60,866	60,915	60,964
1,157.2	61,013	61,062	61,111	61,161	61,210	61,259	61,308	61,358	61,407	61,457
1,157.3	61,506	61,556	61,604	61,654	61,703	61,753	61,803	61,852	61,902	61,951
1,157.4	62,001	62,051	62,101	62,150	62,200	62,249	62,299	62,349	62,399	62,449
1,157.5	62,499	62,549	62,599	62,649	62,699	62,749	62,799	62,849	62,899	62,949
1,157.6	62,999	63,049	63,100	63,150	63,200	63,251	63,301	63,351	63,402	63,452
1,157.7	63,502	63,553	63,603	63,654	63,704	63,755	63,806	63,856	63,907	63,958
1,157.8	64,008	64,059	64,109	64,160	64,211	64,262	64,313	64,364	64,415	64,466
1,157.9	64,517	64,568	64,619	64,670	64,721	64,772	64,823	64,875	64,926	64,977
1,158	65,029	65,080	65,131	65,183	65,234	65,286	65,337	65,388	65,440	65,491
1,158.1	65,543	65,594	65,646	65,698	65,750	65,801	65,853	65,905	65,957	66,008
1,158.2	66,060	66,112	66,164	66,216	66,268	66,320	66,372	66,424	66,476	66,529
1,158.3	66,581	66,633	66,685	66,737	66,789	66,842	66,894	66,946	66,999	67,051
1,158.4	67,104	67,156	67,209	67,262	67,314	67,366	67,419	67,472	67,524	67,577
1,158.5	67,630	67,683	67,736	67,789	67,842	67,895	67,948	68,000	68,053	68,106
1,158.6	68,159	68,212	68,266	68,319	68,372	68,425	68,479	68,532	68,585	68,638
1,158.7	68,692	68,745	68,799	68,852	68,906	68,959	69,013	69,067	69,120	69,174
1,158.8	69,228	69,281	69,335	69,388	69,442	69,496	69,550	69,604	69,658	69,712
1,158.9	69,766	69,820	69,874	69,928	69,982	70,036	70,090	70,145	70,199	70,253

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,159	70,308	70,362	70,417	70,471	70,525	70,580	70,635	70,688	70,743	70,798
1,159.1	70,852	70,907	70,962	71,017	71,071	71,126	71,181	71,236	71,291	71,345
1,159.2	71,400	71,455	71,510	71,566	71,621	71,676	71,731	71,786	71,842	71,897
1,159.3	71,952	72,007	72,062	72,118	72,173	72,229	72,284	72,340	72,395	72,451
1,159.4	72,506	72,562	72,618	72,674	72,729	72,784	72,840	72,896	72,952	73,008
1,159.5	73,064	73,120	73,176	73,232	73,288	73,344	73,400	73,455	73,512	73,568
1,159.6	73,624	73,680	73,737	73,793	73,849	73,906	73,962	74,019	74,075	74,131
1,159.7	74,187	74,244	74,301	74,357	74,414	74,471	74,527	74,584	74,641	74,698
1,159.8	74,755	74,812	74,868	74,925	74,982	75,039	75,096	75,153	75,210	75,268
1,159.9	75,325	75,382	75,439	75,497	75,553	75,611	75,668	75,726	75,783	75,841
1,160	75,898	75,956	76,014	76,071	76,129	76,187	76,244	76,302	76,359	76,417
1,160.1	76,475	76,533	76,591	76,649	76,707	76,765	76,824	76,882	76,940	76,998
1,160.2	77,056	77,114	77,172	77,231	77,289	77,348	77,406	77,465	77,523	77,582
1,160.3	77,641	77,699	77,757	77,816	77,875	77,933	77,992	78,051	78,110	78,169
1,160.4	78,228	78,287	78,346	78,405	78,464	78,523	78,582	78,641	78,700	78,760
1,160.5	78,819	78,878	78,938	78,997	79,057	79,116	79,176	79,234	79,294	79,354
1,160.6	79,413	79,473	79,533	79,592	79,652	79,712	79,772	79,832	79,892	79,951
1,160.7	80,011	80,071	80,131	80,191	80,251	80,311	80,372	80,432	80,492	80,552
1,160.8	80,613	80,673	80,733	80,793	80,854	80,914	80,975	81,035	81,096	81,157
1,160.9	81,217	81,278	81,339	81,399	81,459	81,520	81,581	81,642	81,703	81,764
1,161	81,825	81,886	81,947	82,008	82,069	82,131	82,192	82,252	82,314	82,375
1,161.1	82,436	82,498	82,559	82,621	82,682	82,744	82,805	82,867	82,929	82,989
1,161.2	83,051	83,113	83,175	83,237	83,298	83,360	83,422	83,484	83,546	83,608
1,161.3	83,670	83,732	83,794	83,856	83,918	83,980	84,043	84,105	84,167	84,230
1,161.4	84,292	84,355	84,417	84,480	84,541	84,604	84,667	84,729	84,792	84,855
1,161.5	84,918	84,981	85,044	85,106	85,169	85,232	85,295	85,358	85,421	85,484
1,161.6	85,547	85,610	85,674	85,737	85,800	85,864	85,927	85,991	86,054	86,117
1,161.7	86,180	86,244	86,308	86,371	86,435	86,499	86,563	86,626	86,690	86,754
1,161.8	86,818	86,882	86,945	87,009	87,073	87,138	87,202	87,266	87,330	87,394
1,161.9	87,459	87,523	87,588	87,652	87,716	87,780	87,845	87,909	87,974	88,039
1,162	88,103	88,168	88,233	88,298	88,362	88,427	88,492	88,556	88,621	88,686
1,162.1	88,751	88,817	88,882	88,947	89,012	89,077	89,143	89,208	89,274	89,338
1,162.2	89,404	89,469	89,535	89,600	89,666	89,732	89,798	89,863	89,929	89,995
1,162.3	90,061	90,127	90,192	90,258	90,324	90,390	90,456	90,522	90,589	90,655
1,162.4	90,721	90,788	90,854	90,920	90,986	91,053	91,119	91,186	91,252	91,319
1,162.5	91,386	91,452	91,519	91,586	91,653	91,720	91,787	91,853	91,920	91,987
1,162.6	92,054	92,121	92,189	92,256	92,323	92,391	92,458	92,526	92,593	92,660
1,162.7	92,727	92,795	92,863	92,930	92,998	93,066	93,134	93,202	93,270	93,338
1,162.8	93,406	93,474	93,541	93,609	93,677	93,745	93,814	93,882	93,950	94,019
1,162.9	94,087	94,156	94,224	94,293	94,360	94,429	94,498	94,566	94,635	94,704
1,163	94,773	94,842	94,911	94,980	95,049	95,118	95,187	95,255	95,324	95,393
1,163.1	95,463	95,532	95,601	95,671	95,740	95,809	95,879	95,948	96,018	96,087
1,163.2	96,156	96,226	96,296	96,366	96,435	96,505	96,575	96,645	96,715	96,785
1,163.3	96,855	96,925	96,994	97,064	97,134	97,204	97,274	97,345	97,415	97,485
1,163.4	97,556	97,626	97,696	97,767	97,836	97,907	97,977	98,048	98,119	98,189
1,163.5	98,260	98,331	98,401	98,472	98,543	98,614	98,685	98,755	98,826	98,897
1,163.6	98,968	99,039	99,110	99,181	99,252	99,323	99,395	99,466	99,537	99,608
1,163.7	99,679	99,750	99,822	99,893	99,965	100,036	100,108	100,179	100,251	100,323
1,163.8	100,394	100,466	100,537	100,609	100,681	100,753	100,824	100,896	100,968	101,040
1,163.9	101,112	101,184	101,257	101,329	101,400	101,472	101,545	101,617	101,689	101,761
1,164	101,834	101,906	101,979	102,051	102,124	102,196	102,269	102,341	102,413	102,486
1,164.1	102,559	102,631	102,704	102,777	102,850	102,923	102,996	103,069	103,142	103,214
1,164.2	103,287	103,360	103,433	103,506	103,580	103,653	103,726	103,799	103,873	103,946
1,164.3	104,019	104,093	104,165	104,239	104,313	104,386	104,460	104,533	104,607	104,681
1,164.4	104,755	104,828	104,902	104,976	105,049	105,123	105,197	105,271	105,345	105,419
1,164.5	105,493	105,567	105,641	105,715	105,790	105,864	105,938	106,012	106,086	106,160
1,164.6	106,235	106,309	106,384	106,458	106,533	106,607	106,682	106,757	106,831	106,905
1,164.7	106,980	107,055	107,129	107,204	107,279	107,354	107,429	107,504	107,579	107,654
1,164.8	107,729	107,804	107,879	107,954	108,029	108,104	108,180	108,255	108,330	108,406
1,164.9	108,481	108,557	108,632	108,708	108,782	108,858	108,934	109,009	109,085	109,161

Appendix E (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,165	109,237	109,312	109,388	109,464	109,540	109,616	109,692	109,767	109,843	109,919
1,165.1	109,995	110,072	110,148	110,224	110,300	110,377	110,453	110,529	110,606	110,681
1,165.2	110,758	110,834	110,911	110,988	111,064	111,141	111,218	111,294	111,371	111,448
1,165.3	111,525	111,602	111,678	111,755	111,832	111,909	111,986	112,063	112,140	112,217
1,165.4	112,294	112,371	112,449	112,526	112,602	112,680	112,757	112,835	112,912	112,989
1,165.5	113,067	113,145	113,222	113,300	113,378	113,455	113,533	113,610	113,688	113,765
1,165.6	113,843	113,921	113,999	114,077	114,155	114,233	114,311	114,390	114,468	114,545
1,165.7	114,623	114,701	114,780	114,858	114,937	115,015	115,093	115,172	115,250	115,329
1,165.8	115,407	115,486	115,564	115,642	115,721	115,800	115,879	115,958	116,036	116,115
1,165.9	116,194	116,273	116,352	116,431	116,509	116,589	116,668	116,747	116,826	116,905
1,166	116,985	117,064	117,143	117,223	117,302	117,382	117,461	117,540	117,619	117,699
1,166.1	117,779	117,859	117,938	118,018	118,098	118,178	118,258	118,338	118,418	118,497
1,166.2	118,577	118,657	118,737	118,817	118,897	118,977	119,058	119,138	119,218	119,299
1,166.3	119,379	119,460	119,539	119,620	119,700	119,781	119,861	119,942	120,023	120,103
1,166.4	120,184	120,265	120,346	120,427	120,507	120,588	120,669	120,750	120,831	120,912
1,166.5	120,993	121,074	121,155	121,237	121,318	121,399	121,481	121,561	121,642	121,724
1,166.6	121,805	121,887	121,968	122,050	122,132	122,213	122,295	122,377	122,459	122,540
1,166.7	122,621	122,703	122,785	122,867	122,949	123,031	123,113	123,196	123,278	123,360
1,166.8	123,442	123,524	123,606	123,688	123,771	123,853	123,935	124,018	124,101	124,183
1,166.9	124,266	124,348	124,431	124,514	124,596	124,678	124,761	124,844	124,927	125,010
1,167	125,093	125,176	125,259	125,342	125,426	125,509	125,592	125,674	125,758	125,841
1,167.1	125,925	126,008	126,091	126,175	126,259	126,342	126,426	126,510	126,593	126,676
1,167.2	126,760	126,844	126,928	127,011	127,095	127,179	127,263	127,347	127,432	127,516
1,167.3	127,600	127,684	127,767	127,852	127,936	128,021	128,105	128,189	128,274	128,358
1,167.4	128,443	128,528	128,612	128,697	128,781	128,866	128,950	129,035	129,120	129,205
1,167.5	129,290	129,375	129,460	129,545	129,630	129,716	129,801	129,885	129,970	130,056
1,167.6	130,141	130,227	130,312	130,397	130,483	130,569	130,654	130,740	130,826	130,910
1,167.7	130,996	131,082	131,168	131,254	131,340	131,426	131,512	131,598	131,684	131,770
1,167.8	131,856	131,942	132,027	132,114	132,200	132,286	132,373	132,459	132,546	132,632
1,167.9	132,719	132,805	132,892	132,979	133,064	133,151	133,238	133,325	133,412	133,499
1,168	133,586	133,673	133,760	133,847	133,934	134,021	134,108	134,194	134,282	134,369
1,168.1	134,457	134,544	134,631	134,719	134,807	134,894	134,982	135,069	135,157	135,244
1,168.2	135,332	135,420	135,507	135,595	135,683	135,771	135,859	135,948	136,036	136,124
1,168.3	136,212	136,300	136,388	136,476	136,564	136,653	136,741	136,830	136,918	137,007
1,168.4	137,095	137,184	137,273	137,362	137,449	137,538	137,627	137,716	137,805	137,894
1,168.5	137,983	138,072	138,161	138,250	138,340	138,429	138,518	138,606	138,696	138,785
1,168.6	138,875	138,964	139,054	139,143	139,233	139,323	139,412	139,502	139,592	139,681
1,168.7	139,771	139,861	139,951	140,041	140,131	140,221	140,311	140,401	140,492	140,582
1,168.8	140,672	140,763	140,852	140,943	141,033	141,124	141,215	141,305	141,396	141,487
1,168.9	141,578	141,669	141,759	141,850	141,940	142,031	142,123	142,214	142,305	142,396
1,169	142,488	142,579	142,670	142,762	142,853	142,945	143,036	143,127	143,219	143,310
1,169.1	143,402	143,494	143,586	143,678	143,770	143,862	143,954	144,046	144,138	144,229
1,169.2	144,322	144,414	144,506	144,598	144,691	144,783	144,876	144,968	145,061	145,154
1,169.3	145,246	145,339	145,431	145,524	145,616	145,709	145,802	145,895	145,988	146,081
1,169.4	146,174	146,268	146,361	146,454	146,546	146,639	146,733	146,826	146,920	147,013
1,169.5	147,107	147,200	147,294	147,388	147,481	147,575	147,669	147,761	147,855	147,949
1,169.6	148,043	148,137	148,231	148,325	148,419	148,513	148,607	148,702	148,796	148,889
1,169.7	148,983	149,078	149,172	149,267	149,361	149,456	149,550	149,645	149,740	149,834
1,169.8	149,929	150,024	150,118	150,212	150,307	150,402	150,497	150,592	150,687	150,783
1,169.9	150,878	150,973	151,068	151,164	151,258	151,353	151,449	151,544	151,640	151,735
1,170	151,831	151,927	152,022	152,118	152,214	152,310	152,406	152,500	152,596	152,692
1,170.1	152,788	152,885	152,981	153,077	153,173	153,269	153,366	153,462	153,558	153,654
1,170.2	153,750	153,847	153,943	154,040	154,136	154,233	154,330	154,427	154,523	154,620
1,170.3	154,717	154,814	154,910	155,007	155,104	155,201	155,298	155,395	155,493	155,590
1,170.4	155,687	155,785	155,882	155,979	156,076	156,173	156,271	156,368	156,466	156,564
1,170.5	156,661	156,759	156,857	156,955	157,053	157,150	157,248	157,345	157,443	157,541
1,170.6	157,639	157,738	157,836	157,934	158,032	158,131	158,229	158,327	158,426	158,523
1,170.7	158,622	158,720	158,819	158,918	159,016	159,115	159,214	159,313	159,411	159,510
1,170.8	159,609	159,708	159,806	159,905	160,004	160,103	160,203	160,302	160,401	160,500
1,170.9	160,600	160,699	160,799	160,898	160,996	161,096	161,195	161,295	161,395	161,494

Appendix E (continued)

**Hubbard Creek Reservoir**  
**RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,171	161,594	161,694	161,794	161,894	161,993	162,093	162,193	162,292	162,392	162,492
1,171.1	162,592	162,693	162,793	162,893	162,993	163,094	163,194	163,295	163,395	163,494
1,171.2	163,595	163,695	163,796	163,897	163,997	164,098	164,199	164,300	164,401	164,501
1,171.3	164,602	164,703	164,803	164,904	165,005	165,107	165,208	165,309	165,410	165,512
1,171.4	165,613	165,714	165,816	165,917	166,017	166,119	166,221	166,322	166,424	166,526
1,171.5	166,628	166,729	166,831	166,933	167,035	167,137	167,239	167,340	167,442	167,544
1,171.6	167,647	167,749	167,851	167,954	168,056	168,158	168,261	168,363	168,466	168,567
1,171.7	168,670	168,773	168,875	168,978	169,081	169,184	169,287	169,390	169,493	169,596
1,171.8	169,699	169,802	169,904	170,007	170,110	170,213	170,317	170,420	170,523	170,627
1,171.9	170,730	170,834	170,937	171,041	171,143	171,247	171,351	171,455	171,559	171,662
1,172	171,766	171,870	171,974	172,078	172,182	172,286	172,391	172,494	172,598	172,702
1,172.1	172,806	172,911	173,015	173,120	173,224	173,329	173,433	173,538	173,643	173,746
1,172.2	173,851	173,956	174,061	174,165	174,270	174,375	174,480	174,585	174,691	174,796
1,172.3	174,901	175,006	175,110	175,215	175,321	175,426	175,532	175,637	175,743	175,848
1,172.4	175,954	176,060	176,165	176,271	176,375	176,481	176,587	176,693	176,799	176,905
1,172.5	177,011	177,117	177,223	177,330	177,436	177,542	177,648	177,753	177,860	177,966
1,172.6	178,073	178,179	178,286	178,392	178,499	178,606	178,713	178,819	178,926	179,032
1,172.7	179,139	179,246	179,353	179,460	179,567	179,674	179,781	179,888	179,996	180,103
1,172.8	180,210	180,318	180,424	180,531	180,639	180,747	180,854	180,962	181,070	181,177
1,172.9	181,285	181,393	181,501	181,609	181,715	181,823	181,931	182,039	182,147	182,255
1,173	182,364	182,472	182,580	182,688	182,797	182,905	183,013	183,121	183,229	183,338
1,173.1	183,446	183,555	183,663	183,772	183,881	183,990	184,098	184,207	184,316	184,424
1,173.2	184,533	184,642	184,751	184,860	184,969	185,078	185,187	185,296	185,406	185,515
1,173.3	185,624	185,734	185,842	185,951	186,061	186,170	186,280	186,389	186,499	186,609
1,173.4	186,718	186,828	186,938	187,048	187,156	187,266	187,376	187,486	187,597	187,707
1,173.5	187,817	187,927	188,037	188,147	188,258	188,368	188,479	188,588	188,698	188,809
1,173.6	188,919	189,030	189,141	189,251	189,362	189,473	189,584	189,694	189,805	189,915
1,173.7	190,026	190,137	190,248	190,359	190,470	190,581	190,693	190,804	190,915	191,027
1,173.8	191,138	191,249	191,360	191,471	191,583	191,694	191,806	191,918	192,029	192,141
1,173.9	192,253	192,365	192,477	192,588	192,699	192,811	192,923	193,035	193,147	193,260
1,174	193,372	193,484	193,596	193,709	193,821	193,933	194,046	194,157	194,270	194,382
1,174.1	194,495	194,607	194,720	194,833	194,946	195,059	195,171	195,284	195,397	195,509
1,174.2	195,622	195,735	195,848	195,961	196,075	196,188	196,301	196,415	196,528	196,641
1,174.3	196,755	196,868	196,981	197,094	197,208	197,322	197,435	197,549	197,663	197,777
1,174.4	197,891	198,005	198,118	198,232	198,345	198,459	198,573	198,688	198,802	198,916
1,174.5	199,030	199,145	199,259	199,373	199,488	199,602	199,717	199,830	199,945	200,059
1,174.6	200,174	200,289	200,404	200,519	200,633	200,748	200,863	200,978	201,093	201,207
1,174.7	201,322	201,437	201,553	201,668	201,783	201,898	202,014	202,129	202,245	202,360
1,174.8	202,476	202,591	202,706	202,821	202,937	203,053	203,169	203,284	203,400	203,516
1,174.9	203,632	203,748	203,864	203,980	204,095	204,211	204,327	204,444	204,560	204,676
1,175	204,793	204,909	205,025	205,142	205,258	205,375	205,492	205,607	205,724	205,840
1,175.1	205,957	206,074	206,191	206,308	206,425	206,542	206,659	206,776	206,893	207,009
1,175.2	207,126	207,243	207,360	207,478	207,595	207,712	207,830	207,947	208,065	208,182
1,175.3	208,300	208,418	208,534	208,652	208,770	208,887	209,005	209,123	209,241	209,359
1,175.4	209,477	209,595	209,714	209,832	209,948	210,067	210,185	210,303	210,422	210,540
1,175.5	210,659	210,777	210,896	211,015	211,133	211,252	211,371	211,488	211,607	211,726
1,175.6	211,845	211,964	212,083	212,202	212,321	212,440	212,559	212,679	212,798	212,916
1,175.7	213,035	213,155	213,274	213,394	213,513	213,633	213,753	213,872	213,992	214,112
1,175.8	214,232	214,352	214,470	214,590	214,710	214,831	214,951	215,071	215,191	215,311
1,175.9	215,432	215,552	215,673	215,793	215,912	216,033	216,154	216,274	216,395	216,516
1,176	216,637	216,757	216,878	216,999	217,120	217,241	217,363	217,482	217,604	217,725
1,176.1	217,846	217,967	218,089	218,210	218,332	218,453	218,575	218,697	218,819	218,939
1,176.2	219,061	219,183	219,304	219,426	219,548	219,671	219,793	219,915	220,037	220,159
1,176.3	220,282	220,404	220,525	220,648	220,770	220,893	221,015	221,138	221,261	221,384
1,176.4	221,506	221,629	221,752	221,875	221,997	222,120	222,243	222,366	222,490	222,613
1,176.5	222,736	222,860	222,983	223,106	223,230	223,354	223,477	223,599	223,723	223,847
1,176.6	223,971	224,095	224,219	224,343	224,467	224,591	224,715	224,839	224,963	225,086
1,176.7	225,211	225,335	225,459	225,584	225,708	225,833	225,958	226,082	226,207	226,332
1,176.8	226,457	226,581	226,705	226,830	226,955	227,080	227,205	227,330	227,456	227,581
1,176.9	227,706	227,831	227,957	228,082	228,206	228,332	228,458	228,583	228,709	228,835



Appendix E (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,177	228,961	229,086	229,212	229,338	229,464	229,590	229,717	229,841	229,967	230,094
1,177.1	230,220	230,346	230,473	230,599	230,726	230,852	230,979	231,106	231,232	231,357
1,177.2	231,484	231,611	231,738	231,865	231,992	232,119	232,246	232,373	232,501	232,628
1,177.3	232,755	232,882	233,008	233,136	233,263	233,391	233,519	233,646	233,774	233,902
1,177.4	234,030	234,158	234,285	234,413	234,540	234,668	234,796	234,925	235,053	235,181
1,177.5	235,310	235,438	235,566	235,695	235,824	235,952	236,081	236,208	236,337	236,466
1,177.6	236,595	236,724	236,853	236,982	237,111	237,240	237,369	237,499	237,628	237,756
1,177.7	237,885	238,015	238,144	238,274	238,403	238,533	238,663	238,793	238,922	239,052
1,177.8	239,182	239,312	239,441	239,571	239,701	239,831	239,961	240,092	240,222	240,352
1,177.9	240,483	240,613	240,744	240,875	241,004	241,134	241,265	241,396	241,527	241,658
1,178	241,788	241,920	242,051	242,182	242,313	242,444	242,575	242,705	242,836	242,968
1,178.1	243,099	243,231	243,362	243,494	243,626	243,757	243,889	244,021	244,153	244,283
1,178.2	244,415	244,547	244,679	244,811	244,943	245,076	245,208	245,340	245,473	245,605
1,178.3	245,737	245,870	246,001	246,133	246,266	246,399	246,532	246,664	246,797	246,930
1,178.4	247,063	247,196	247,329	247,462	247,594	247,727	247,860	247,993	248,127	248,260
1,178.5	248,393	248,527	248,661	248,794	248,928	249,061	249,195	249,327	249,461	249,595
1,178.6	249,729	249,863	249,997	250,131	250,265	250,399	250,533	250,668	250,802	250,935
1,178.7	251,069	251,204	251,338	251,473	251,607	251,742	251,876	252,011	252,146	252,281
1,178.8	252,416	252,551	252,684	252,819	252,954	253,089	253,224	253,359	253,495	253,630
1,178.9	253,765	253,901	254,036	254,171	254,307	254,442	254,578	254,713	254,849	254,984
1,179	255,120	255,256	255,392	255,527	255,663	255,799	255,935	256,071	256,207	256,344
1,179.1	256,480	256,616	256,752	256,889	257,025	257,161	257,298	257,434	257,571	257,708
1,179.2	257,844	257,981	258,118	258,255	258,392	258,528	258,665	258,802	258,940	259,077
1,179.3	259,214	259,351	259,488	259,626	259,763	259,900	260,038	260,175	260,313	260,451
1,179.4	260,588	260,726	260,864	261,002	261,139	261,277	261,415	261,553	261,691	261,829
1,179.5	261,968	262,106	262,244	262,382	262,521	262,659	262,797	262,936	263,075	263,213
1,179.6	263,352	263,490	263,629	263,768	263,907	264,046	264,185	264,324	264,463	264,602
1,179.7	264,741	264,880	265,019	265,159	265,298	265,437	265,577	265,716	265,856	265,995
1,179.8	266,135	266,275	266,414	266,554	266,694	266,834	266,974	267,114	267,254	267,394
1,179.9	267,534	267,674	267,814	267,954	268,095	268,235	268,376	268,516	268,657	268,797
1,180	268,938	269,078	269,219	269,360	269,501	269,641	269,782	269,923	270,064	270,205
1,180.1	270,346	270,488	270,629	270,770	270,911	271,053	271,194	271,335	271,477	271,618
1,180.2	271,760	271,902	272,043	272,185	272,327	272,469	272,611	272,753	272,895	273,037
1,180.3	273,179	273,321	273,463	273,605	273,747	273,890	274,032	274,175	274,317	274,460
1,180.4	274,602	274,745	274,887	275,030	275,173	275,316	275,459	275,601	275,744	275,887
1,180.5	276,030	276,174	276,317	276,460	276,603	276,746	276,890	277,033	277,177	277,320
1,180.6	277,464	277,607	277,751	277,895	278,038	278,182	278,326	278,470	278,614	278,758
1,180.7	278,902	279,046	279,190	279,334	279,479	279,623	279,767	279,912	280,056	280,200
1,180.8	280,345	280,490	280,634	280,779	280,924	281,068	281,213	281,358	281,503	281,648
1,180.9	281,793	281,938	282,083	282,228	282,374	282,519	282,664	282,810	282,955	283,100
1,181	283,246	283,391	283,537	283,683	283,828	283,974	284,120	284,266	284,412	284,558
1,181.1	284,704	284,850	284,996	285,142	285,288	285,434	285,581	285,727	285,874	286,020
1,181.2	286,166	286,313	286,460	286,606	286,753	286,900	287,046	287,193	287,340	287,487
1,181.3	287,634	287,781	287,928	288,075	288,222	288,370	288,517	288,664	288,812	288,959
1,181.4	289,107	289,254	289,402	289,549	289,697	289,845	289,992	290,140	290,288	290,436
1,181.5	290,584	290,732	290,880	291,028	291,176	291,325	291,473	291,621	291,770	291,918
1,181.6	292,066	292,215	292,363	292,512	292,661	292,809	292,958	293,107	293,256	293,405
1,181.7	293,554	293,703	293,852	294,001	294,150	294,299	294,448	294,598	294,747	294,896
1,181.8	295,046	295,195	295,345	295,494	295,644	295,794	295,943	296,093	296,243	296,393
1,181.9	296,543	296,693	296,843	296,993	297,143	297,293	297,443	297,594	297,744	297,894
1,182	298,045	298,195	298,346	298,496	298,647	298,798	298,948	299,099	299,250	299,401
1,182.1	299,552	299,703	299,854	300,005	300,156	300,307	300,458	300,609	300,761	300,912
1,182.2	301,063	301,215	301,366	301,518	301,670	301,821	301,973	302,125	302,276	302,428
1,182.3	302,580	302,732	302,884	303,036	303,188	303,340	303,492	303,645	303,797	303,949
1,182.4	304,102	304,254	304,407	304,559	304,712	304,864	305,017	305,170	305,323	305,475
1,182.5	305,628	305,781	305,934	306,087	306,240	306,393	306,546	306,700	306,853	307,006
1,182.6	307,160	307,313	307,466	307,620	307,774	307,927	308,081	308,235	308,388	308,542

Appendix E (continued)

**Hubbard Creek Reservoir  
RESERVOIR CAPACITY TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,182.7	308,696	308,850	309,004	309,158	309,312	309,466	309,620	309,774	309,929	310,083
1,182.8	310,237	310,392	310,546	310,700	310,855	311,010	311,164	311,319	311,474	311,628
1,182.9	311,783	311,938	312,093	312,248	312,403	312,558	312,713	312,868	313,024	313,179
1,183	313,334	313,490	313,645	313,801	313,956	314,112	314,267	314,423	314,579	314,734
1,183.1	314,890	315,046	315,202	315,358	315,514	315,670	315,826	315,982	316,138	316,295
1,183.2	316,451	316,607	316,764	316,920	317,077	317,233	317,390	317,547	317,703	317,860
1,183.3	318,017	318,174								

Note: Capacities above elevation 1,178.90 feet calculated from interpolated and extrapolated areas

Appendix F  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,117	0	0	0	0	0	0	0	0	0	0
1,117.1	0	0	0	0	0	0	0	0	0	0
1,117.2	0	1	1	1	1	1	1	1	1	1
1,117.3	1	1	1	1	1	1	1	1	1	1
1,117.4	1	1	1	1	1	1	1	1	1	1
1,117.5	1	1	1	1	1	1	1	1	1	1
1,117.6	1	1	1	1	1	1	1	1	1	1
1,117.7	1	1	1	1	1	1	1	1	1	1
1,117.8	1	1	1	1	1	1	1	1	1	1
1,117.9	1	1	1	1	1	1	1	1	1	1
1,118	1	1	1	1	1	1	1	1	1	1
1,118.1	1	1	1	1	1	2	2	2	2	2
1,118.2	2	2	2	2	2	2	2	3	3	3
1,118.3	4	4	4	5	5	5	5	6	6	6
1,118.4	7	7	7	7	8	8	8	8	8	9
1,118.5	9	9	9	9	9	10	10	10	10	11
1,118.6	11	11	11	11	11	12	12	12	12	12
1,118.7	12	13	13	13	13	13	13	13	14	14
1,118.8	14	14	14	14	14	15	15	15	15	15
1,118.9	15	15	15	16	16	16	16	16	16	16
1,119	16	17	17	17	17	17	17	17	18	18
1,119.1	18	18	18	18	18	19	19	19	19	19
1,119.2	19	19	20	20	20	20	20	20	20	20
1,119.3	21	21	21	21	21	21	21	21	22	22
1,119.4	22	22	22	22	22	23	23	23	23	23
1,119.5	23	23	23	24	24	24	24	24	24	24
1,119.6	24	24	25	25	25	25	25	25	25	25
1,119.7	25	26	26	26	26	26	26	26	26	26
1,119.8	27	27	27	27	27	27	27	27	27	28
1,119.9	28	28	28	28	28	28	28	28	29	29
1,120	29	29	29	30	30	30	30	30	30	31
1,120.1	31	31	31	31	31	32	32	32	32	33
1,120.2	33	33	33	34	34	34	34	34	34	34
1,120.3	34	35	35	35	35	35	35	35	35	36
1,120.4	36	36	36	36	36	36	37	37	37	37
1,120.5	37	37	37	37	37	38	38	38	38	38
1,120.6	38	38	38	38	39	39	39	39	39	39
1,120.7	39	39	40	40	40	40	40	40	40	40
1,120.8	41	41	41	41	41	41	41	41	42	42
1,120.9	42	42	42	42	42	42	43	43	43	43
1,121	43	43	43	43	43	44	44	44	44	44
1,121.1	44	45	45	45	45	45	45	45	46	46
1,121.2	46	46	46	46	46	47	47	47	47	47
1,121.3	47	48	48	48	48	48	49	49	49	49
1,121.4	49	49	50	50	50	50	50	51	51	51
1,121.5	51	51	52	52	52	52	53	53	53	54
1,121.6	54	54	55	55	55	55	56	56	56	57
1,121.7	57	57	58	58	58	58	59	59	59	60
1,121.8	60	60	61	61	61	61	62	62	62	63
1,121.9	63	63	64	64	64	64	65	65	65	65
1,122	66	66	66	66	66	67	67	67	67	68
1,122.1	68	68	68	69	69	69	70	70	70	70
1,122.2	71	71	71	71	71	72	72	72	72	73
1,122.3	73	73	73	73	74	74	74	74	75	75
1,122.4	75	75	75	76	76	76	76	76	77	77
1,122.5	77	77	77	78	78	78	78	78	79	79
1,122.6	79	79	80	80	80	80	80	81	81	81
1,122.7	81	81	82	82	82	82	82	83	83	83
1,122.8	83	83	84	84	84	84	84	85	85	85
1,122.9	85	85	86	86	86	86	86	87	87	87

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,123	87	87	88	88	88	88	88	89	89	89
1,123.1	89	89	90	90	90	90	91	91	91	91
1,123.2	91	92	92	92	92	92	93	93	93	93
1,123.3	94	94	94	94	94	95	95	95	95	96
1,123.4	96	96	96	96	97	97	97	97	98	98
1,123.5	98	98	99	99	99	99	99	100	100	100
1,123.6	100	101	101	101	101	102	102	102	102	103
1,123.7	103	103	103	104	104	104	104	105	105	105
1,123.8	105	106	106	106	106	106	107	107	107	107
1,123.9	108	108	108	108	109	109	109	109	110	110
1,124	110	110	110	111	111	111	111	112	112	112
1,124.1	112	113	113	113	113	114	114	114	115	115
1,124.2	115	115	116	116	116	116	116	117	117	117
1,124.3	117	118	118	118	118	119	119	119	119	119
1,124.4	120	120	120	120	121	121	121	121	121	122
1,124.5	122	122	122	123	123	123	123	123	124	124
1,124.6	124	124	125	125	125	125	126	126	126	126
1,124.7	127	127	127	127	128	128	128	128	128	129
1,124.8	129	129	129	129	130	130	130	130	131	131
1,124.9	131	131	131	132	132	132	132	132	132	133
1,125	133	133	133	133	134	134	134	134	134	135
1,125.1	135	135	135	135	136	136	136	136	136	137
1,125.2	137	137	137	137	138	138	138	138	138	139
1,125.3	139	139	139	139	140	140	140	140	140	141
1,125.4	141	141	141	141	141	142	142	142	142	142
1,125.5	143	143	143	143	143	144	144	144	144	144
1,125.6	145	145	145	145	146	146	146	146	146	147
1,125.7	147	147	147	147	148	148	148	148	148	149
1,125.8	149	149	149	149	149	150	150	150	150	150
1,125.9	151	151	151	151	151	152	152	152	152	152
1,126	153	153	153	153	153	154	154	154	154	154
1,126.1	155	155	155	155	155	156	156	156	156	156
1,126.2	156	157	157	157	157	157	158	158	158	158
1,126.3	158	159	159	159	159	159	160	160	160	160
1,126.4	161	161	161	161	162	162	162	162	162	163
1,126.5	163	163	163	164	164	164	164	165	165	165
1,126.6	165	166	166	166	166	167	167	167	168	168
1,126.7	168	168	169	169	169	169	170	170	170	170
1,126.8	171	171	171	171	172	172	172	172	173	173
1,126.9	173	173	174	174	174	174	175	175	175	175
1,127	176	176	176	176	177	177	177	177	178	178
1,127.1	178	178	179	179	179	179	180	180	180	180
1,127.2	181	181	181	181	182	182	182	182	183	183
1,127.3	183	184	184	184	184	185	185	185	186	186
1,127.4	186	186	187	187	187	188	188	188	188	189
1,127.5	189	189	190	190	190	190	191	191	191	192
1,127.6	192	192	192	193	193	193	194	194	194	195
1,127.7	195	195	195	196	196	196	197	197	197	197
1,127.8	198	198	198	198	199	199	199	199	200	200
1,127.9	200	200	201	201	201	201	202	202	202	202
1,128	203	203	203	203	204	204	204	204	205	205
1,128.1	205	205	206	206	206	206	207	207	207	207
1,128.2	208	208	208	208	209	209	209	210	210	210
1,128.3	211	211	211	211	212	212	212	213	213	213
1,128.4	214	214	214	215	215	215	215	216	216	216
1,128.5	217	217	217	218	218	218	218	219	219	219
1,128.6	220	220	220	221	221	221	221	222	222	222
1,128.7	223	223	223	223	224	224	224	225	225	225
1,128.8	226	226	226	226	227	227	227	228	228	228
1,128.9	229	229	229	229	230	230	230	231	231	231

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,129	232	232	232	233	233	233	234	234	234	235
1,129.1	235	235	236	236	236	237	237	237	238	238
1,129.2	238	239	239	239	239	240	240	240	241	241
1,129.3	241	242	242	242	243	243	243	244	244	244
1,129.4	245	245	245	246	246	246	247	247	247	248
1,129.5	248	248	249	249	249	250	250	250	251	251
1,129.6	251	252	252	253	253	253	254	254	254	255
1,129.7	255	255	256	256	256	257	257	257	258	258
1,129.8	258	259	259	260	260	260	261	261	261	262
1,129.9	262	262	263	263	263	264	264	265	265	265
1,130	266	266	267	267	267	268	268	269	269	270
1,130.1	270	271	271	271	272	272	273	273	274	274
1,130.2	275	275	275	276	276	277	277	278	278	279
1,130.3	279	280	280	281	281	282	282	283	283	284
1,130.4	284	285	285	285	286	286	287	287	288	289
1,130.5	289	290	290	291	291	292	292	293	294	294
1,130.6	295	295	296	296	297	297	298	298	299	299
1,130.7	300	300	301	301	302	302	303	303	304	304
1,130.8	305	305	306	306	307	307	308	308	309	309
1,130.9	310	310	311	311	312	312	313	313	314	314
1,131	315	315	316	316	317	317	318	318	319	320
1,131.1	320	321	321	322	322	323	323	324	325	325
1,131.2	326	326	327	328	328	329	330	331	332	332
1,131.3	333	334	335	335	336	337	338	338	339	340
1,131.4	341	342	343	344	345	346	347	348	349	350
1,131.5	351	352	353	354	355	356	357	358	359	360
1,131.6	361	362	363	364	365	366	367	368	369	370
1,131.7	371	372	373	374	375	375	376	378	379	379
1,131.8	380	381	382	382	383	384	384	385	386	386
1,131.9	387	388	389	389	390	391	391	392	393	394
1,132	394	395	396	397	398	399	399	400	401	402
1,132.1	403	403	404	405	406	407	408	409	410	411
1,132.2	412	413	414	415	416	417	419	420	421	422
1,132.3	423	424	425	426	427	428	429	431	432	433
1,132.4	434	435	436	437	438	439	440	441	442	443
1,132.5	443	444	445	446	448	449	450	451	452	453
1,132.6	455	456	457	458	459	461	462	463	464	465
1,132.7	467	468	469	470	471	472	473	475	476	478
1,132.8	480	481	482	483	485	486	488	489	491	492
1,132.9	494	495	496	498	499	500	501	503	504	505
1,133	506	507	509	510	511	512	514	515	516	517
1,133.1	519	520	521	522	524	525	526	527	528	529
1,133.2	531	532	533	534	536	537	539	540	541	542
1,133.3	544	545	546	547	549	550	551	552	553	555
1,133.4	556	557	559	560	562	563	564	566	567	568
1,133.5	570	571	572	574	575	577	578	579	581	582
1,133.6	584	585	586	588	589	591	592	594	595	596
1,133.7	598	599	600	601	603	604	605	606	607	609
1,133.8	610	611	612	614	615	616	617	619	620	621
1,133.9	623	624	625	626	628	629	630	632	633	634
1,134	636	637	639	640	641	643	644	645	647	648
1,134.1	649	651	652	653	654	656	657	659	660	661
1,134.2	663	664	666	667	668	670	672	673	675	676
1,134.3	678	679	681	682	684	686	687	689	690	692
1,134.4	693	695	696	698	699	700	702	703	704	706
1,134.5	707	708	710	711	713	714	715	717	718	720
1,134.6	721	723	724	726	727	729	730	732	734	735
1,134.7	737	738	740	741	743	744	746	747	749	750
1,134.8	752	753	754	756	757	758	760	761	762	763
1,134.9	765	766	767	768	769	771	772	773	774	775

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,135	777	778	779	781	782	784	785	787	788	790
1,135.1	791	793	794	796	797	798	800	801	802	803
1,135.2	805	806	807	808	810	811	812	813	815	816
1,135.3	817	818	820	821	822	824	825	826	827	829
1,135.4	830	831	832	834	835	836	837	839	841	842
1,135.5	844	845	847	849	850	852	853	854	855	857
1,135.6	858	859	860	862	863	865	867	868	869	871
1,135.7	872	873	874	875	877	878	879	880	882	883
1,135.8	884	885	886	888	889	890	891	893	894	895
1,135.9	896	898	899	900	902	903	904	905	907	908
1,136	910	911	912	914	915	916	917	919	920	921
1,136.1	922	924	925	926	927	929	930	931	932	933
1,136.2	935	936	937	938	939	940	942	943	944	945
1,136.3	947	948	949	950	951	953	954	956	957	958
1,136.4	960	961	962	963	964	966	967	968	969	971
1,136.5	972	973	975	976	977	978	979	981	982	983
1,136.6	984	986	987	988	990	991	992	993	995	996
1,136.7	997	998	1,000	1,001	1,002	1,003	1,005	1,006	1,007	1,009
1,136.8	1,010	1,011	1,013	1,014	1,016	1,017	1,019	1,020	1,022	1,023
1,136.9	1,025	1,026	1,027	1,029	1,030	1,032	1,033	1,035	1,036	1,038
1,137	1,039	1,041	1,042	1,044	1,045	1,047	1,048	1,050	1,051	1,053
1,137.1	1,054	1,056	1,058	1,059	1,061	1,063	1,064	1,066	1,068	1,069
1,137.2	1,071	1,073	1,074	1,076	1,078	1,079	1,081	1,083	1,084	1,086
1,137.3	1,088	1,090	1,092	1,093	1,095	1,097	1,099	1,100	1,102	1,104
1,137.4	1,106	1,107	1,109	1,111	1,113	1,115	1,116	1,118	1,120	1,122
1,137.5	1,124	1,125	1,127	1,129	1,131	1,133	1,134	1,136	1,138	1,140
1,137.6	1,142	1,143	1,145	1,146	1,148	1,149	1,151	1,152	1,154	1,155
1,137.7	1,157	1,158	1,160	1,161	1,163	1,164	1,166	1,167	1,169	1,170
1,137.8	1,171	1,173	1,174	1,176	1,177	1,178	1,180	1,181	1,183	1,184
1,137.9	1,185	1,187	1,188	1,189	1,191	1,192	1,194	1,195	1,196	1,198
1,138	1,199	1,200	1,202	1,203	1,205	1,206	1,207	1,209	1,210	1,211
1,138.1	1,213	1,214	1,216	1,217	1,219	1,220	1,222	1,223	1,225	1,226
1,138.2	1,228	1,229	1,231	1,232	1,234	1,235	1,237	1,238	1,240	1,241
1,138.3	1,243	1,244	1,246	1,247	1,249	1,251	1,252	1,254	1,255	1,257
1,138.4	1,258	1,260	1,261	1,263	1,265	1,266	1,268	1,269	1,271	1,273
1,138.5	1,274	1,276	1,278	1,280	1,282	1,284	1,285	1,287	1,289	1,290
1,138.6	1,292	1,294	1,295	1,297	1,298	1,300	1,302	1,304	1,305	1,307
1,138.7	1,308	1,310	1,312	1,314	1,316	1,317	1,319	1,321	1,323	1,325
1,138.8	1,327	1,328	1,330	1,332	1,335	1,336	1,338	1,340	1,342	1,344
1,138.9	1,346	1,348	1,350	1,353	1,355	1,357	1,359	1,361	1,362	1,364
1,139	1,366	1,368	1,370	1,372	1,374	1,375	1,377	1,379	1,381	1,382
1,139.1	1,384	1,386	1,388	1,390	1,391	1,393	1,395	1,397	1,398	1,400
1,139.2	1,402	1,403	1,405	1,407	1,408	1,410	1,411	1,413	1,414	1,416
1,139.3	1,417	1,418	1,420	1,421	1,422	1,424	1,425	1,426	1,428	1,429
1,139.4	1,430	1,432	1,433	1,434	1,436	1,437	1,438	1,440	1,441	1,442
1,139.5	1,443	1,445	1,446	1,447	1,448	1,450	1,451	1,452	1,454	1,455
1,139.6	1,456	1,458	1,459	1,460	1,461	1,463	1,464	1,465	1,467	1,468
1,139.7	1,469	1,471	1,472	1,473	1,475	1,476	1,477	1,479	1,480	1,481
1,139.8	1,483	1,484	1,485	1,487	1,488	1,489	1,491	1,492	1,493	1,495
1,139.9	1,496	1,497	1,499	1,500	1,502	1,503	1,504	1,506	1,507	1,508
1,140	1,510	1,511	1,512	1,514	1,515	1,516	1,517	1,519	1,520	1,521
1,140.1	1,523	1,524	1,526	1,527	1,529	1,530	1,531	1,532	1,534	1,535
1,140.2	1,536	1,538	1,539	1,540	1,542	1,543	1,544	1,546	1,547	1,548
1,140.3	1,550	1,551	1,553	1,554	1,556	1,557	1,558	1,560	1,561	1,562
1,140.4	1,564	1,565	1,566	1,568	1,569	1,570	1,571	1,573	1,574	1,575
1,140.5	1,577	1,578	1,579	1,581	1,582	1,583	1,585	1,586	1,587	1,588
1,140.6	1,590	1,591	1,592	1,594	1,595	1,597	1,598	1,599	1,601	1,602
1,140.7	1,603	1,605	1,606	1,608	1,610	1,611	1,613	1,615	1,616	1,618
1,140.8	1,619	1,621	1,622	1,624	1,625	1,627	1,628	1,630	1,631	1,633
1,140.9	1,635	1,636	1,638	1,640	1,641	1,643	1,645	1,647	1,648	1,650

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,141	1,651	1,653	1,655	1,656	1,658	1,660	1,661	1,663	1,664	1,666
1,141.1	1,668	1,669	1,671	1,673	1,674	1,676	1,678	1,680	1,681	1,683
1,141.2	1,685	1,687	1,688	1,690	1,692	1,694	1,695	1,697	1,699	1,701
1,141.3	1,703	1,704	1,706	1,708	1,709	1,711	1,713	1,715	1,716	1,718
1,141.4	1,720	1,722	1,724	1,726	1,727	1,729	1,731	1,732	1,734	1,736
1,141.5	1,738	1,740	1,741	1,743	1,745	1,747	1,749	1,750	1,752	1,754
1,141.6	1,756	1,758	1,760	1,762	1,763	1,765	1,767	1,769	1,771	1,773
1,141.7	1,775	1,777	1,778	1,780	1,782	1,784	1,786	1,788	1,790	1,792
1,141.8	1,794	1,796	1,798	1,800	1,802	1,805	1,807	1,809	1,811	1,813
1,141.9	1,815	1,817	1,819	1,821	1,823	1,826	1,828	1,830	1,832	1,834
1,142	1,836	1,838	1,840	1,842	1,844	1,846	1,848	1,850	1,853	1,855
1,142.1	1,857	1,859	1,861	1,863	1,865	1,867	1,869	1,871	1,873	1,875
1,142.2	1,876	1,878	1,880	1,882	1,884	1,885	1,887	1,889	1,891	1,893
1,142.3	1,895	1,896	1,898	1,900	1,902	1,903	1,905	1,907	1,909	1,910
1,142.4	1,912	1,914	1,916	1,918	1,919	1,921	1,923	1,925	1,927	1,929
1,142.5	1,931	1,933	1,936	1,938	1,940	1,942	1,943	1,945	1,947	1,948
1,142.6	1,950	1,952	1,954	1,956	1,958	1,960	1,962	1,963	1,965	1,966
1,142.7	1,968	1,970	1,971	1,973	1,974	1,976	1,977	1,979	1,981	1,982
1,142.8	1,984	1,985	1,987	1,988	1,990	1,991	1,992	1,994	1,995	1,997
1,142.9	1,998	2,000	2,001	2,003	2,004	2,005	2,007	2,008	2,009	2,011
1,143	2,012	2,014	2,015	2,017	2,019	2,021	2,022	2,024	2,025	2,027
1,143.1	2,028	2,030	2,032	2,033	2,035	2,036	2,038	2,039	2,041	2,042
1,143.2	2,044	2,046	2,047	2,048	2,050	2,051	2,052	2,054	2,055	2,056
1,143.3	2,058	2,059	2,060	2,062	2,063	2,064	2,066	2,067	2,068	2,069
1,143.4	2,071	2,072	2,073	2,075	2,076	2,077	2,079	2,080	2,081	2,083
1,143.5	2,085	2,086	2,088	2,089	2,091	2,093	2,094	2,095	2,097	2,098
1,143.6	2,099	2,101	2,102	2,103	2,105	2,106	2,107	2,109	2,110	2,111
1,143.7	2,113	2,114	2,115	2,117	2,118	2,120	2,121	2,123	2,125	2,126
1,143.8	2,127	2,129	2,130	2,132	2,133	2,135	2,136	2,137	2,138	2,140
1,143.9	2,141	2,142	2,143	2,145	2,146	2,147	2,148	2,149	2,151	2,152
1,144	2,153	2,154	2,155	2,157	2,158	2,159	2,160	2,161	2,163	2,164
1,144.1	2,165	2,166	2,167	2,169	2,170	2,171	2,172	2,173	2,175	2,176
1,144.2	2,177	2,179	2,180	2,181	2,183	2,184	2,185	2,187	2,188	2,190
1,144.3	2,191	2,192	2,194	2,195	2,197	2,199	2,200	2,202	2,203	2,205
1,144.4	2,207	2,208	2,210	2,211	2,213	2,215	2,216	2,218	2,219	2,220
1,144.5	2,222	2,223	2,224	2,225	2,227	2,228	2,229	2,230	2,232	2,233
1,144.6	2,234	2,235	2,237	2,238	2,239	2,240	2,242	2,243	2,244	2,245
1,144.7	2,246	2,247	2,249	2,250	2,251	2,252	2,253	2,254	2,255	2,256
1,144.8	2,258	2,259	2,260	2,261	2,262	2,263	2,264	2,265	2,267	2,268
1,144.9	2,269	2,270	2,271	2,272	2,274	2,275	2,276	2,277	2,278	2,280
1,145	2,281	2,282	2,283	2,284	2,285	2,287	2,288	2,289	2,290	2,292
1,145.1	2,293	2,294	2,296	2,297	2,298	2,299	2,300	2,301	2,303	2,304
1,145.2	2,305	2,306	2,307	2,309	2,310	2,311	2,312	2,313	2,314	2,316
1,145.3	2,317	2,318	2,319	2,320	2,321	2,323	2,324	2,325	2,326	2,327
1,145.4	2,328	2,330	2,331	2,332	2,333	2,334	2,335	2,337	2,338	2,339
1,145.5	2,340	2,341	2,342	2,343	2,344	2,346	2,347	2,348	2,349	2,350
1,145.6	2,351	2,352	2,353	2,354	2,355	2,356	2,357	2,358	2,359	2,360
1,145.7	2,361	2,363	2,364	2,365	2,366	2,367	2,368	2,369	2,370	2,372
1,145.8	2,373	2,374	2,375	2,376	2,377	2,379	2,380	2,382	2,383	2,384
1,145.9	2,386	2,387	2,388	2,389	2,391	2,392	2,393	2,395	2,396	2,397
1,146	2,399	2,400	2,401	2,402	2,404	2,405	2,406	2,407	2,409	2,410
1,146.1	2,411	2,413	2,414	2,415	2,417	2,418	2,419	2,421	2,422	2,423
1,146.2	2,424	2,426	2,427	2,428	2,430	2,431	2,433	2,434	2,435	2,437
1,146.3	2,438	2,439	2,441	2,442	2,443	2,445	2,446	2,447	2,449	2,450
1,146.4	2,452	2,453	2,454	2,456	2,457	2,458	2,459	2,461	2,462	2,463
1,146.5	2,465	2,466	2,467	2,468	2,470	2,471	2,472	2,474	2,475	2,476
1,146.6	2,477	2,479	2,480	2,481	2,483	2,484	2,485	2,486	2,488	2,489
1,146.7	2,490	2,492	2,493	2,494	2,496	2,497	2,498	2,500	2,501	2,503
1,146.8	2,504	2,505	2,507	2,508	2,510	2,511	2,513	2,514	2,516	2,518
1,146.9	2,519	2,521	2,523	2,524	2,526	2,527	2,529	2,530	2,532	2,533

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,147	2,535	2,537	2,538	2,540	2,541	2,543	2,544	2,545	2,547	2,548
1,147.1	2,550	2,551	2,552	2,554	2,555	2,557	2,558	2,560	2,561	2,562
1,147.2	2,564	2,565	2,566	2,568	2,569	2,571	2,572	2,573	2,575	2,576
1,147.3	2,578	2,579	2,581	2,582	2,584	2,586	2,587	2,589	2,590	2,592
1,147.4	2,594	2,595	2,597	2,599	2,600	2,602	2,603	2,605	2,606	2,608
1,147.5	2,609	2,611	2,612	2,614	2,615	2,617	2,618	2,620	2,622	2,623
1,147.6	2,625	2,626	2,628	2,630	2,632	2,634	2,635	2,637	2,639	2,641
1,147.7	2,642	2,644	2,646	2,647	2,649	2,651	2,653	2,654	2,656	2,658
1,147.8	2,659	2,661	2,663	2,664	2,666	2,668	2,669	2,671	2,673	2,674
1,147.9	2,676	2,678	2,680	2,681	2,683	2,685	2,687	2,689	2,690	2,692
1,148	2,694	2,696	2,697	2,699	2,701	2,703	2,704	2,706	2,708	2,710
1,148.1	2,711	2,713	2,715	2,717	2,718	2,720	2,722	2,724	2,726	2,728
1,148.2	2,730	2,732	2,734	2,735	2,737	2,739	2,741	2,742	2,744	2,746
1,148.3	2,748	2,750	2,751	2,753	2,755	2,757	2,759	2,761	2,763	2,765
1,148.4	2,767	2,769	2,771	2,773	2,775	2,777	2,779	2,781	2,783	2,785
1,148.5	2,787	2,789	2,791	2,793	2,795	2,797	2,799	2,801	2,803	2,805
1,148.6	2,807	2,809	2,811	2,813	2,815	2,816	2,818	2,820	2,822	2,824
1,148.7	2,826	2,828	2,830	2,832	2,834	2,836	2,839	2,841	2,843	2,845
1,148.8	2,847	2,849	2,852	2,854	2,856	2,858	2,861	2,863	2,865	2,867
1,148.9	2,869	2,872	2,874	2,876	2,878	2,880	2,882	2,884	2,886	2,888
1,149	2,890	2,892	2,894	2,896	2,898	2,901	2,903	2,905	2,907	2,909
1,149.1	2,911	2,913	2,915	2,918	2,920	2,922	2,924	2,926	2,929	2,931
1,149.2	2,934	2,937	2,939	2,941	2,944	2,946	2,949	2,951	2,954	2,956
1,149.3	2,959	2,961	2,964	2,966	2,969	2,971	2,974	2,977	2,979	2,982
1,149.4	2,985	2,988	2,990	2,993	2,996	2,998	3,001	3,003	3,005	3,008
1,149.5	3,010	3,012	3,014	3,017	3,019	3,021	3,024	3,026	3,028	3,030
1,149.6	3,032	3,035	3,037	3,039	3,042	3,044	3,046	3,049	3,051	3,054
1,149.7	3,056	3,059	3,061	3,064	3,066	3,068	3,070	3,073	3,075	3,078
1,149.8	3,080	3,083	3,085	3,088	3,090	3,093	3,095	3,098	3,100	3,102
1,149.9	3,105	3,107	3,110	3,112	3,115	3,117	3,119	3,122	3,124	3,127
1,150	3,130	3,132	3,134	3,137	3,139	3,142	3,144	3,146	3,149	3,151
1,150.1	3,154	3,156	3,158	3,161	3,164	3,167	3,169	3,172	3,175	3,177
1,150.2	3,180	3,183	3,185	3,188	3,191	3,194	3,196	3,199	3,202	3,204
1,150.3	3,207	3,210	3,212	3,215	3,217	3,220	3,222	3,225	3,227	3,230
1,150.4	3,232	3,235	3,238	3,240	3,243	3,245	3,248	3,250	3,253	3,256
1,150.5	3,259	3,262	3,265	3,268	3,271	3,274	3,277	3,280	3,283	3,286
1,150.6	3,289	3,292	3,295	3,298	3,301	3,304	3,307	3,310	3,313	3,315
1,150.7	3,318	3,321	3,323	3,326	3,329	3,331	3,334	3,336	3,339	3,341
1,150.8	3,344	3,346	3,349	3,351	3,354	3,356	3,358	3,361	3,363	3,366
1,150.9	3,368	3,370	3,373	3,375	3,378	3,380	3,383	3,385	3,387	3,390
1,151	3,393	3,395	3,397	3,400	3,402	3,404	3,407	3,409	3,412	3,414
1,151.1	3,417	3,419	3,421	3,423	3,426	3,428	3,430	3,432	3,435	3,437
1,151.2	3,439	3,441	3,443	3,446	3,448	3,450	3,453	3,455	3,457	3,460
1,151.3	3,462	3,464	3,467	3,469	3,471	3,474	3,476	3,478	3,480	3,482
1,151.4	3,485	3,487	3,489	3,492	3,494	3,496	3,499	3,501	3,504	3,506
1,151.5	3,509	3,511	3,514	3,516	3,519	3,521	3,524	3,526	3,529	3,531
1,151.6	3,534	3,536	3,539	3,541	3,543	3,546	3,548	3,551	3,553	3,555
1,151.7	3,557	3,560	3,562	3,564	3,567	3,569	3,571	3,573	3,576	3,578
1,151.8	3,580	3,582	3,585	3,587	3,589	3,591	3,593	3,596	3,598	3,600
1,151.9	3,602	3,605	3,607	3,609	3,611	3,614	3,616	3,618	3,621	3,623
1,152	3,626	3,628	3,630	3,633	3,635	3,638	3,640	3,642	3,645	3,647
1,152.1	3,650	3,652	3,655	3,658	3,661	3,663	3,666	3,669	3,672	3,675
1,152.2	3,678	3,680	3,683	3,686	3,688	3,691	3,693	3,696	3,698	3,700
1,152.3	3,703	3,705	3,707	3,710	3,712	3,714	3,717	3,719	3,721	3,724
1,152.4	3,726	3,729	3,731	3,733	3,735	3,737	3,739	3,742	3,744	3,746
1,152.5	3,748	3,750	3,752	3,754	3,756	3,758	3,760	3,762	3,765	3,767
1,152.6	3,770	3,772	3,774	3,776	3,778	3,780	3,783	3,785	3,787	3,789
1,152.7	3,791	3,794	3,796	3,798	3,800	3,802	3,804	3,806	3,809	3,811
1,152.8	3,813	3,815	3,818	3,820	3,822	3,824	3,826	3,829	3,831	3,833
1,152.9	3,835	3,838	3,840	3,842	3,844	3,847	3,849	3,851	3,853	3,855



Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,153	3,858	3,860	3,862	3,864	3,866	3,869	3,871	3,873	3,875	3,878
1,153.1	3,880	3,882	3,885	3,887	3,890	3,892	3,895	3,897	3,899	3,902
1,153.2	3,904	3,906	3,909	3,911	3,914	3,916	3,918	3,921	3,923	3,926
1,153.3	3,928	3,930	3,933	3,935	3,937	3,939	3,942	3,944	3,946	3,949
1,153.4	3,951	3,953	3,955	3,958	3,960	3,962	3,964	3,967	3,969	3,971
1,153.5	3,973	3,976	3,978	3,980	3,982	3,985	3,987	3,989	3,992	3,994
1,153.6	3,996	3,998	4,001	4,003	4,005	4,008	4,010	4,013	4,015	4,018
1,153.7	4,020	4,023	4,025	4,028	4,030	4,032	4,035	4,038	4,040	4,043
1,153.8	4,046	4,048	4,051	4,054	4,057	4,059	4,061	4,064	4,066	4,068
1,153.9	4,070	4,073	4,075	4,078	4,080	4,082	4,085	4,087	4,089	4,092
1,154	4,094	4,097	4,099	4,102	4,104	4,107	4,109	4,112	4,114	4,116
1,154.1	4,119	4,121	4,123	4,126	4,128	4,131	4,133	4,135	4,138	4,140
1,154.2	4,143	4,145	4,147	4,150	4,152	4,154	4,157	4,159	4,161	4,164
1,154.3	4,166	4,168	4,171	4,173	4,175	4,177	4,180	4,182	4,184	4,186
1,154.4	4,189	4,191	4,193	4,195	4,198	4,200	4,202	4,204	4,207	4,209
1,154.5	4,211	4,214	4,216	4,218	4,221	4,223	4,225	4,227	4,229	4,232
1,154.6	4,234	4,236	4,238	4,240	4,242	4,245	4,247	4,249	4,252	4,254
1,154.7	4,256	4,258	4,261	4,263	4,265	4,267	4,270	4,272	4,274	4,276
1,154.8	4,279	4,281	4,283	4,286	4,288	4,291	4,293	4,295	4,298	4,300
1,154.9	4,302	4,305	4,307	4,309	4,312	4,314	4,317	4,319	4,321	4,324
1,155	4,326	4,329	4,331	4,333	4,336	4,338	4,341	4,343	4,345	4,348
1,155.1	4,350	4,353	4,355	4,358	4,360	4,362	4,365	4,367	4,370	4,372
1,155.2	4,375	4,377	4,379	4,382	4,384	4,387	4,389	4,392	4,394	4,397
1,155.3	4,399	4,402	4,404	4,407	4,410	4,412	4,415	4,417	4,420	4,422
1,155.4	4,425	4,427	4,430	4,432	4,435	4,438	4,440	4,443	4,445	4,448
1,155.5	4,451	4,454	4,456	4,459	4,462	4,465	4,468	4,470	4,473	4,476
1,155.6	4,479	4,482	4,485	4,488	4,491	4,493	4,496	4,499	4,501	4,504
1,155.7	4,506	4,509	4,512	4,514	4,517	4,519	4,522	4,524	4,527	4,530
1,155.8	4,532	4,535	4,538	4,540	4,543	4,546	4,548	4,551	4,554	4,556
1,155.9	4,559	4,561	4,564	4,567	4,569	4,572	4,574	4,577	4,580	4,582
1,156	4,585	4,587	4,590	4,593	4,595	4,598	4,600	4,603	4,605	4,608
1,156.1	4,610	4,613	4,615	4,618	4,620	4,623	4,625	4,628	4,630	4,633
1,156.2	4,635	4,638	4,641	4,643	4,646	4,649	4,651	4,654	4,656	4,659
1,156.3	4,661	4,664	4,667	4,669	4,672	4,674	4,677	4,680	4,682	4,685
1,156.4	4,688	4,690	4,693	4,696	4,699	4,702	4,705	4,707	4,710	4,713
1,156.5	4,716	4,719	4,721	4,724	4,727	4,730	4,732	4,735	4,738	4,740
1,156.6	4,743	4,746	4,749	4,751	4,754	4,757	4,760	4,763	4,766	4,769
1,156.7	4,772	4,775	4,778	4,781	4,784	4,787	4,790	4,793	4,796	4,799
1,156.8	4,802	4,805	4,808	4,811	4,814	4,817	4,820	4,823	4,826	4,829
1,156.9	4,832	4,834	4,837	4,840	4,843	4,846	4,849	4,852	4,855	4,857
1,157	4,860	4,863	4,866	4,869	4,871	4,874	4,877	4,880	4,882	4,885
1,157.1	4,888	4,890	4,893	4,895	4,898	4,901	4,903	4,906	4,909	4,911
1,157.2	4,914	4,916	4,919	4,921	4,924	4,927	4,929	4,932	4,934	4,937
1,157.3	4,939	4,942	4,945	4,947	4,950	4,952	4,955	4,958	4,960	4,963
1,157.4	4,965	4,968	4,970	4,973	4,975	4,978	4,981	4,983	4,986	4,988
1,157.5	4,991	4,994	4,996	4,999	5,002	5,004	5,007	5,010	5,012	5,015
1,157.6	5,017	5,020	5,023	5,025	5,028	5,031	5,034	5,036	5,039	5,042
1,157.7	5,044	5,047	5,050	5,053	5,056	5,059	5,062	5,065	5,067	5,070
1,157.8	5,073	5,076	5,079	5,082	5,085	5,087	5,090	5,093	5,096	5,098
1,157.9	5,101	5,104	5,107	5,110	5,112	5,115	5,118	5,121	5,124	5,127
1,158	5,129	5,132	5,135	5,138	5,141	5,144	5,147	5,150	5,153	5,155
1,158.1	5,158	5,161	5,165	5,168	5,171	5,174	5,177	5,180	5,183	5,186
1,158.2	5,189	5,191	5,194	5,197	5,200	5,203	5,206	5,209	5,211	5,214
1,158.3	5,217	5,220	5,223	5,226	5,229	5,232	5,235	5,238	5,241	5,244
1,158.4	5,247	5,250	5,253	5,257	5,260	5,263	5,266	5,269	5,272	5,276
1,158.5	5,279	5,282	5,285	5,288	5,291	5,294	5,297	5,300	5,303	5,306
1,158.6	5,309	5,312	5,316	5,319	5,322	5,325	5,328	5,331	5,334	5,337
1,158.7	5,340	5,343	5,346	5,349	5,352	5,355	5,358	5,361	5,364	5,367
1,158.8	5,370	5,373	5,376	5,380	5,383	5,386	5,389	5,392	5,395	5,398
1,158.9	5,401	5,405	5,408	5,411	5,414	5,417	5,420	5,424	5,427	5,430

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD  
 AREA IN ACRES

March 2017 - January 2018 Survey  
 Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,159	5,433	5,436	5,439	5,442	5,445	5,448	5,452	5,455	5,458	5,461
1,159.1	5,464	5,468	5,471	5,474	5,477	5,480	5,484	5,487	5,490	5,493
1,159.2	5,496	5,500	5,503	5,506	5,509	5,513	5,516	5,519	5,522	5,526
1,159.3	5,529	5,532	5,535	5,538	5,541	5,544	5,547	5,550	5,554	5,557
1,159.4	5,560	5,563	5,566	5,569	5,572	5,575	5,578	5,580	5,584	5,587
1,159.5	5,590	5,593	5,596	5,599	5,601	5,604	5,607	5,610	5,613	5,617
1,159.6	5,620	5,623	5,626	5,629	5,633	5,636	5,639	5,642	5,645	5,648
1,159.7	5,652	5,655	5,658	5,661	5,664	5,667	5,670	5,673	5,677	5,680
1,159.8	5,683	5,687	5,690	5,694	5,697	5,701	5,705	5,708	5,712	5,715
1,159.9	5,719	5,722	5,726	5,729	5,733	5,736	5,740	5,744	5,747	5,751
1,160	5,754	5,758	5,761	5,765	5,768	5,772	5,775	5,779	5,782	5,786
1,160.1	5,789	5,793	5,796	5,800	5,803	5,807	5,810	5,814	5,817	5,821
1,160.2	5,824	5,828	5,831	5,835	5,838	5,842	5,845	5,849	5,852	5,856
1,160.3	5,859	5,863	5,866	5,869	5,873	5,876	5,880	5,883	5,887	5,890
1,160.4	5,894	5,897	5,900	5,904	5,907	5,911	5,914	5,918	5,921	5,924
1,160.5	5,928	5,931	5,934	5,938	5,941	5,944	5,948	5,951	5,955	5,958
1,160.6	5,961	5,965	5,968	5,972	5,975	5,978	5,982	5,985	5,989	5,992
1,160.7	5,996	5,999	6,002	6,006	6,009	6,012	6,016	6,019	6,022	6,026
1,160.8	6,029	6,033	6,036	6,039	6,042	6,046	6,049	6,052	6,056	6,059
1,160.9	6,063	6,066	6,070	6,073	6,076	6,080	6,083	6,087	6,090	6,094
1,161	6,097	6,101	6,104	6,108	6,111	6,115	6,118	6,122	6,125	6,129
1,161.1	6,132	6,136	6,139	6,143	6,146	6,150	6,153	6,157	6,160	6,164
1,161.2	6,167	6,171	6,174	6,178	6,181	6,185	6,188	6,191	6,195	6,199
1,161.3	6,202	6,206	6,210	6,213	6,217	6,221	6,224	6,228	6,232	6,235
1,161.4	6,239	6,243	6,246	6,250	6,254	6,258	6,262	6,265	6,269	6,273
1,161.5	6,277	6,281	6,285	6,289	6,292	6,296	6,300	6,304	6,308	6,311
1,161.6	6,315	6,319	6,323	6,327	6,330	6,334	6,338	6,341	6,345	6,349
1,161.7	6,352	6,356	6,359	6,363	6,367	6,370	6,374	6,378	6,382	6,386
1,161.8	6,389	6,393	6,397	6,401	6,404	6,408	6,412	6,415	6,419	6,423
1,161.9	6,427	6,430	6,434	6,438	6,442	6,446	6,449	6,453	6,457	6,461
1,162	6,465	6,469	6,472	6,476	6,480	6,484	6,488	6,492	6,496	6,500
1,162.1	6,504	6,508	6,512	6,516	6,520	6,524	6,528	6,532	6,536	6,540
1,162.2	6,544	6,548	6,553	6,557	6,561	6,565	6,569	6,573	6,577	6,581
1,162.3	6,585	6,589	6,593	6,597	6,601	6,605	6,609	6,613	6,618	6,622
1,162.4	6,626	6,630	6,634	6,638	6,642	6,646	6,650	6,654	6,658	6,662
1,162.5	6,666	6,670	6,675	6,679	6,684	6,688	6,692	6,696	6,701	6,705
1,162.6	6,710	6,714	6,719	6,723	6,728	6,732	6,737	6,741	6,746	6,750
1,162.7	6,755	6,759	6,763	6,767	6,772	6,776	6,780	6,784	6,788	6,793
1,162.8	6,797	6,801	6,805	6,809	6,814	6,818	6,822	6,826	6,830	6,834
1,162.9	6,838	6,842	6,846	6,850	6,854	6,858	6,862	6,866	6,870	6,873
1,163	6,877	6,885	6,889	6,893	6,897	6,901	6,905	6,909	6,913	6,917
1,163.1	6,920	6,924	6,928	6,932	6,936	6,939	6,943	6,947	6,950	6,954
1,163.2	6,958	6,961	6,965	6,969	6,972	6,976	6,979	6,983	6,987	6,990
1,163.3	6,994	6,997	7,001	7,004	7,008	7,011	7,015	7,018	7,022	7,025
1,163.4	7,028	7,032	7,035	7,039	7,042	7,045	7,049	7,052	7,056	7,059
1,163.5	7,062	7,066	7,069	7,073	7,076	7,079	7,083	7,086	7,090	7,093
1,163.6	7,097	7,100	7,103	7,107	7,110	7,113	7,117	7,120	7,124	7,127
1,163.7	7,130	7,134	7,137	7,141	7,144	7,148	7,151	7,154	7,158	7,161
1,163.8	7,165	7,168	7,171	7,175	7,178	7,182	7,185	7,189	7,192	7,196
1,163.9	7,199	7,203	7,206	7,210	7,213	7,217	7,220	7,223	7,227	7,230
1,164	7,233	7,237	7,240	7,243	7,247	7,250	7,253	7,257	7,260	7,264
1,164.1	7,267	7,271	7,274	7,278	7,281	7,284	7,288	7,291	7,294	7,298
1,164.2	7,301	7,305	7,308	7,311	7,315	7,318	7,322	7,325	7,328	7,332
1,164.3	7,335	7,339	7,342	7,345	7,349	7,352	7,356	7,359	7,362	7,366
1,164.4	7,369	7,373	7,376	7,379	7,383	7,386	7,389	7,393	7,396	7,399
1,164.5	7,403	7,406	7,409	7,413	7,416	7,419	7,423	7,426	7,429	7,432
1,164.6	7,436	7,439	7,443	7,446	7,449	7,453	7,456	7,459	7,463	7,466
1,164.7	7,470	7,473	7,477	7,480	7,483	7,487	7,490	7,494	7,497	7,501
1,164.8	7,504	7,508	7,511	7,514	7,518	7,521	7,525	7,528	7,532	7,535
1,164.9	7,539	7,542	7,546	7,549	7,552	7,556	7,560	7,563	7,566	7,570

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,165	7,573	7,577	7,580	7,584	7,587	7,591	7,594	7,598	7,601	7,605
1,165.1	7,608	7,612	7,616	7,619	7,623	7,626	7,630	7,633	7,637	7,640
1,165.2	7,644	7,647	7,651	7,654	7,658	7,661	7,665	7,668	7,671	7,675
1,165.3	7,678	7,682	7,685	7,689	7,692	7,696	7,699	7,703	7,706	7,710
1,165.4	7,713	7,717	7,720	7,724	7,727	7,731	7,734	7,738	7,741	7,745
1,165.5	7,748	7,751	7,755	7,758	7,762	7,765	7,769	7,772	7,776	7,779
1,165.6	7,783	7,786	7,790	7,793	7,797	7,800	7,804	7,807	7,811	7,814
1,165.7	7,818	7,821	7,825	7,828	7,832	7,835	7,838	7,842	7,845	7,849
1,165.8	7,852	7,856	7,859	7,863	7,866	7,870	7,873	7,877	7,880	7,884
1,165.9	7,887	7,891	7,895	7,899	7,902	7,906	7,910	7,913	7,917	7,921
1,166	7,925	7,928	7,932	7,936	7,940	7,943	7,947	7,951	7,954	7,958
1,166.1	7,962	7,966	7,969	7,973	7,977	7,981	7,984	7,988	7,992	7,995
1,166.2	7,999	8,002	8,006	8,010	8,013	8,017	8,020	8,024	8,027	8,031
1,166.3	8,035	8,038	8,042	8,046	8,049	8,053	8,056	8,060	8,064	8,067
1,166.4	8,071	8,075	8,078	8,082	8,086	8,089	8,093	8,097	8,100	8,104
1,166.5	8,108	8,111	8,115	8,119	8,122	8,126	8,130	8,133	8,137	8,141
1,166.6	8,144	8,148	8,152	8,155	8,159	8,163	8,166	8,170	8,174	8,177
1,166.7	8,181	8,185	8,189	8,192	8,196	8,200	8,203	8,207	8,211	8,215
1,166.8	8,219	8,222	8,226	8,230	8,234	8,238	8,242	8,246	8,249	8,253
1,166.9	8,257	8,261	8,265	8,269	8,272	8,276	8,280	8,284	8,288	8,292
1,167	8,296	8,300	8,304	8,308	8,312	8,316	8,320	8,323	8,327	8,331
1,167.1	8,335	8,339	8,343	8,347	8,351	8,354	8,358	8,362	8,366	8,370
1,167.2	8,374	8,378	8,382	8,386	8,390	8,394	8,397	8,401	8,405	8,409
1,167.3	8,413	8,417	8,421	8,425	8,429	8,433	8,437	8,441	8,445	8,449
1,167.4	8,453	8,457	8,461	8,464	8,468	8,472	8,476	8,480	8,484	8,488
1,167.5	8,492	8,496	8,500	8,504	8,508	8,512	8,516	8,520	8,524	8,527
1,167.6	8,531	8,535	8,539	8,543	8,547	8,551	8,555	8,560	8,564	8,568
1,167.7	8,572	8,575	8,579	8,583	8,587	8,591	8,595	8,599	8,603	8,607
1,167.8	8,611	8,615	8,618	8,622	8,626	8,630	8,634	8,638	8,642	8,646
1,167.9	8,650	8,654	8,658	8,662	8,666	8,670	8,674	8,678	8,682	8,686
1,168	8,691	8,695	8,699	8,703	8,708	8,712	8,716	8,721	8,725	8,729
1,168.1	8,733	8,737	8,742	8,746	8,750	8,754	8,758	8,762	8,766	8,770
1,168.2	8,774	8,778	8,782	8,787	8,791	8,795	8,799	8,803	8,807	8,811
1,168.3	8,815	8,819	8,823	8,827	8,832	8,836	8,840	8,844	8,848	8,853
1,168.4	8,857	8,861	8,865	8,869	8,873	8,877	8,881	8,886	8,890	8,894
1,168.5	8,898	8,902	8,907	8,911	8,915	8,919	8,924	8,928	8,932	8,937
1,168.6	8,941	8,946	8,950	8,954	8,959	8,963	8,968	8,972	8,977	8,981
1,168.7	8,985	8,990	8,994	8,998	9,003	9,008	9,012	9,017	9,022	9,026
1,168.8	9,031	9,035	9,040	9,045	9,050	9,054	9,059	9,064	9,069	9,074
1,168.9	9,078	9,083	9,088	9,092	9,097	9,102	9,107	9,111	9,116	9,121
1,169	9,125	9,130	9,135	9,139	9,144	9,149	9,153	9,158	9,163	9,167
1,169.1	9,172	9,177	9,182	9,186	9,191	9,195	9,199	9,204	9,208	9,213
1,169.2	9,217	9,221	9,226	9,230	9,235	9,239	9,244	9,248	9,253	9,257
1,169.3	9,262	9,266	9,270	9,274	9,279	9,283	9,287	9,292	9,296	9,300
1,169.4	9,305	9,309	9,313	9,317	9,321	9,325	9,329	9,333	9,337	9,341
1,169.5	9,346	9,349	9,353	9,357	9,361	9,365	9,369	9,373	9,377	9,381
1,169.6	9,385	9,389	9,393	9,397	9,401	9,405	9,410	9,414	9,418	9,422
1,169.7	9,427	9,431	9,435	9,440	9,444	9,448	9,452	9,456	9,460	9,465
1,169.8	9,469	9,473	9,477	9,481	9,486	9,490	9,495	9,499	9,503	9,508
1,169.9	9,512	9,517	9,521	9,526	9,530	9,534	9,539	9,543	9,547	9,552
1,170	9,556	9,560	9,565	9,569	9,573	9,577	9,581	9,585	9,590	9,594
1,170.1	9,598	9,602	9,607	9,611	9,615	9,619	9,623	9,627	9,631	9,635
1,170.2	9,639	9,643	9,647	9,652	9,656	9,660	9,664	9,668	9,673	9,677
1,170.3	9,682	9,686	9,691	9,695	9,699	9,703	9,707	9,712	9,716	9,720
1,170.4	9,724	9,728	9,732	9,736	9,739	9,743	9,747	9,751	9,755	9,759
1,170.5	9,763	9,767	9,771	9,775	9,780	9,784	9,788	9,792	9,796	9,800
1,170.6	9,804	9,809	9,813	9,817	9,821	9,825	9,829	9,834	9,838	9,842
1,170.7	9,846	9,850	9,854	9,858	9,862	9,867	9,870	9,874	9,878	9,882
1,170.8	9,886	9,890	9,894	9,898	9,902	9,907	9,911	9,915	9,919	9,923
1,170.9	9,927	9,931	9,934	9,938	9,942	9,946	9,950	9,954	9,958	9,962

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,171	9,966	9,970	9,974	9,978	9,982	9,986	9,990	9,994	9,998	10,002
1,171.1	10,006	10,010	10,014	10,018	10,022	10,026	10,030	10,034	10,038	10,042
1,171.2	10,046	10,050	10,054	10,058	10,062	10,066	10,070	10,074	10,078	10,083
1,171.3	10,087	10,091	10,095	10,099	10,103	10,107	10,111	10,115	10,119	10,123
1,171.4	10,127	10,132	10,136	10,141	10,145	10,149	10,154	10,158	10,163	10,167
1,171.5	10,172	10,176	10,181	10,185	10,190	10,194	10,198	10,202	10,207	10,211
1,171.6	10,215	10,219	10,223	10,227	10,231	10,235	10,239	10,243	10,247	10,251
1,171.7	10,255	10,260	10,264	10,268	10,272	10,277	10,281	10,285	10,289	10,294
1,171.8	10,298	10,303	10,307	10,311	10,316	10,320	10,324	10,328	10,333	10,337
1,171.9	10,341	10,345	10,349	10,354	10,358	10,362	10,366	10,370	10,375	10,379
1,172	10,383	10,387	10,391	10,396	10,400	10,404	10,408	10,413	10,417	10,421
1,172.1	10,425	10,430	10,434	10,439	10,443	10,447	10,452	10,456	10,460	10,464
1,172.2	10,469	10,473	10,477	10,481	10,485	10,490	10,494	10,498	10,503	10,507
1,172.3	10,511	10,515	10,519	10,523	10,528	10,532	10,536	10,540	10,545	10,549
1,172.4	10,553	10,558	10,562	10,566	10,570	10,575	10,579	10,584	10,588	10,593
1,172.5	10,597	10,601	10,605	10,610	10,614	10,618	10,622	10,627	10,631	10,636
1,172.6	10,640	10,645	10,650	10,655	10,660	10,664	10,668	10,673	10,677	10,681
1,172.7	10,685	10,689	10,694	10,698	10,702	10,706	10,711	10,715	10,719	10,724
1,172.8	10,728	10,732	10,736	10,740	10,744	10,748	10,752	10,756	10,760	10,764
1,172.9	10,768	10,772	10,776	10,780	10,784	10,788	10,793	10,797	10,801	10,805
1,173	10,809	10,813	10,816	10,820	10,824	10,828	10,832	10,836	10,840	10,844
1,173.1	10,847	10,851	10,855	10,859	10,863	10,867	10,871	10,875	10,879	10,883
1,173.2	10,886	10,890	10,894	10,898	10,902	10,906	10,910	10,914	10,918	10,922
1,173.3	10,926	10,930	10,933	10,937	10,941	10,945	10,949	10,953	10,957	10,961
1,173.4	10,965	10,969	10,973	10,977	10,981	10,985	10,990	10,994	10,998	11,002
1,173.5	11,006	11,011	11,015	11,019	11,023	11,027	11,032	11,037	11,041	11,045
1,173.6	11,049	11,053	11,057	11,061	11,066	11,070	11,074	11,078	11,082	11,085
1,173.7	11,089	11,093	11,098	11,102	11,106	11,110	11,114	11,118	11,122	11,126
1,173.8	11,130	11,135	11,139	11,143	11,147	11,151	11,155	11,159	11,163	11,168
1,173.9	11,172	11,176	11,180	11,184	11,188	11,192	11,196	11,201	11,205	11,209
1,174	11,213	11,217	11,221	11,225	11,229	11,233	11,237	11,241	11,245	11,249
1,174.1	11,253	11,257	11,262	11,266	11,270	11,274	11,279	11,284	11,288	11,292
1,174.2	11,296	11,301	11,305	11,309	11,314	11,318	11,322	11,326	11,331	11,335
1,174.3	11,339	11,343	11,347	11,351	11,355	11,359	11,364	11,368	11,372	11,376
1,174.4	11,380	11,384	11,388	11,393	11,397	11,401	11,405	11,409	11,413	11,417
1,174.5	11,421	11,425	11,429	11,433	11,437	11,441	11,445	11,449	11,454	11,458
1,174.6	11,462	11,466	11,470	11,474	11,478	11,483	11,487	11,491	11,495	11,500
1,174.7	11,504	11,508	11,512	11,517	11,521	11,525	11,529	11,533	11,537	11,541
1,174.8	11,546	11,550	11,554	11,558	11,562	11,566	11,570	11,574	11,578	11,582
1,174.9	11,586	11,590	11,594	11,599	11,603	11,607	11,611	11,615	11,619	11,623
1,175	11,627	11,632	11,636	11,640	11,644	11,648	11,652	11,656	11,660	11,665
1,175.1	11,669	11,673	11,677	11,681	11,686	11,690	11,694	11,698	11,702	11,707
1,175.2	11,711	11,715	11,719	11,723	11,728	11,732	11,736	11,741	11,745	11,749
1,175.3	11,753	11,758	11,762	11,766	11,771	11,775	11,779	11,783	11,788	11,792
1,175.4	11,796	11,801	11,805	11,809	11,814	11,818	11,822	11,827	11,831	11,836
1,175.5	11,840	11,845	11,849	11,854	11,858	11,862	11,867	11,871	11,876	11,880
1,175.6	11,885	11,890	11,894	11,899	11,903	11,908	11,912	11,917	11,921	11,926
1,175.7	11,930	11,935	11,940	11,945	11,949	11,954	11,959	11,964	11,969	11,974
1,175.8	11,979	11,984	11,988	11,993	11,998	12,003	12,007	12,012	12,017	12,022
1,175.9	12,027	12,031	12,036	12,041	12,045	12,050	12,055	12,060	12,064	12,069
1,176	12,074	12,078	12,083	12,088	12,093	12,099	12,104	12,109	12,114	12,119
1,176.1	12,124	12,128	12,134	12,139	12,144	12,149	12,154	12,159	12,164	12,169
1,176.2	12,174	12,179	12,184	12,189	12,194	12,199	12,204	12,209	12,214	12,219
1,176.3	12,225	12,230	12,235	12,240	12,245	12,250	12,255	12,260	12,265	12,270
1,176.4	12,275	12,280	12,285	12,290	12,295	12,300	12,305	12,310	12,315	12,320
1,176.5	12,325	12,330	12,335	12,340	12,345	12,350	12,355	12,360	12,365	12,370
1,176.6	12,375	12,380	12,385	12,390	12,395	12,400	12,405	12,410	12,414	12,419
1,176.7	12,424	12,429	12,434	12,439	12,444	12,449	12,454	12,458	12,463	12,468
1,176.8	12,473	12,478	12,483	12,488	12,493	12,498	12,503	12,508	12,513	12,518
1,176.9	12,523	12,528	12,533	12,538	12,542	12,547	12,552	12,558	12,563	12,568

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,177	12,573	12,577	12,582	12,587	12,592	12,597	12,602	12,607	12,612	12,617
1,177.1	12,622	12,627	12,632	12,637	12,642	12,647	12,651	12,656	12,661	12,666
1,177.2	12,671	12,676	12,680	12,685	12,690	12,696	12,701	12,706	12,711	12,716
1,177.3	12,722	12,727	12,732	12,737	12,743	12,748	12,753	12,759	12,764	12,769
1,177.4	12,775	12,780	12,786	12,792	12,797	12,802	12,808	12,813	12,819	12,824
1,177.5	12,829	12,835	12,840	12,845	12,851	12,856	12,861	12,866	12,872	12,877
1,177.6	12,882	12,887	12,892	12,897	12,902	12,906	12,911	12,916	12,921	12,926
1,177.7	12,932	12,937	12,943	12,948	12,954	12,959	12,964	12,969	12,974	12,979
1,177.8	12,984	12,989	12,994	12,999	13,004	13,009	13,014	13,019	13,024	13,029
1,177.9	13,034	13,039	13,044	13,049	13,054	13,059	13,065	13,070	13,075	13,080
1,178	13,085	13,091	13,096	13,102	13,107	13,112	13,117	13,122	13,127	13,132
1,178.1	13,137	13,142	13,146	13,151	13,157	13,161	13,166	13,171	13,176	13,181
1,178.2	13,186	13,191	13,195	13,200	13,205	13,210	13,215	13,220	13,225	13,229
1,178.3	13,234	13,239	13,244	13,249	13,254	13,259	13,264	13,269	13,274	13,278
1,178.4	13,283	13,288	13,293	13,298	13,303	13,308	13,313	13,318	13,323	13,328
1,178.5	13,333	13,338	13,343	13,348	13,353	13,358	13,363	13,368	13,373	13,377
1,178.6	13,382	13,387	13,391	13,396	13,400	13,405	13,410	13,414	13,419	13,424
1,178.7	13,428	13,433	13,438	13,443	13,447	13,452	13,457	13,461	13,466	13,471
1,178.8	13,476	13,480	13,485	13,490	13,495	13,500	13,504	13,509	13,514	13,519
1,178.9	13,523	13,528	13,533	13,538	13,543	13,548	13,553	13,558	13,562	13,567
1,179	13,572	13,577	13,582	13,587	13,592	13,597	13,602	13,607	13,612	13,616
1,179.1	13,621	13,626	13,631	13,636	13,641	13,646	13,651	13,656	13,661	13,666
1,179.2	13,670	13,675	13,680	13,685	13,690	13,695	13,700	13,705	13,710	13,715
1,179.3	13,719	13,724	13,729	13,734	13,739	13,744	13,749	13,754	13,759	13,764
1,179.4	13,769	13,773	13,778	13,783	13,788	13,793	13,798	13,803	13,808	13,813
1,179.5	13,818	13,823	13,827	13,832	13,837	13,842	13,847	13,852	13,857	13,862
1,179.6	13,867	13,872	13,876	13,881	13,886	13,891	13,896	13,901	13,906	13,911
1,179.7	13,916	13,921	13,926	13,930	13,935	13,940	13,945	13,950	13,955	13,960
1,179.8	13,965	13,970	13,975	13,980	13,984	13,989	13,994	13,999	14,004	14,009
1,179.9	14,014	14,019	14,024	14,029	14,033	14,038	14,043	14,048	14,053	14,058
1,180	14,063	14,068	14,073	14,078	14,083	14,087	14,092	14,097	14,102	14,107
1,180.1	14,112	14,117	14,122	14,127	14,132	14,137	14,141	14,146	14,151	14,156
1,180.2	14,161	14,166	14,171	14,176	14,181	14,186	14,190	14,195	14,200	14,205
1,180.3	14,210	14,215	14,220	14,225	14,230	14,235	14,240	14,244	14,249	14,254
1,180.4	14,259	14,264	14,269	14,274	14,279	14,284	14,289	14,294	14,298	14,303
1,180.5	14,308	14,313	14,318	14,323	14,328	14,333	14,338	14,343	14,347	14,352
1,180.6	14,357	14,362	14,367	14,372	14,377	14,382	14,387	14,392	14,397	14,401
1,180.7	14,406	14,411	14,416	14,421	14,426	14,431	14,436	14,441	14,446	14,451
1,180.8	14,455	14,460	14,465	14,470	14,475	14,480	14,485	14,490	14,495	14,500
1,180.9	14,504	14,509	14,514	14,519	14,524	14,529	14,534	14,539	14,544	14,549
1,181	14,554	14,558	14,563	14,568	14,573	14,578	14,583	14,588	14,593	14,598
1,181.1	14,603	14,608	14,612	14,617	14,622	14,627	14,632	14,637	14,642	14,647
1,181.2	14,652	14,657	14,661	14,666	14,671	14,676	14,681	14,686	14,691	14,696
1,181.3	14,701	14,706	14,711	14,715	14,720	14,725	14,730	14,735	14,740	14,745
1,181.4	14,750	14,755	14,760	14,765	14,769	14,774	14,779	14,784	14,789	14,794
1,181.5	14,799	14,804	14,809	14,814	14,818	14,823	14,828	14,833	14,838	14,843
1,181.6	14,848	14,853	14,858	14,863	14,868	14,872	14,877	14,882	14,887	14,892
1,181.7	14,897	14,902	14,907	14,912	14,917	14,922	14,926	14,931	14,936	14,941
1,181.8	14,946	14,951	14,956	14,961	14,966	14,971	14,975	14,980	14,985	14,990
1,181.9	14,995	15,000	15,005	15,010	15,015	15,020	15,025	15,029	15,034	15,039
1,182	15,044	15,049	15,054	15,059	15,064	15,069	15,074	15,079	15,083	15,088
1,182.1	15,093	15,098	15,103	15,108	15,113	15,118	15,123	15,128	15,132	15,137
1,182.2	15,142	15,147	15,152	15,157	15,162	15,167	15,172	15,177	15,182	15,186
1,182.3	15,191	15,196	15,201	15,206	15,211	15,216	15,221	15,226	15,231	15,236
1,182.4	15,240	15,245	15,250	15,255	15,260	15,265	15,270	15,275	15,280	15,285
1,182.5	15,289	15,294	15,299	15,304	15,309	15,314	15,319	15,324	15,329	15,334
1,182.6	15,339	15,343	15,348	15,353	15,358	15,363	15,368	15,373	15,378	15,383

Appendix F (continued)  
**Hubbard Creek Reservoir**  
**RESERVOIR AREA TABLE**

TEXAS WATER DEVELOPMENT BOARD

March 2017 - January 2018 Survey

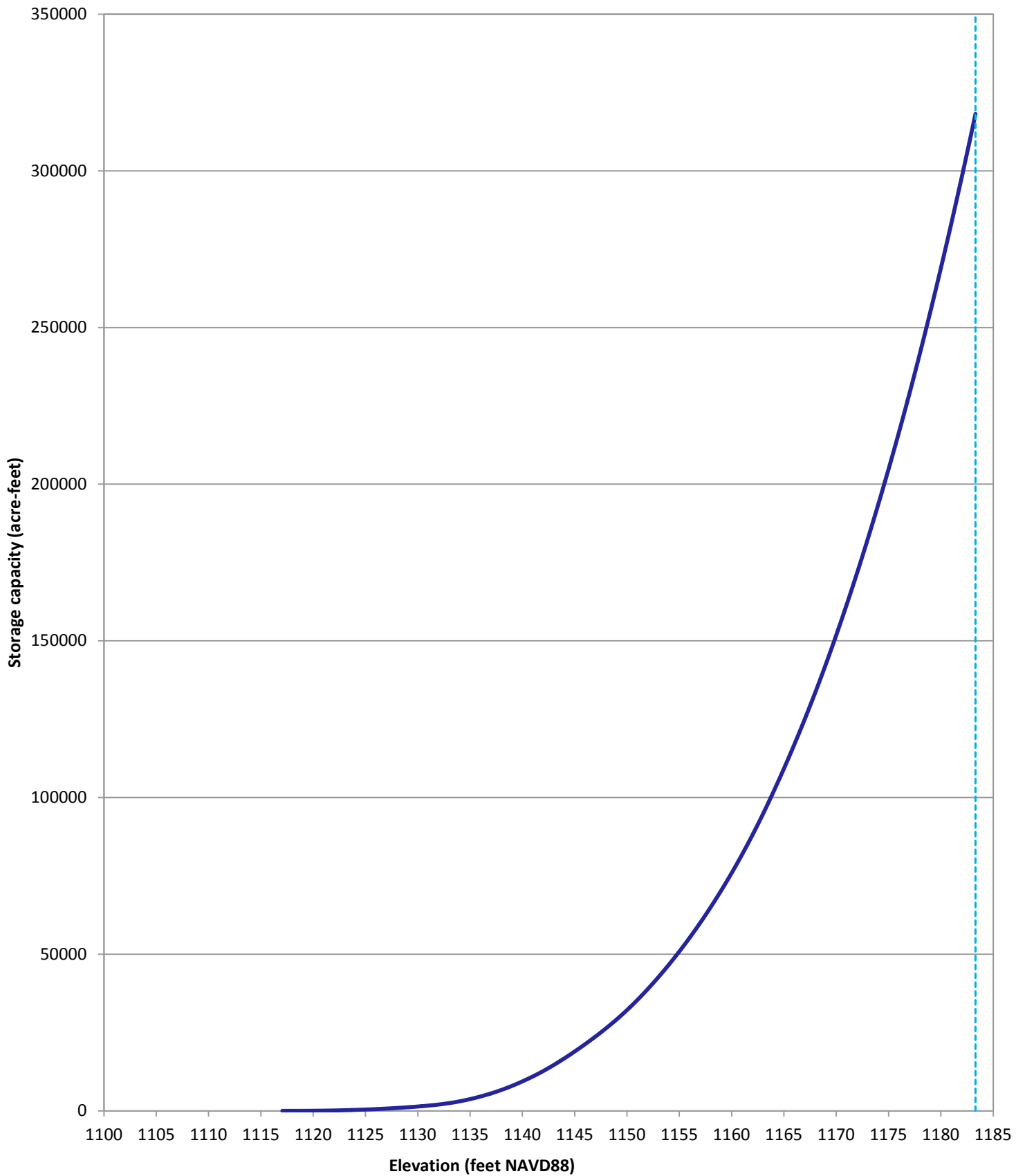
AREA IN ACRES

Conservation Pool Elevation 1,183.31 feet NAVD88

ELEVATION INCREMENT IS ONE HUNDREDTH FOOT

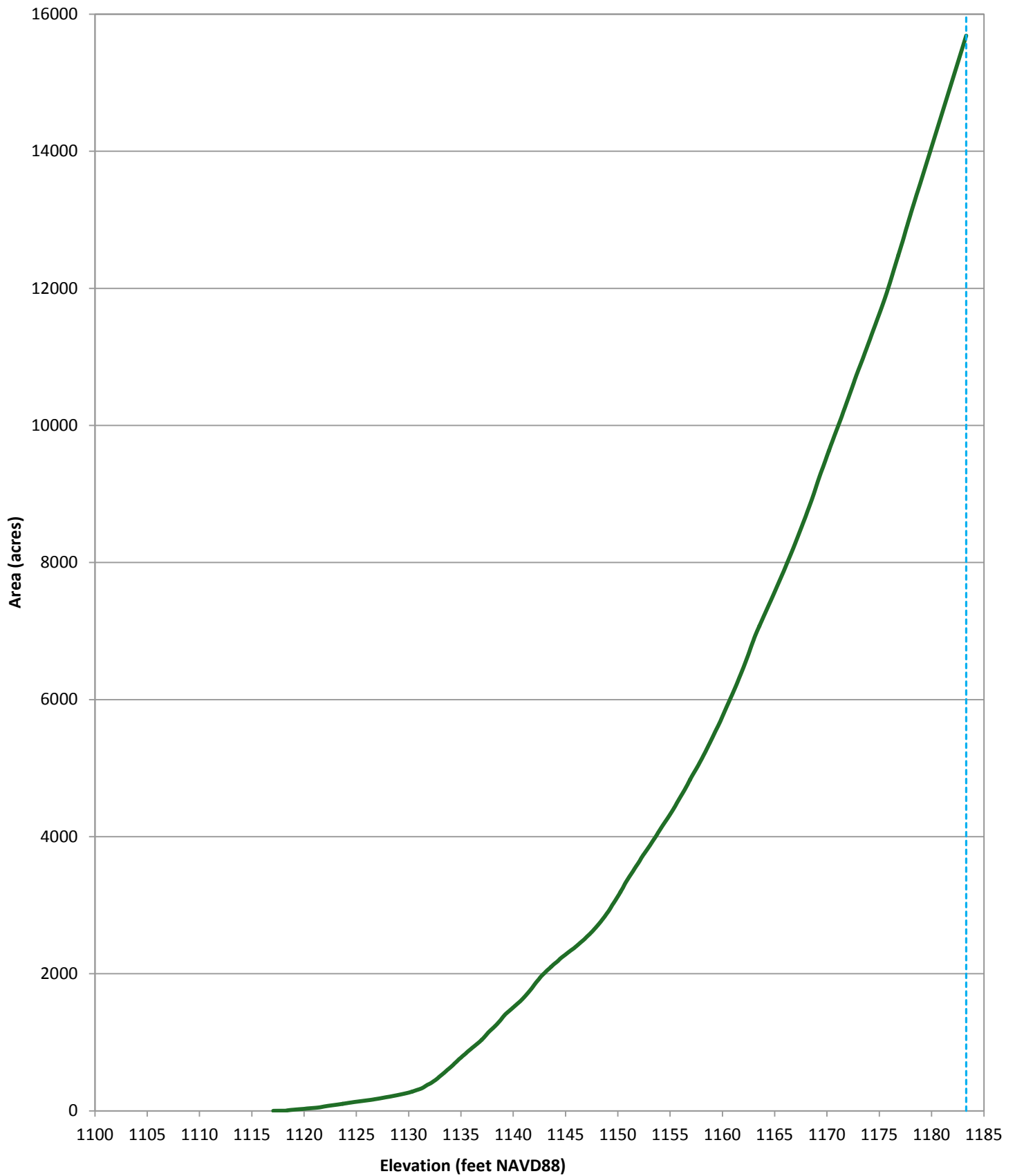
ELEVATION in Feet	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
1,182.7	15,388	15,393	15,397	15,402	15,407	15,412	15,417	15,422	15,427	15,432
1,182.8	15,437	15,442	15,446	15,451	15,456	15,461	15,466	15,471	15,476	15,481
1,182.9	15,486	15,491	15,496	15,500	15,505	15,510	15,515	15,520	15,525	15,530
1,183	15,535	15,540	15,545	15,550	15,554	15,559	15,564	15,569	15,574	15,579
1,183.1	15,584	15,589	15,594	15,599	15,603	15,608	15,613	15,618	15,623	15,628
1,183.2	15,633	15,638	15,643	15,648	15,653	15,657	15,662	15,667	15,672	15,677
1,183.3	15,682	15,687								

Note: Areas between elevations 1,178.90 and 1181.75 feet linearly interpolated, areas above elevation 1181.75 feet linearly extrapolated



— Total capacity 2017     
 - - - Conservation pool elevation 1,183.31 feet

**Hubbard Creek Reservoir**  
 March 2017 - January 2018 Survey  
 Prepared by: TWDB



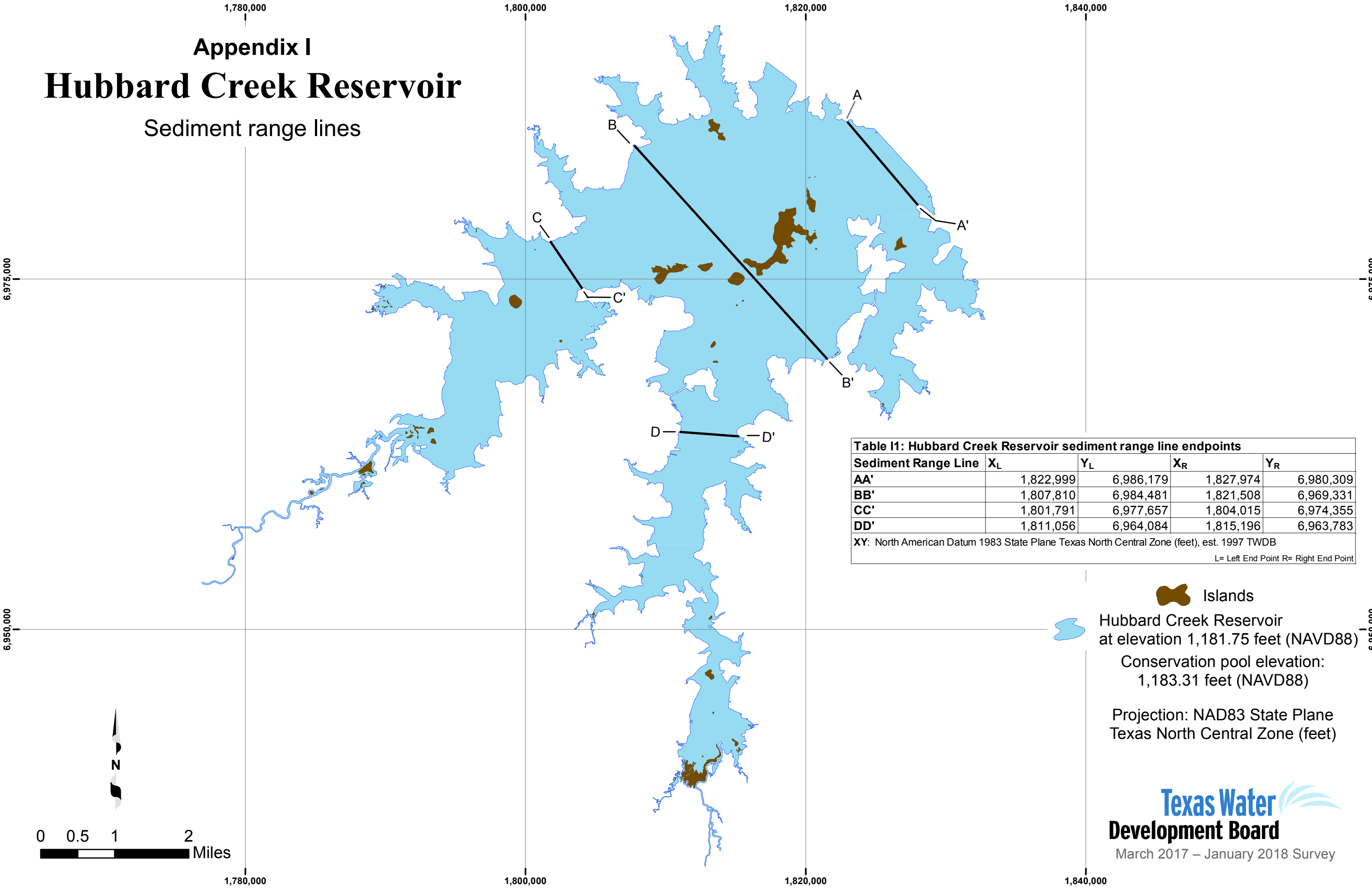
— Total area 2017     
 - - - - Conservation pool elevation 1,183.31 feet

**Hubbard Creek Reservoir**  
 March 2017 - January 2018 Survey  
 Prepared by: TWDB



# Appendix I Hubbard Creek Reservoir


## Sediment range lines




**Table I1: Hubbard Creek Reservoir sediment range line endpoints**

Sediment Range Line	X <sub>L</sub>	Y <sub>L</sub>	X <sub>R</sub>	Y <sub>R</sub>
AA'	1,822,999	6,986,179	1,827,974	6,980,309
BB'	1,807,810	6,984,481	1,821,508	6,969,331
CC'	1,801,791	6,977,657	1,804,015	6,974,355
DD'	1,811,056	6,964,084	1,815,196	6,963,783

XY: North American Datum 1983 State Plane Texas North Central Zone (feet), est. 1997 TWDB  
L= Left End Point R= Right End Point

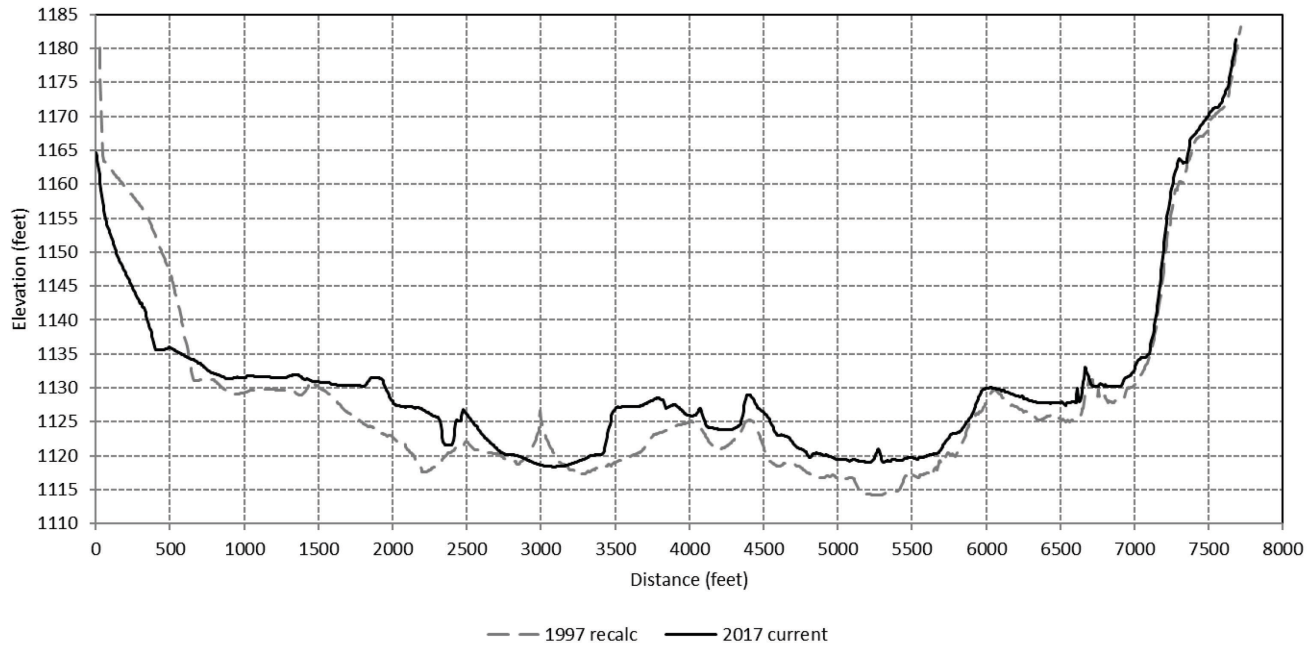
 Islands

 Hubbard Creek Reservoir at elevation 1,181.75 feet (NAVD88)

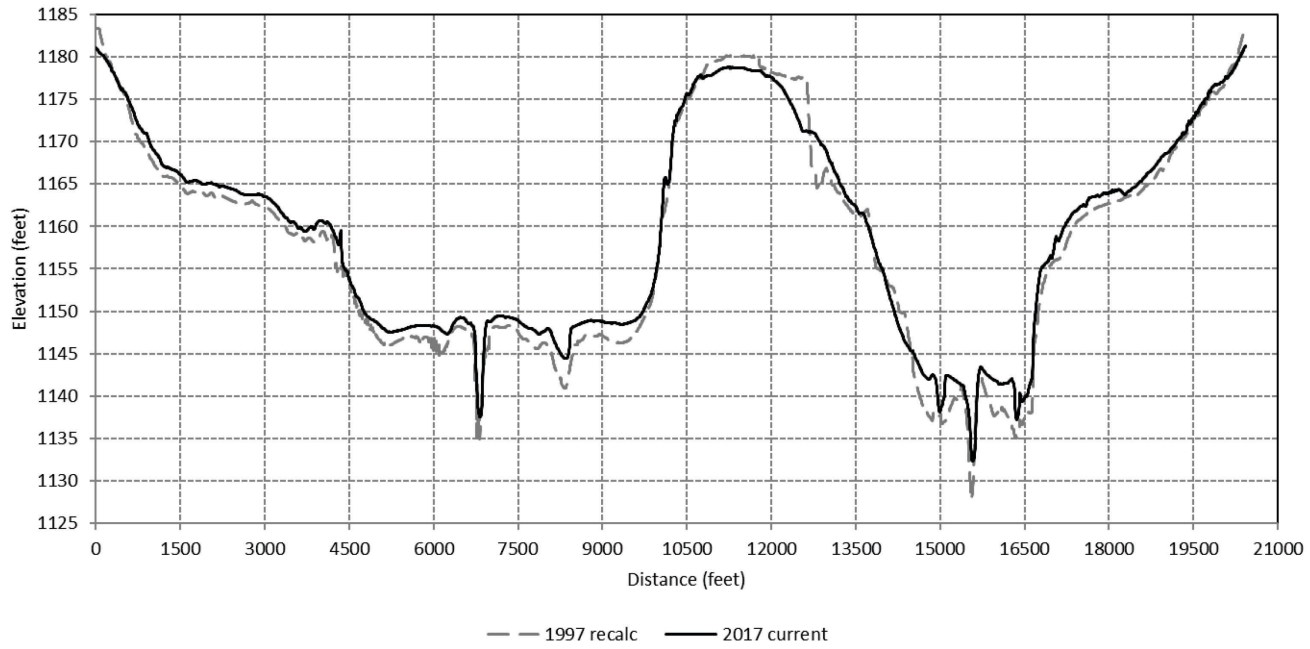
Conservation pool elevation: 1,183.31 feet (NAVD88)

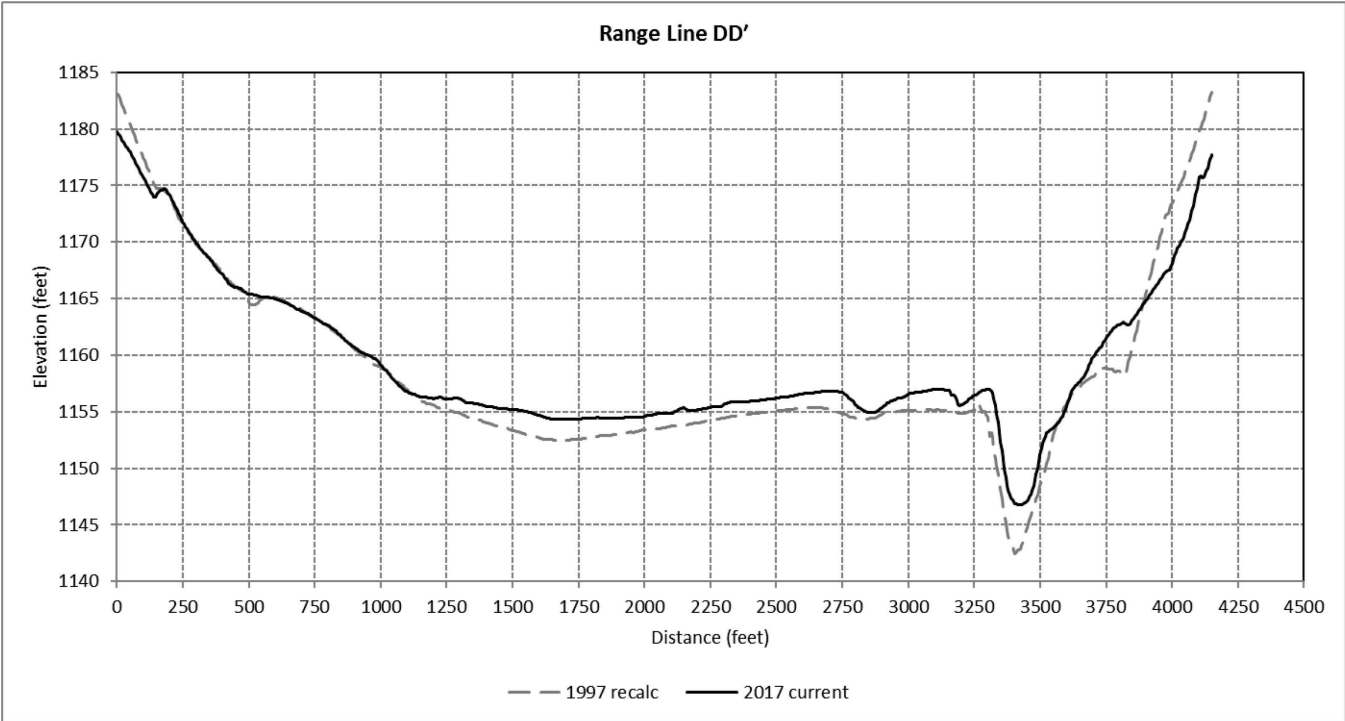
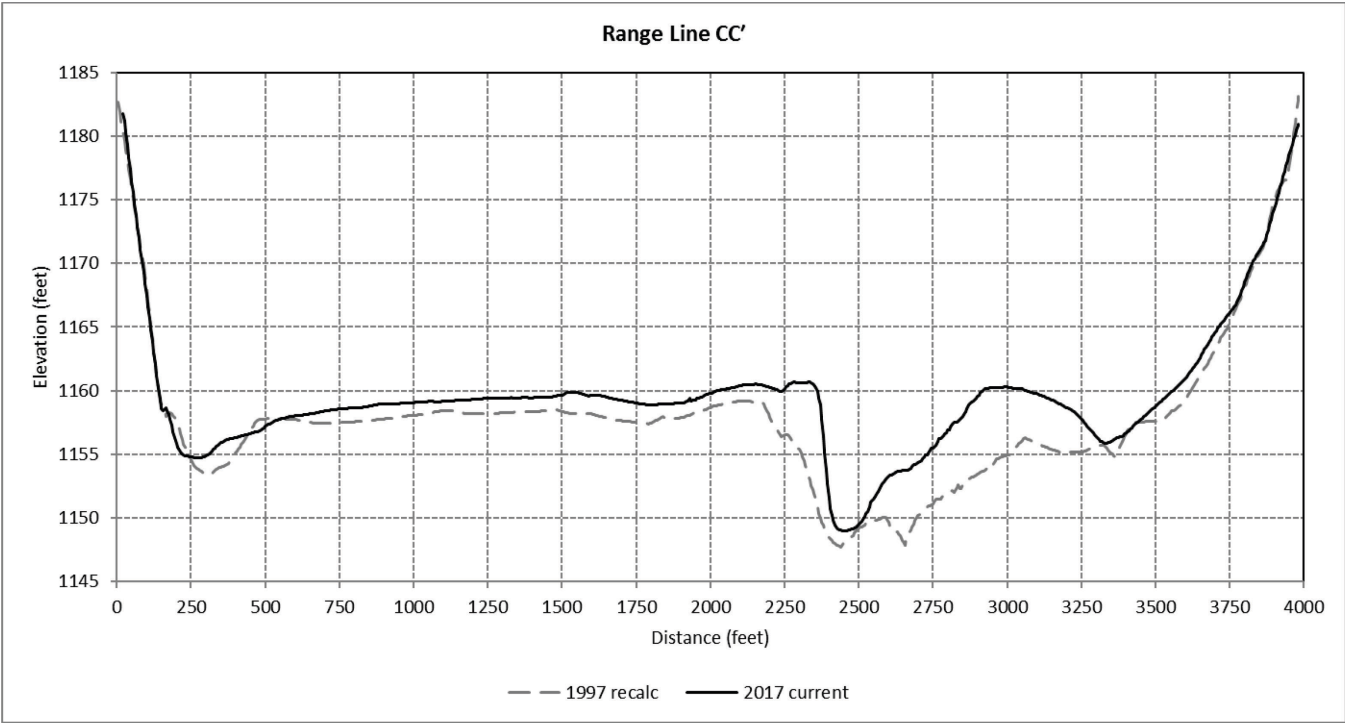
Projection: NAD83 State Plane Texas North Central Zone (feet)

Range Line AA'
















Range Line BB'





# Figure 6

## Contours feet (NAVD88)

-  1180
-  1175
-  1170
-  1165
-  1160
-  1155
-  1150
-  1145
-  1140
-  1135
-  1130
-  1125
-  1120

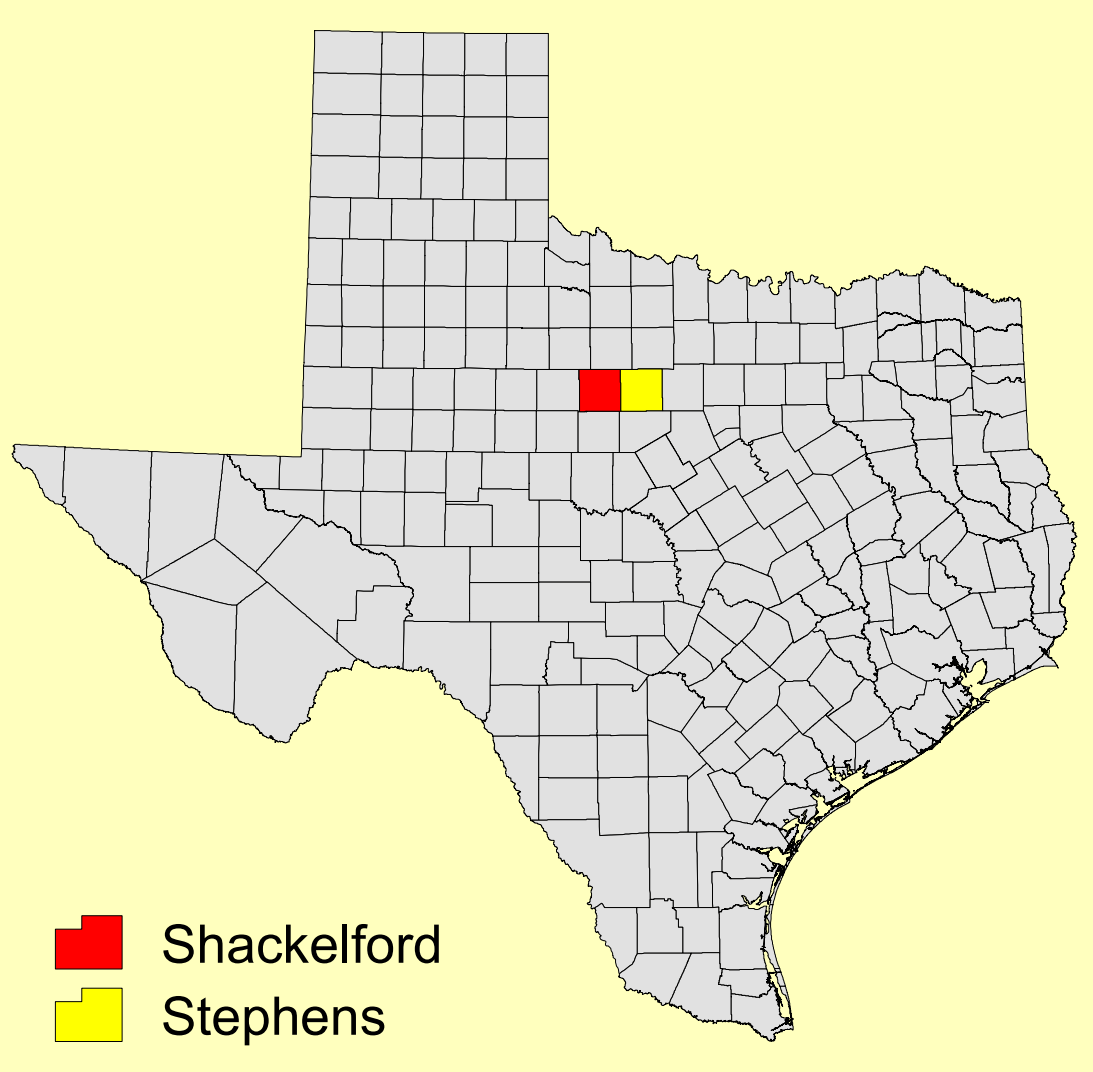
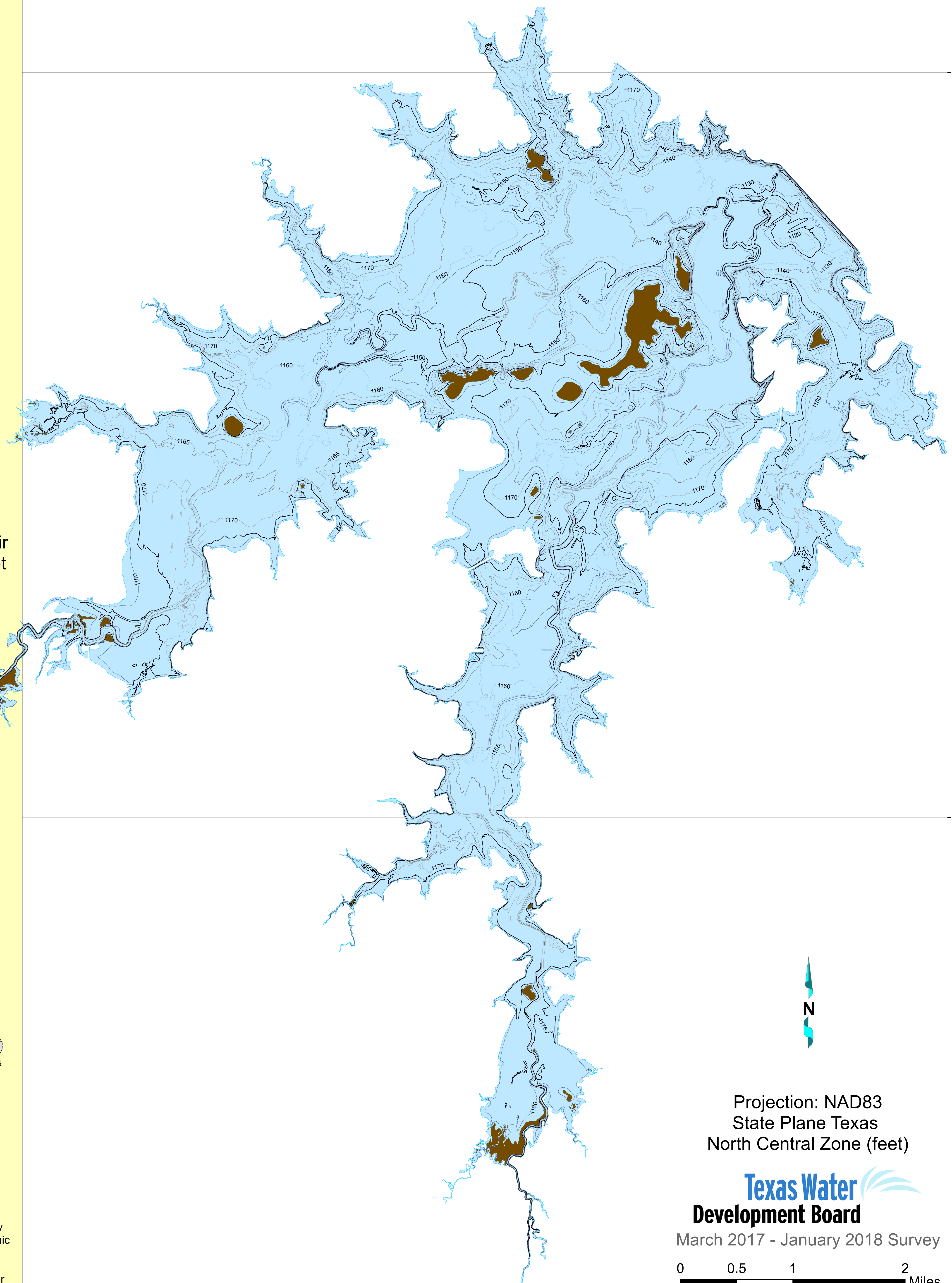
 Islands



Hubbard Creek Reservoir  
at elevation 1,181.75 feet  
(NAVD88)

Conservation pool elevation  
1,183.31 feet (NAVD88)

# Hubbard Creek Reservoir

## 5' - contour map



 Shackelford  
 Stephens

Projection: NAD83  
State Plane Texas  
North Central Zone (feet)

**Texas Water**  
**Development Board**

March 2017 - January 2018 Survey



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