

**INTERLOCAL COOPERATION AGREEMENT CONTRACT BETWEEN
THE TEXAS WATER DEVELOPMENT BOARD
AND THE CITY OF CORPUS CHRISTI REGARDING
VOLUMETRIC SURVEY OF LAKE CORPUS CHRISTI RESERVOIR**

This Interlocal Cooperation Agreement Contract ("Agreement") is made by and between the Texas Water Development Board, hereinafter called "TWDB", and the City of Corpus Christi hereinafter called "the CITY" under the authority of Chapter 791, Texas Government Code.

**ARTICLE I.
DESCRIPTION OF SERVICES TO BE PROVIDED**

The parties hereto agree to the performance of a volumetric survey of Lake Corpus Christi Reservoir, Texas (LAKE). A detailed Scope of Services, incorporated into this Agreement as Attachment A, shall provide the substantive basis for definition of the conduct of the technical work, reporting, and coordination requirements of this Agreement.

**ARTICLE II.
RESPONSIBILITIES OF TWDB**

TWDB will furnish all necessary equipment and personnel with professional classification, skill, and expertise required to perform the tasks set forth in this Agreement.

TWDB shall designate an authorized representative to direct the field and office work pertaining to the volumetric survey performed under this Agreement.

TWDB will initially pay all expenses incurred by TWDB in the performance of the Scope of Services incorporated as Attachment A.

This Agreement shall not be construed as creating any debt by or on behalf of the State of Texas, and for TWDB; any obligations are subject to the availability of funds.

**ARTICLE III.
RESPONSIBILITIES OF THE CITY**

The CITY shall provide TWDB with, to the best of its knowledge, an overview of the lake conditions as they may affect the conduct of the survey, including such possible situations as extreme current conditions, impediments to navigation, or other potentially hazardous conditions.

The CITY shall provide TWDB with an authorized contact person, on call during the survey, to facilitate the access to public and private property as may be needed to conduct the volumetric survey in an expeditious manner.

The CITY, as outlined in Attachment A, shall provide a secure, locked enclosure for storage of TWDB equipment and survey vessels during the survey should the field survey activities extend beyond one working day at the reservoir site. Such enclosure should be relatively proximate to the location of work activities and ready access should be provided TWDB staff.

This Agreement shall not be construed as creating any debt by or on behalf of the CITY. Payments by the CITY under this Agreement are subject to the availability of funds and must be made from current revenues available to the CITY.

ARTICLE IV. COMPENSATION

TWDB agrees to perform the tasks prescribed by this Agreement in consideration for an amount not to exceed \$43,518.00 to be paid by the CITY, as conditioned by the terms of the Scope of Services incorporated into this Agreement as Attachment A.

TWDB will invoice for 75% of the cost of the survey upon completion of the field work. The remaining 25% of the cost of the survey will be invoiced upon completion of the volumetric survey report. The total cost of the survey and report shall not exceed \$43,518.00.

The CITY will provide payment to the TWDB for cost incurred associated with performance of the survey as defined Attachment A, Scope of Services, Cost Estimate within forty-five (45) days from receipt of the TWDB's respective invoices, unless such invoices are not approved. If an invoice is not approved, it shall be returned by the CITY to the TWDB within 15 days with a written explanation of why it was not approved.

ARTICLE V. TIME OF PERFORMANCE

This Agreement is valid upon execution by both parties. The field survey performed under this Agreement will commence on an agreed date with the initial set-up activities necessary prior to actual conduct of the field survey by TWDB staff. TWDB shall make all reasonable efforts to perform the field survey by September 9, 2015, unless conditions of lake pool level, weather, or other conditions beyond the TWDB's control, may delay the field survey work. TWDB may commence the field survey three weeks prior to or following the stated date, with three working days notice to the CITY. Should any rescheduling of the survey be required outside of the period stated above, such schedule will be determined in a mutually satisfactory manner within 60 days of the above stated period of field performance or this Agreement will be terminated. The records and report manuscripts resulting from this Agreement shall be completed and provided to the CITY within eighteen months of completion of field survey efforts. This Agreement shall expire December 1, 2016.

**ARTICLE VI.
RECORDS AND USE OF INFORMATION**

Upon request of the CITY, TWDB shall make available to the CITY all records, worksheets, and other evidence directly related to the performance of work under this Agreement. With written agreement of both parties, either party shall have the privilege of publishing the records, reports, and report manuscripts provided that all publications by either party shall contain a statement acknowledging the joint-study efforts of TWDB and the CITY.

The CITY without the prior written consent of TWDB may not modify the published report manuscript developed by TWDB under this Agreement.

**ARTICLE VII.
LIABILITIES**

TWDB shall not assume any liability regarding the presentation or reproduction of this survey information or for the misuse of this information in a manner not consistent with the survey design; for example, maps produced from this volumetric survey are not intended for use as recreational boating maps or for lake boundary determinations. Any published use of data, developed as a product of this Agreement, should contain an adequate and prominent statement referencing the survey intent and proper use of the information.

**ARTICLE VIII.
AMENDMENTS**

It is agreed that, without invalidating this Agreement, upon the advance written agreement of each party, this Agreement may be altered or amended to include additional work to be performed or to change the scheduled period of fieldwork, and to adjust the consideration to be paid hereunder by virtue of such alterations or amendments by formal written amendment.

**ARTICLE IX.
SEVERANCE PROVISIONS**

Should any one or more provisions of this Agreement be held to be null, void, voidable, or any reason whatsoever of no force and effect, such provision(s) shall be construed as severable from the remainder of this Agreement and shall not affect the validity of all other provisions of this Agreement which shall remain in full force and effect.

**ARTICLE X.
TERMINATION**

The Agreement shall terminate upon the earlier of the completion of the Scope of Services, incorporated as Attachment A or December 1, 2016, unless extended by written agreement pursuant to Article VIII of this Agreement. This Agreement may be terminated prior to full performance only by 30 days written notification by either party of this Agreement, and in all cases, the non-terminating party shall be afforded an opportunity for consultation with the terminating party prior to termination. In the event of breach of performance, either party may

terminate this Agreement by giving written notice to the other party at least one (1) week prior to the date of termination.

**ARTICLE XI.
CORRESPONDENCE**

All correspondence between the parties shall be made to the following addresses:

For TWDB:

Jason J. Kemp
Team Lead, Hydrographic Survey
Texas Water Development Board
P.O. Box 13231, Capitol Station
Austin, Texas 78711-3231

For the CITY:

Ronald L. Olson
City Manager
City of Corpus Christi
P.O. Box 9277
Corpus Christi, Texas 78469-9277

IN WITNESS WHEREOF, the parties have caused this Interlocal Cooperation Agreement Contract to be duly EXECUTED in three (3) counterparts, each of which is deemed to be an original.

AGREED:

CITY OF CORPUS CHRISTI, TEXAS

TEXAS WATER DEVELOPMENT BOARD

By: _____
Ronald L. Olson
City Manager

By: _____
Kevin Patteson
Executive Administrator

Date: _____

Date: 7/6/15

APPROVED AS TO LEGAL FORM

By: _____
Assistant City Attorney
for City Attorney

Date: _____

ATTEST

By: _____
Rebecca Huerta
City Secretary

Project No: E15148
Accounting Unit: 4088-061
Account: 550950
Activity: E15148014088EXP
Account Category: 50950
Fund Name: Water 2012 RVBD

ATTACHMENT A SCOPE OF SERVICES

INTRODUCTION

The Texas Water Development Board (TWDB) proposes to perform a volumetric survey of Lake Corpus Christi Reservoir, Texas (LAKE). The purpose of this survey is to collect bathymetric data to develop an updated elevation-area-capacity table. All maps generated from this survey are related to this purpose, and the TWDB makes no representation or assumes any liability if this information is used for any other purposes, such as boating maps.

City of Corpus Christi (CITY) is the ultimate beneficiary of the data to be collected under this study. The Hydrographic Survey Program is a non-profit, user-funded program within the TWDB. It was established to provide essential information at an affordable rate. In an effort to keep costs to a minimum, basic needs were identified and are presented in the Specifications section below. Should the CITY require analysis beyond that identified in the basic contract, information can be provided at an additional cost as identified in the Budget section.

LOCATION OF STUDY

The LAKE is located in San Patricio, Jim Wells, and Live Oak Counties on the Nueces River (Nueces River Basin), four miles southwest of Mathis, Texas. The CITY owns the water rights. The LAKE is owned and operated by the City. The LAKE has a surface area of 18,700 acres at the current water surface elevation of 94.0 feet (NGVD'29) according to the 2013 TWDB survey.

SURVEY PLAN, SPECIFICATIONS, AND ANALYSES

Surface acreages will be based on Digital Orthophoto Quadrangles, if available. Positioning on the lake surface will be established utilizing Differential Global Positioning System (DGPS) with an estimated resolution of one meter or better. Survey data will be collected from survey lines designed at no more than 500 feet spacing. These lines will be followed to the extent possible as permitted by obstructions. Positioning and sounding data will be collected and stored electronically at the rate of one measurement every second. TWDB represents the accuracy of the area where data was collected. The model of the lake bottom is mathematically interpolated between collected points by accepted engineering practices, and is a mathematical estimate of the actual bottom.

Analyses of the survey data will include: (1) an elevation-area-capacity table of the lake, acceptable to the Texas Commission on Environmental Quality, with definition of 0.1 feet; (2) a bottom contour map with definition of 5 feet, depending on legibility; and (3) a shaded relief plot of the lake bottom. The TWDB will provide a copy of the report text and elevation-area-capacity table to the CITY for review and comment prior to preparation of the final report. The CITY must submit written comments on the draft report text and elevation-area-capacity table within 60 days of receipt. If no comments are received by the TWDB within sixty days from receipt the TWDB may finalize the report. The TWDB will address any legitimate questions regarding accuracy in writing within thirty days of receipt, and the TWDB will address the comments in the final report. Three hard copies and one (1) electronic copy of the final report will be provided to the CITY along with the digital data. Additional copies of the reports will be provided at the

cost of \$50.00 per copy. All data from the survey will be stored for future reference on TWDB computers and backup up on tape, CD or DVD.

The elevation-area-capacity table will be delivered as a Microsoft Office Excel spreadsheet. A Triangulated Irregular Network (TIN) Model will be created using a mass points file, from bathymetric data collected during the survey. All vertical data will be adjusted and referenced to lake gage datum (*USGS 08210500 Lk Corpus Christi nr Mathis, TX*). The horizontal datum will be referenced to NAD83 State Plane, Texas North Central Zone. These procedures will be described in the final report.

SURVEY SCHEDULE

The TWDB will schedule the field survey to begin on an agreed date after the contract has been signed and to be completed in 30 – 45 days after commencement. The first day will be spent meeting the CITY representative, visually surveying the lake conditions, and finding and checking the condition of boat ramps. The survey will begin after the completion of these activities. Pool elevation, weather, and condition of equipment are some of the possible factors that could affect the actual time of performing the survey on the scheduled date.

The TWDB will contact the CITY, the week prior to the survey to confirm the proposed dates. Confirmation by the CITY's representative will signify the CITY's approval that the survey be conducted at the current lake elevation. If any delays are anticipated, the TWDB will reschedule the survey as soon as possible. The new dates will be determined with the approval of the CITY.

ON-SITE STORAGE

The CITY shall provide a secure locked enclosure for storage of the survey vessel(s) if the TWDB deems necessary. The secured area may be a fenced enclosure. The enclosed, secured structure will need a vertical clearance of sufficient height to allow storage of the survey vessel(s) on its trailer, or approximately 12 feet. TWDB personnel traveling in marked State vehicles should have unlimited access to the area during the performance of the field survey.

COST ESTIMATE

- a. Survey Cost. Standard charges for the cost of the survey and report are proposed as lump sum fees in accordance with the recorded surface areas and the computed cost shown in paragraph b. below. A contingency fee may be charged for navigational hazards.

The total survey cost shall not exceed \$43,518.00

- b. Hydrographic Survey Program Cost Computation.
The Texas Water Development Board computes Standard Charges for Volumetric Surveys utilizing the following formula:

$$\text{Base Rate} = -0.0000016 \times (\text{Area})^2 + 1.15 \times (\text{Area}) + \$20,500.00$$

(Area is the surface area of the lake at the time of the survey, in acres and Rate is the proposed cost of the survey). The LAKE has a surface area of 18,700 acres at elevation 94.0 feet above msl. The estimated base rate is therefore \$41,446.00 The cost of the

survey and report are proposed as lump sum fees in accordance with the recorded surface areas and the standard rate schedule and represents the typical charges for a "standardized" underwater bathymetric survey for a given size lake and associated reporting of the findings. This standard charge schedule assumes: a surface acreage of the lake at normal pool elevation; an underwater bathymetric (volumetric) survey only; a 500-foot maximum width between the surveying transects; acceptable weather conditions; no significant surface or sub-surface obstructions to navigation; no unusual owner-induced delays once the field mobilization and survey effort has been initiated; a coordination meeting with the CITY's Representative; and a standard survey report consisting of a description of the lake and previously-known physical and storage conditions, description of the hydrographic survey methodology, narrative and tabular descriptions of the newly surveyed physical parameters of the lake bathymetry and storage capacity, representative cross-sections of the lake survey, a two-dimensional contour map and shaded relief plot of the lake bathymetry, and associated digital files of the survey results.

A contingency fee not to exceed 5% of the base rate, \$2,072.00, may be charged for navigational obstructions encountered during the field survey. These obstructions such as submerged trees and vegetation, sand bars, marinas, boat docks and piers delay the data collection process.

c.

<u>Cost Summary</u>	
<u>Base rate (18,700 surface-acres)</u>	<u>\$41,446</u>
<u>Contingency:</u>	
<u>Navigational obstructions (not to exceed)</u>	<u>\$2,072</u>
<u>Total</u>	<u>\$43,518</u>

SUMMARY

Based on the above rate schedule, and assuming the lake's surface area at the time of the survey is 18,700 surface acres, the maximum total cost of this survey will be \$43,518.00 (including \$2,072.00 contingency for navigational obstructions). The final cost analysis will be conducted at the conclusion of the survey.

The TWDB shall furnish invoices to the CITY as follows: (1) An invoice for 75% of the cost of the survey upon completion of the data collection and (2) An invoice for the remaining 25% of the cost of the survey upon completion of each lake survey report.