

Corpus Christi Aquifer Storage  
& Recovery Conservation District

1201 Leopard St.  
Corpus Christi, TX 78401

## QUARTERLY PROJECT PERFORMANCE REPORT

**Date:** June 18, 2018

**Reporting Period:** Q1 CY18, January 1 – March 31, 2018

**Recipient:** *AF* Corpus Christi Aquifer Storage and Recovery Conservation District  
Larjai Francis, CCASRCD Project Manager  
1201 Leopard Street  
Corpus Christi, Texas 78401-2825

**Executive Administrator**

**Designee:** Matthew Webb, TWDB Project Manager

**Subject:** Research Contract between the Corpus Christi Aquifer Storage and Recovery Conservation District and the Texas Development Board, Contract No. 1600011956

**Project:** Corpus Christi ASR Feasibility Study

### **Work Completed:**

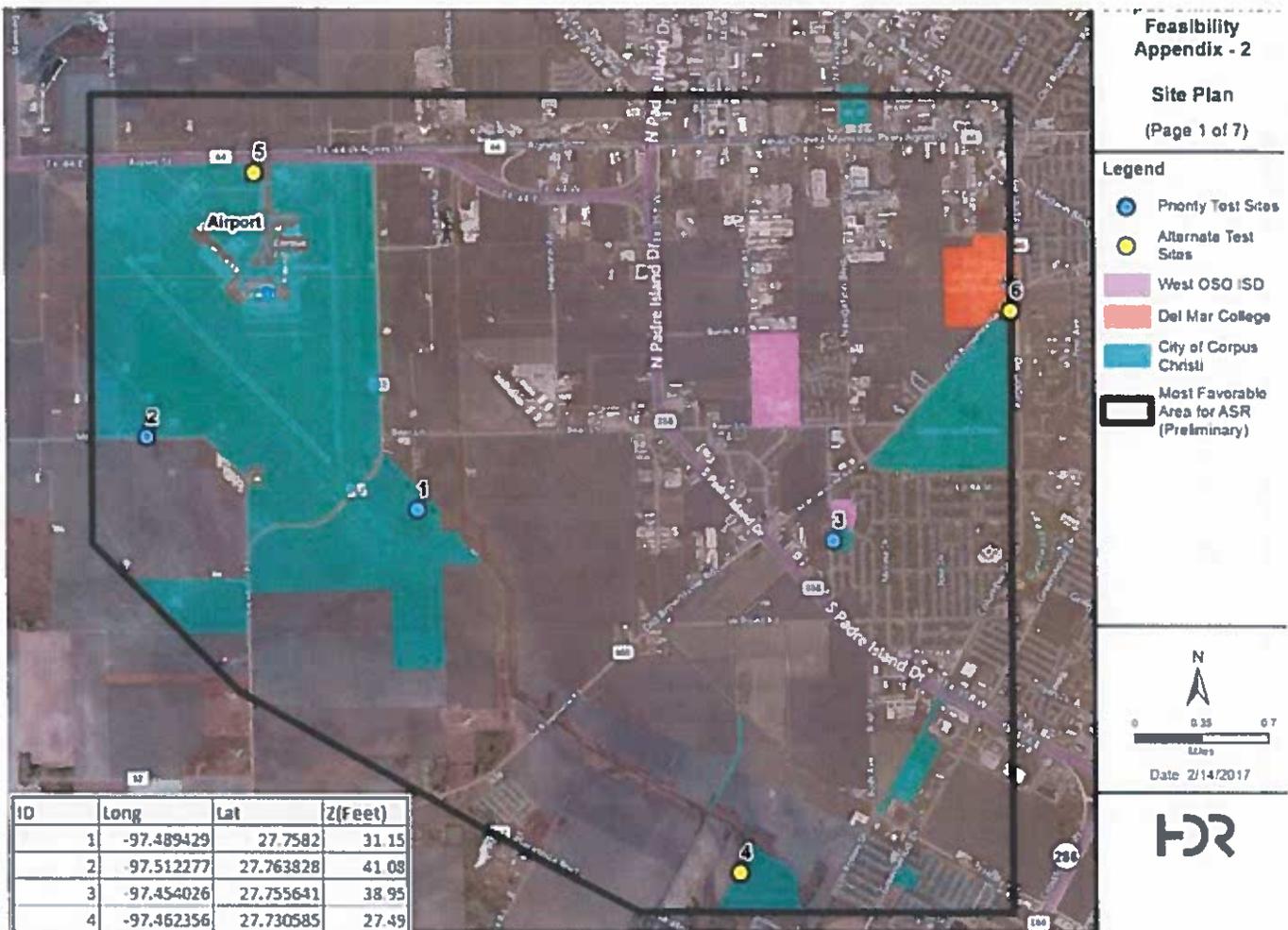
Pursuant to Section II, Article II, subsection 3 of the Contract this progress report represents a summary of work completed during the 4th Quarter 2017 for the Corpus Christi ASR Feasibility Study. Exhibit B of the TWDB contract includes the Scope of Work. Exhibit B contain six (6) distinct tasks with subtasks. An update to these tasks is provided overleaf and thus serves as the update mechanism for this contract. The drilling program began on 10/10/17 and activities have been proceeding according to the project plan, scope, and budget without any major or notable problems encountered this period. The drillers have completed Phase II testing at Sites 1 & 3 per the map in this document. Phase II testing where aquifer parameters affecting storage and recovery and geochemical compatibility was completed in terms of aquifer testing, core sampling and geochemical testing and lab results are pending. Monitoring wells are planned to be developed in both the shallow and deep depth at both sites, after which the drilling program (Task 2) is expected to be completed when the monitoring well at Site 2 is completed and the deliverables consisting of driller work performance data is submitted to City/District officials.

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Req\4QCY17\CCASRCD\_ProgRep6\_1QCY18

**Project Financial Update**

The Corpus Christi Aquifer Storage and Recovery Conservation District have incurred expenditures for the Project in the amount of \$907, 506.53. The responsibility for this expenditure has been distributed between the District and TWDB and is reflected on the payment request form for this quarter.

**Map**



Pictures



1. Site #1 MW deep install



HDR Engineering, Inc.  
 Austin, TX 78741  
 Phone (512) 912-5100

Invoice

HDR Invoice No. 1200106627  
 Invoice Date 3/6/2018  
 Month Ending 2/3/2018

**Corpus Christi ASR Feasibility Study - Invoice #15**

**Task 1 - Formulate Program**  
 No Work This period.  
 Problems Encountered this period: None

**Task 2 - Exploratory Test Drilling Program**  
 HDR geologist on-site from Jan 4 to 12 to support City Construction Inspector for Phase II coring and testing at Site 1- deep zone (568 - 648' bgs), including water level monitoring at MW1D during pump tests, core collection, and water quality sampling. Prepare field notes. Included extended 72 hour pump test (scope 24 hr). Site photos.  
 Collected core composite on Jan 5 (Site 1- deep) and Jan 30 (Site 3). Collected water quality sample on Jan 11 and delivered to CoCC water quality utilities lab. Prepared field notes. Site photos.  
 Communication and coordination between HDR field representatives and PM on field program.  
 PM coordination with driller on program updates, field related activities, and scheduling.  
 Follow-up with City Staff on progress reports/updates.  
 Rental of two Level Troll 700 transducers (and associated cables) to monitor water levels during pump tests. Rental of Horiba water quality probe to record in-situ field water quality parameters during pump tests prior to laboratory sample collection. ✓  
 Problems Encountered this period: None

**Task 3 - Geochemical Analysis**  
 No Work This period.  
 Problems Encountered this period: None

**Task 4 - Field Scale Groundwater Model**  
 No Work This period.  
 Problems Encountered this period: None

**Task 5 - ASR Operating Policies**  
 No Work This period.  
 Problems Encountered this period: None

**Task 6 - TWDB Coordination, Draft/Final Deliverables and Meetings**  
 No Work This period.  
 Problems Encountered this period: None

**APPROVED**  
 [Signature]  
 03/12/18



HDR Engineering, Inc.  
Austin, TX 78741  
Phone: (512) 912-5100

Invoice

HDR Invoice No. 1200115854  
Invoice Date 4/24/2018  
Month Ending 3/31/2018

**Corpus Christi ASR Feasibility Study - Invoice #16**

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**Task 1 - Formulate Program**

No Work This period.

Problems Encountered this period: None

**Task 2 - Exploratory Test Drilling Program**

HDR geologist on-site from Feb 16 to 21 to support City Construction Inspector for Phase II testing at Site 3- deep zone (to 750' bgs), including water level monitoring at Test Well, water quality sampling, and Site 1 monitoring during pump tests. Prepare field notes. Included extended 72 hour pump test (scope 24 hr). Site photos.

Collected water quality sample on Feb 20 and delivered to CoCC water quality utilities lab. Prepared field notes.

Communication and coordination between HDR field representatives and PM on field program.

PM coordination with driller on program updates, field related activities, and scheduling.

Follow-up with City Staff on progress reports/updates.

Rental of two Level Troll 700 transducers (and associated cables) to monitor water levels during pump tests. Rental of Horiba water quality probe to record in-situ field water quality parameters during pump tests prior to laboratory sample collection.

Problems Encountered this period: None

**Task 3 - Geochemical Analysis**

Coordination with laboratories and receipt of water quality and core data, as available. Follow-up with laboratories and confirmation of testing parameters.

Confirmation of geochemist workplan. Compiled laboratory QA/QC data. Performed internal review by project chemist.

Provided laboratory results to geochemists, as data became available in packages. Began geochemistry evaluation.

Follow-up and coordination to collect additional potential source water sample (ON Stevens WTP) per City Staff request.

Problems Encountered this period: None

**Task 4 - Field Scale Groundwater Model**

No Work This period.

Problems Encountered this period: None

**Task 5 - ASR Operating Policies**

No Work This period.

Problems Encountered this period: None

**Task 6 - TWDB Coordination, Draft/Final Deliverables and Meetings**

No Work This period.

Problems Encountered this period: None

APPROVED

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4/30/18