



# **MEETING MATERIALS**

**August 6, 2014**

**San Jacinto River Authority**



**Region H Water Planning Group**  
**10:00 AM Wednesday**  
**August 6, 2014**  
**San Jacinto River Authority Office**  
**1577 Dam Site Rd, Conroe, Texas**

**AGENDA**

1. Introductions.
2. Review and approve minutes of May 7, 2014 meeting.
3. **Receive public comments on specific issues related to agenda items 4 through 20.** (Public comments limited to 3 minutes per speaker)
4. Consider and take action on the resignation of John Hofmann as a voting member of the Region H WPG representing River Authorities.
5. Consider and take action on the selection of David Collinsworth as a voting member of the Region H WPG representing River Authorities.
6. Consider and take action on the selection of James Comin as a voting member of the Region H WPG representing Industries.
7. Recognize the appointment of Dave Scholler as non-voting member of the Region H WPG representing North Fort Bend Water Authority.
8. Elect officers and members of the Executive Committee of the Region H WPG.
9. Receive presentation from Consultant Team regarding the proposed application by Brazosport Water Authority to amend the 2011 Region H Regional Water Plan and consider approving the submittal of the application package to TWDB for the determination of minor amendment status.
10. Receive presentation from Consultant Team regarding the proposed application by Dow Chemical Company to amend the 2011 Region H Regional Water Plan and consider approving the submittal of the application package to TWDB for the determination of minor amendment status.
11. Receive update from Consultant Team regarding the schedule and milestones for the development of the 2016 Region H Regional Water Plan.
12. Review and consider ratifying the technical memorandum submitted to TWDB by the Consultant Team detailing population and water demand projections, existing water supplies, and identified needs.
13. Receive presentation from the Consultant Team regarding the draft copy of Chapter 1: Description of Region for inclusion in the 2016 Region H Regional Water Plan.
14. Receive presentation from the Consultant Team regarding the draft copy of Chapter 2: Projected Population and Water Demands for inclusion in the 2016 Region H Regional Water Plan.
15. Receive presentation from the Consultant Team regarding the draft copy of Chapter 3: Analysis of Current Water Supplies for inclusion in the 2016 Region H Regional Water Plan.

16. Receive update from Consultant Team and Water Management Strategies Committee regarding the prioritization of water plan projects for use by the Texas Water Development Board in administering loan funding to implement water projects.
17. Consider and take action on authorizing the Consultant Team to finalize and submit the final TWDB prioritization scoring template for Region H water management strategies included in the 2011 Regional Water Plan.
18. Receive a presentation from the Consultant Team regarding draft rules developed by TWDB related to the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT) and propose comments to be submitted to TWDB by September 1, 2014.
19. Consider authorizing the Executive Committee to review and consider submittal of a separate report summarizing existing water infrastructure facilities that may be used for interconnections in the event of an emergency shortage of water.
20. Agency communications and general information.
21. **Receive public comments.** (Public comments limited to 3 minutes per speaker)
22. Next Meeting: November 5, 2014.
23. Adjourn

Persons with disabilities who plan to attend this meeting and would like to request auxiliary aids or services are requested to contact Jodi Chaney at (936) 588-3111 at least three business days prior to the meeting so that appropriate arrangements can be made.

## Agenda Item 2

Review and approve minutes of February 7<sup>th</sup>, 2014 meeting.



**MINUTES**  
**REGION H WATER PLANNING GROUP MEETING**  
**10:00 A.M.**  
**May 7, 2014**  
**SAN JACINTO RIVER AUTHORITY**  
**GENERAL AND ADMINISTRATION BUILDING**  
**1577 DAM SITE ROAD**  
**CONROE, TEXAS**

**MEMBERS PRESENT:** David Bailey, John R. Bartos, John Blount, Robert Bruner, Jun Chang, Mark Evans, Art Henson, Jace Houston, John Howard, Robert Istre, Kathy Jones, Gena Leathers, Carl Masterson, Ron Neighbors, Jimmie Schindewolf, William Teer, Steve Tyler, Pudge Willcox

**DESIGNATED ALTERNATES:** David Collinsworth for John Hofmann, Mike Turco for Marvin Marcell, Jim Sims for Kevin Ward, Mike O'Connell for Bob Hebert, Zac Holland for James Morrison

**MEMBERS ABSENT:** Gene Fisseler

**NON-VOTING MEMBERS PRESENT:** Temple McKinnon, Melinda Silva, Scott Hall, Wayne Ahrens

**PRESIDING:** Judge Mark Evans, Chair

**CALL TO ORDER REGULAR MEETING AT 10:05 A.M.**

A quorum was present.

**INTRODUCTIONS**

Mr. Evans welcomed everyone and alternates were announced.

**REVIEW AND APPROVE MINUTES OF FEBRUARY 5, 2014 MEETING**

The minutes for the February 5, 2014, meeting were presented. Motion was made by Mr. Schindewolf, seconded by Mr. Henson, to approve the minutes. The motion carried unanimously.

**RECEIVE PUBLIC COMMENTS ON SPECIFIC ISSUES RELATED TO AGENDA ITEMS 4 THROUGH 14**

Don Ripley, Executive Director, Coastal Water Authority, gave an update on Luce Bayou Inter-Basin Transfer Project, reporting on its transition from years of planning into the final design of the project. He emphasized the importance of prioritization and construction funding with this project.

Susan Roth, an independent engineering consultant working with Brazosport Water Authority presented a minor amendment request for the 2011 Region H Water Plan. The request comes on behalf of BWA and supports their ability to gain eligibility for funding. The key issue is providing a reliable water supply and continued opportunities for regionalization.

**RECOGNIZE AND WELCOME BECH BRUUN, MEMBER OF THE TEXAS WATER DEVELOPMENT BOARD**

Bech Bruun, Director, Texas Water Development Board, thanked members of the water planning group for their service and overviewed the regional prioritization timeline with regards to submission of the draft prioritization.

**RECEIVE PRESENTATION FROM NANCY RICHARDS REGARDING THE STATUS OF TEXAS WATER DEVELOPMENT BOARD FUNDING PROGRAMS**

Nancy Richards, Team Manager, East Texas Region, Texas Water Development Board, discussed additional funding programs available outside of SWIFT, both state and federally funded.

**RECEIVE UPDATE FROM SENATOR KIP AVERITT REGARDING THE STATUS OF THE GOLDWATER PROJECT EXAMINING WATER CONSERVATION EFFORTS IN REGION H**

Senator Kip Averitt and Mr. Stephen Cortes, Project Director, presented the first year report on the Goldwater Project concerning water conservation efforts within Region H. Mr. Cortes explained the two main goals are tracking and measuring municipal conservation and providing individual utilities with reports to assist them in meeting their own water conservation plans. Senator Averitt concluded with announcing an upcoming meeting of the Goldwater stakeholder committee on May 30, 2014, at the office of Freese & Nichols, which will begin the process of how to use the data and develop a core group that will start implementation.

**RECEIVE UPDATE FROM CONSULTANT TEAM REGARDING THE SCHEDULE AND MILESTONES FOR THE DEVELOPMENT OF THE 2016 REGION H REGIONAL WATER PLAN**

Mr. Jason Afinowicz, consultant with Freese & Nichols overviewed the timeline for the prioritization schedule. The deadline for the submittal of the required technical memorandum to TWDB is August 1, 2014. Submission of the Initially Prepared Plan is required by May 1, 2015 and final, approved Regional Water Plan must be adopted by November 1, 2015. The submission deadline to TWDB is June 1, 2014, for the *draft* prioritization and September 1, 2014, for the *final* prioritization.

**RECEIVE UPDATE FROM CONSULTANT TEAM AND WATER MANAGEMENT STRATEGIES COMMITTEE REGARDING THE PRIORITIZATION OF WATER PLAN PROJECTS FOR USE BY THE TEXAS WATER DEVELOPMENT BOARD IN ADMINISTERING LOAN FUNDING TO IMPLEMENT WATER PROJECTS**

Mr. Afinowicz gave an overview of the prioritization process and the results of the 829 projects. A full list will be submitted to the TWDB including the shorter list showing only projects with capital funding needs.

**CONSIDER AND TAKE ACTION ON AUTHORIZING THE CONSULTANT TEAM TO FINALIZE AND SUBMIT THE DRAFT TWDB PRIORITIZATION SCORING TEMPLATE FOR REGION H WATER MANAGEMENT STRATEGIES INCLUDED IN THE 2011 REGIONAL WATER PLAN AND AUTHORIZE THE WATER MANAGEMENT STRATEGIES COMMITTEE AND CONSULTANT TEAM TO WORK TO ADDRESS COMMENTS RECEIVED AND DEVELOP FINAL PRIORITIZATION FOR REGIONAL WATER PLANNING GROUP APPROVAL**

Mr. Afinowicz presented the draft prioritization, scoring template, and cover letter for submittal to the TWDB. Motion was made by Mr. Chang to submit the draft prioritization. Mr. Blount seconded the motion. The motion carried unanimously.

**AUTHORIZE THE CONSULTANT TEAM TO PREPARE AND SUBMIT THE REQUIRED TECHNICAL MEMORANDUM PRIOR TO AUGUST 1, 2014 TO BE RATIFIED BY THE REGIONAL WATER PLANNING GROUP FOLLOWING SUBMITTAL**

Mr. Afinowicz explained the submission of the technical memorandum prior to August 1, 2014, which



will then be ratified by the group shortly after at the August 6, 2014, meeting. Mr. Houston made the motion. Mr. Blount seconded the motion. The motion carried unanimously.

#### **CONSIDER AUTHORIZING THE REQUEST OF ADDITIONAL FUNDING FOR THE STUDY OF WATER MANAGEMENT STRATEGIES FROM THE TEXAS WATER DEVELOPMENT BOARD**

Mr. Afinowicz recommended consideration of a request for additional funding for the study of water management strategies. The amount of \$448,807.00 has been requested to date and \$351,600.00 still remains for potential funding. Mr. Masterson made the motion. Mr. Blount seconded the motion. The motion carried unanimously.

#### **RECEIVE UPDATE REGARDING THE STATUS OF THE TRINITY AND SAN JACINTO RIVERS AND GALVESTON BAY STAKEHOLDER COMMITTEE**

John Bartos reported on the status of projects being implemented in creating work plans related to environmental flows in the river systems and bays. TWDB has awarded \$312,000.00 for scopes of work on three different studies to include: defining a bio-indicator for freshwater information needs, making a determination of freshwater inflow from the Trinity River to the Trinity Bay, and environmental flow standards in the Trinity River.

#### **RECEIVE UPDATE REGARDING THE STATUS OF THE BRAZOS RIVER AND ASSOCIATED BAY AND ESTUARY SYSTEM STAKEHOLDER COMMITTEE**

Tom Michel reported on the Brazos BBAS Committee. The committee submitted flow recommendations and work plans for five projects.

#### **AGENCY COMMUNICATIONS AND GENERAL INFORMATION**

Temple McKinnon will be sending a link of the draft rules to be distributed.

#### **RECEIVE PUBLIC COMMENTS**

Jill Savory, Fort Bend County resident, provided comments regarding water issues in Fort Bend County.

#### **NEXT MEETING**

August 6, 2014  
San Jacinto River Authority  
General & Administration Building  
1577 Dam Site Road  
Conroe, TX 77304

**ADJOURNED AT 12:00 P.M.**



## Agenda Item 9

Receive presentation from Consultant Team regarding the proposed application by Brazosport Water Authority to amend the 2011 Region H Regional Water Plan and consider approving the submittal of the application package to TWDB for the determination of minor amendment status.



# Brazoria County Regional Water Supply Strategy



## Region H Planning Group Meeting

San Jacinto River Authority  
August 6, 2014



## Presentation Overview

- ◆ Brazosport Water Authority's Request for a Minor Amendment to 2011 Region H Water Plan and 2012 State Water Plan
- ◆ Highlights of TWDB Brazoria County Regional Water Facility Study
- ◆ Summary of Proposed BWA Water Management Strategy



## Brazosport Water Authority Request

- ◆ **What:** Request for Minor Amendment to 2011 Region H Water Plan and 2012 State Water Plan
- ◆ **Why:** To assure eligibility to apply for TWDB Financial Programs – SWIFT (project must be recommended in plans) and DWSRF (project must be consistent with plans)
- ◆ **Additional Drivers:**
  - Health and safety issues
  - Water supply reliability issues
  - Opportunities for regionalization



## Brazosport Water Authority Request

- ◆ **Primary Focus:**
  - Provide a reliable water supply
  - Expand regional water system to serve existing and additional BWA wholesale customers
  - Interconnect existing water systems to provide redundancy in case of system failures
  - Provide clarity for recommendations in 2011 Region H Water Plan, which include additional groundwater strategies and desalination of seawater to meet needs



# TWDB Brazoria County Regional Water Facility Study



## Overview of TWDB Brazoria County Regional Water Facility Study

- ◆ Brazosport Water Authority (BWA) was awarded a 50% matching grant from TWDB in March 2012 to conduct a regional water facility study in Brazoria County;
- ◆ 18 entities (including BWA as the primary applicant) participated in study to evaluate and determine a regional water solution for infrastructure in the study area;
- ◆ Regional study was initiated on April 17, 2012 and completed on January 31, 2014.



## **TWDB Regional Water Facility Planning Grant Program**

- ◆ **Regional Planning Guidelines:**
  - Focus on infrastructure planning needs
  - Regional treatment and distribution systems
  - Sizing of facilities, implementation schedule, cost estimates
  - Water conservation & drought contingency plans
  - Public involvement and public meetings
  - Funding alternatives, including TWDB
- ◆ **Studies are feasibility level to identify potential problems and cost-effective solutions.**



## **Project Participants**

- ◆ Texas Water Development Board
- ◆ Brazosport Water Authority (primary applicant)
- ◆ Brazoria County
- ◆ Brazoria County Groundwater Conservation District
- ◆ City of Alvin
- ◆ City of Angleton
- ◆ City of Brazoria
- ◆ City of Clute
- ◆ City of Freeport





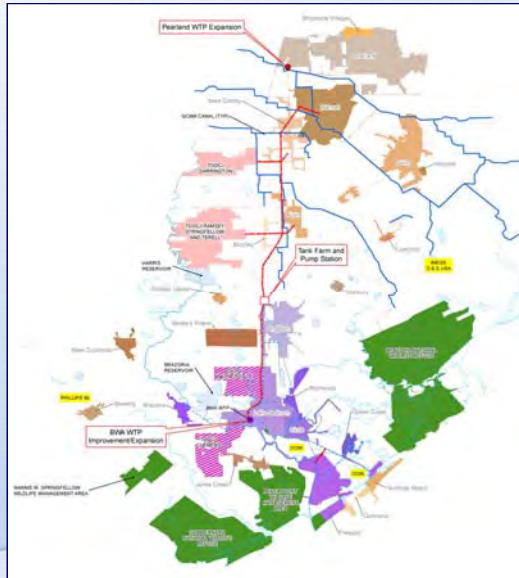
## **Project Participants (cont.)**

- ◆ **City of Lake Jackson**
- ◆ **City of Manvel**
- ◆ **City of Oyster Creek**
- ◆ **City of Richwood**
- ◆ **City of Pearland**
- ◆ **Phillips 66**
- ◆ **Dow Chemical**
- ◆ **Ineos O&P USA**
- ◆ **Gulf Coast Water Authority**
- ◆ **Port Freeport**



## **Proposed BWA Water Management Strategy**

## BWA Water Management Strategy: Brackish Groundwater Desal Project



## BWA Water Management Strategy: Brackish Groundwater Desal Project

- ◆ **What:** Replace surface water (seawater desal) supplies with additional new groundwater (brackish desal) to serve existing and future BWA participating customers in Brazoria County.
- ◆ **Why:** Address water reliability issues during 3-6 months of the year during drought conditions due to interruptible water contracts with BRA; provides conjunctive use of surface and groundwater supplies recommended in TWDB-Brazoria County Regional Water Study.
- ◆ **How:** Construct brackish groundwater wells and 6.0 MGD RO WTP at BWA WTP Site; construct tank farm, booster pump station at Angleton and transmission lines to provide regional water service

## **TWDB-Brazoria County Regional Water Study Findings**

- ◆ **Brackish Groundwater Desal Project provides an alternative reliable water source during the 10% critical period**
- ◆ **Brackish Groundwater Desal Project diversifies the water portfolio for BWA customers with the construction of the new RO WTP**
- ◆ **Treatment of seawater is cost prohibitive at this time (construction and O&M costs approx. 4 times greater than Brackish GW Desal)**
- ◆ **Location of proposed new RO WTP is ideal for brine disposal (no TDS limits below SH 332)**

## **Additional Technical Findings for Amendment Request**

## BWA Capacity and Contracts

- ◆ BWA Existing Capacity = 17.8 MGD

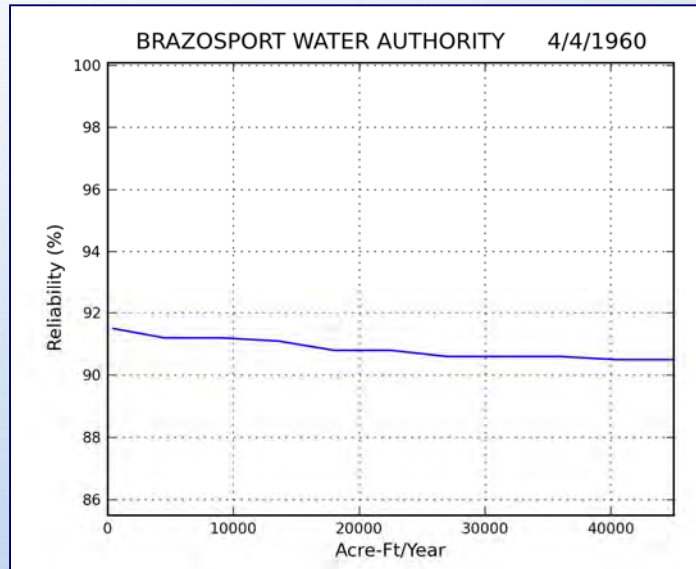
| Entity       | Contract Amount (MGD) |
|--------------|-----------------------|
| Angleton     | 1.80                  |
| Brazoria     | 0.30                  |
| Clute        | 1.00                  |
| Freeport     | 2.00                  |
| Lake Jackson | 2.00                  |
| Oyster Creek | 0.10                  |
| Richwood     | 0.24                  |
| TDCJ         | 0.90                  |
| DOW          | 1.00                  |
| <b>TOTAL</b> | <b>9.33</b>           |

*Available capacity = 8.5 MGD*

## Surface Water Availability

- ◆ Surface water availability for the regional water study was determined by INTERA
- ◆ BWA has water rights for 45,000 ac-ft/yr with a priority date of April 1960
- ◆ Monthly modeling using WAM8
- ◆ BWA's Surface Water is available 90% of the time regardless of the amount diverted (WAM8)
- ◆ Daily modeling using 2011 data
- ◆ Surface Water is available in quantities to full water right or it is NOT available
- ◆ Expanded Dow Reservoir helps but does not address all of BWA water availability issues

## BWA Monthly Reliability Graph



## Brackish Groundwater Availability

- ◆ Brackish Groundwater Availability was determined by INTERA
- ◆ Brazoria County is in Groundwater Management Area (GMA) 14
- ◆ Base of Fresh Water is 500 ft Below Surface; Base of Brackish Water is 1,000 ft Below Surface
- ◆ Brackish Groundwater Quality between 1000 mg/L and 3000 mg/L
- ◆ Brackish Groundwater Well (pull water from the lower levels of the Chicot Aquifer) could produce between 900 gpm and 2,000 gpm near the BWA Plant.

## **Proposed Project Details for Inclusion in 2011 RHWP**

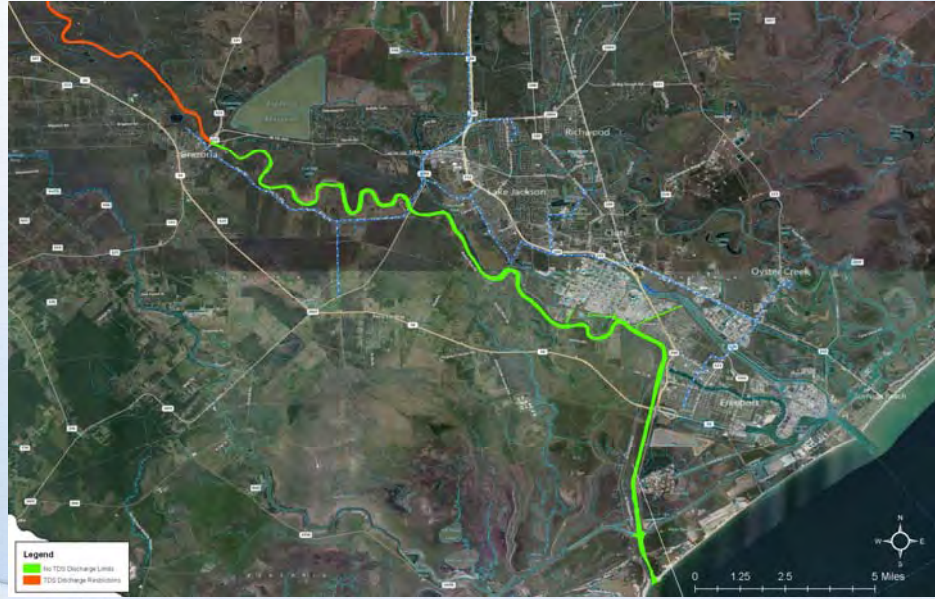
- ◆ **Construct 6.0 MGD Brackish Groundwater Facilities (Phase I, includes drilling 3 new wells and RO WTP)**
- ◆ **Location of new wells at or near BWA WTP property**
- ◆ **Additional water supplies will serve existing BWA customers**
- ◆ **Surface water/raw water improvements not included in Phase I**
- ◆ **Brackish Groundwater RO Plant will run at a minimum of 2.0 MGD on a continuous basis to stay operational**

## **Proposed Project Details for Inclusion in 2011 RHWP (cont.)**

- ◆ **Project Capital Cost = \$25,137,000**
- ◆ **Operating costs (Brackish Groundwater RO WTP and 3 wells) = approx. \$1.50 per 1,000 gallons**
- ◆ **Environmental studies will be conducted prior to the design of the wells and transmission lines.**
- ◆ **BWA does not anticipate any issue with the disposal of the RO concentrate in the segment of the Brazos River below SH 332 (no TDS limits in this segment).**



## TDS Discharge Limits



## Q&A Discussion

## BWA Plan Amendment



- **WMS Analysis for Inclusion in RWP**

- RO yield computation
  - based on long-term average
  - 90% baseline / 10% peak
  - 3,136 ac-ft/yr from Gulf Coast Aquifer
- Preliminary environmental review
  - Endangered species
  - Section 404
  - Floodplain
  - Etc.

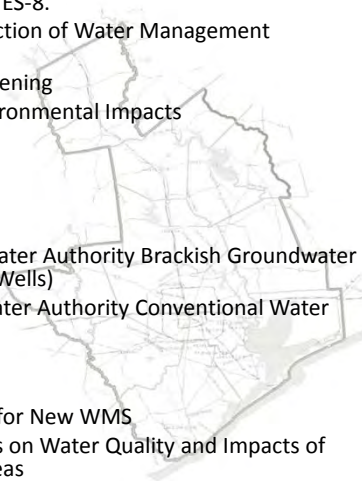


## BWA Plan Amendment



- **Updates to 2011 RWP Document**

- Executive Summary including Tables ES-7 and ES-8.
- Chapter 4: Identification, Evaluation and Selection of Water Management Strategies Based on Needs
  - Table 4A-3: Water Management Strategy Screening
  - Table 4A-4: Water Management Strategy Environmental Impacts
  - Table 4A-5: Recommended WMS by County
  - Table 4A-6: Decadal WMS Summary
  - Table 4A-7: WMS Supply Allocations by WUG
  - Table 4A-8: WUG-Level Contracts
  - Technical Memorandum 4B-52 (Brazosport Water Authority Brackish Groundwater Reverse Osmosis Water Treatment Plant and Wells)
  - Technical Memorandum 4B-53 (Brazosport Water Authority Conventional Water Plant Expansion)
  - Table 4C-1: WWP-Level Project Costs
  - Table 4C-2: WUG-Level Project Costs
  - Appendix 4E: Environmental Flows Modeling for New WMS
- Chapter 5: Impacts of Management Strategies on Water Quality and Impacts of Moving Water from Rural and Agricultural Areas





## BWA Plan Amendment



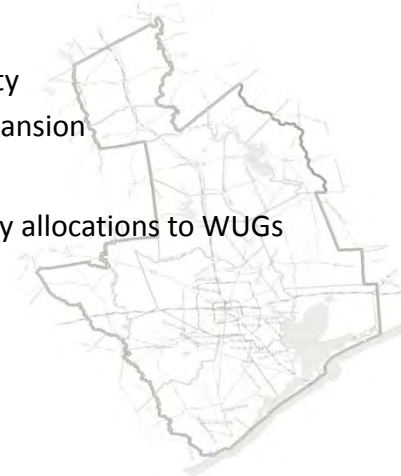
- Updates to DB12

- WMS Projects

- Brackish Groundwater Facility
- Conventional Treatment Expansion

- WUG Projects

- Brackish Groundwater supply allocations to WUGs



## BWA Plan Amendment



**Action:**

Approve the submittal of the application package to TWDB for the determination of minor amendment status and take necessary action to consider amendment of the 2011 RWP at the next Region H Meeting.





## Agenda Item 10

Receive presentation from Consultant Team regarding the proposed application by Dow Chemical Company to amend the 2011 Region H Regional Water Plan and consider approving the submittal of the application package to TWDB for the determination of minor amendment status.



## Dow Plan Amendment



- Materials Pending





## Agenda Item 11

Receive update from Consultant Team regarding the schedule and milestones for the development of the 2016 Region H Regional Water Plan.





## Schedule – Project Prioritization

| Date              | Scheduled Events/Tasks   |
|-------------------|--|
| 06/01/2014        | DUE DATE: RWPG Draft 2011 Project Prioritization to TWDB                                   |
| <b>08/06/2014</b> | <b>RWPG Meeting</b>  |
| 09/01/2014        | DUE DATE: RWPG Final 2011 Project Prioritization to TWDB, Comments to Proposed SWIFT Rules |
| 03/01/2015        | DUE DATE: Deadline for TWDB Adoption of Rules  |
| 11/02/2015        | DUE DATE: RWPG 2016 RWP with Project Prioritization to TWDB                                |

## Schedule – Regional Plan

| Date              | Scheduled Events/Tasks   |
|-------------------|--|
| 08/01/2014        | DUE DATE: Technical Memorandum to TWDB   |
| <b>08/06/2014</b> | <b>RWPG Meeting:<br/>Review / Approve Chapters 1-3<br/>Ratification of Technical Memorandum</b>  |
| 11/5/2014         | RWPG Meeting:<br><i>Review / Approve Chapter 4 and 7<br/>Discuss Legislative Recommendations</i> |
| 01/07/2015        | RWPG Meeting:<br><i>Review / Approve Chapters 5, 6, 8, 9, 10 (partial), and 11</i>               |
| 04/01/2015        | RWPG Meeting:<br><i>Review / Approve Initially Prepared Plan</i>                                 |
| 05/01/2015        | DUE DATE: Initially Prepared Plan to TWDB  |
| Q2/Q3 2015        | RWPG Meeting:<br><i>Review / Approve Final Plan</i>  |
| 11/02/2015        | DUE DATE: Final Adopted Plan to TWDB   |



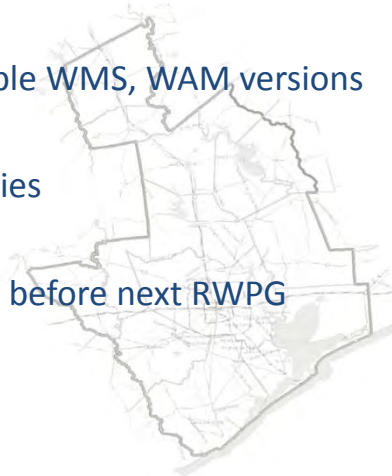
## Agenda Item 12

Review and consider ratifying the technical memorandum submitted to TWDB by the Consultant Team detailing population and water demand projections, existing water supplies, and identified needs.



## Technical Memorandum

- Transmitted to TWDB July 31
- Limited to DB17 reports, feasible WMS, WAM versions
- Preliminary allocation of supplies
- Ratification by RWPG required before next RWPG meeting



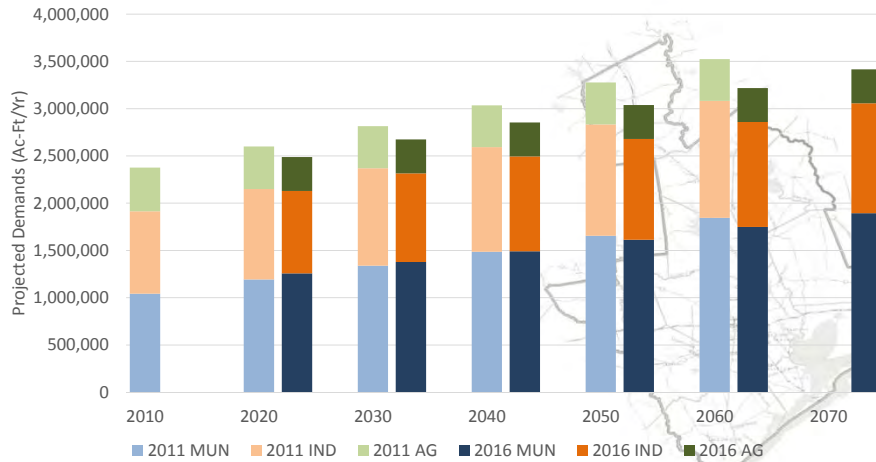
## Technical Memorandum

| DB17 Report Name                                 | Summary of Report Content  |
|--|--|
| Population Projections                           | Population projections by WUG, county, and river basin.  |
| Water Demands                                    | Population and water demand projections by WWP and WUG, county, and river basin to include separate information on water supply commitments to other entities. |
| Population Projection and Water Demand - Summary | Population and water demand projections by WUG category.   |
| Water Availability                               | Water availability by source and location.   |
| Existing Water Supplies                          | Existing water supplies by WUG, county, and river basin.   |
| <del>Existing Water Supplies - Summary</del>     | <del>Existing water supplies by WUG category by decade.</del>  |
| Identified Water Needs/Surpluses                 | Identified water needs and or surpluses by WUG <del>and WWP</del> , county, and river basin.   |
| <del>Identified Water Need - Summary</del>       | <del>Identified water needs by WUG category by decade.</del>   |
| Source Water Balance report                      | Presenting total water use from each source. Must show no over allocation of source availability.  |

## Technical Memorandum



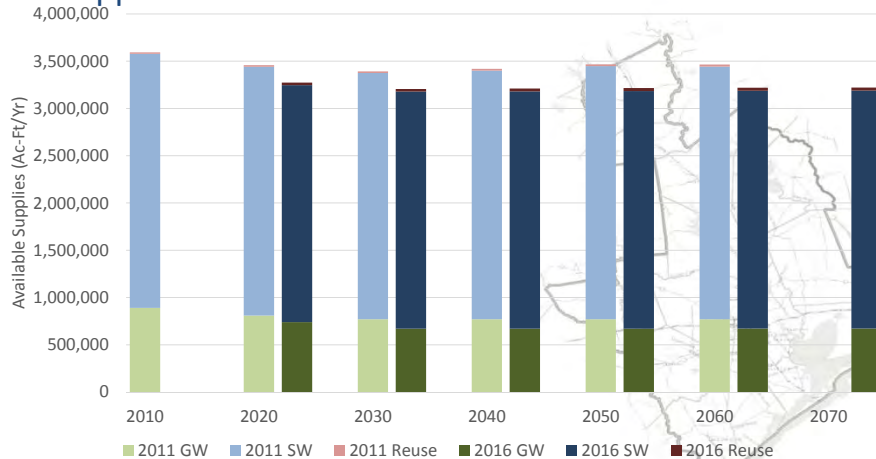
### • Demands vs 2011



## Technical Memorandum



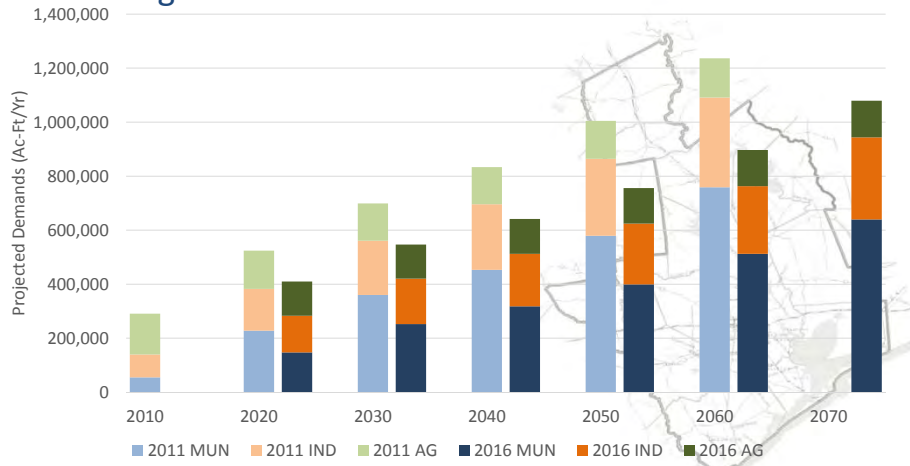
### • Supplies vs 2011



# Technical Memorandum



## • Shortages vs 2011







**TO:** Mr. Kevin Patteson

**CC:** Mr. Lann Bookout (TWDB)  
Ms. Temple McKinnon (TWDB)  
Mr. Mark Evans (RHWPG)  
Mr. Jace Houston (RHWPG)

**FROM:** Jason Afinowicz, P.E.

**SUBJECT:** Required Technical Memorandum for Region H Water Planning Group

**DATE:** 2014/07/31

**PROJECT:** 2016 Region H Regional Water Plan (SJ11328)

The Region H consultant team has concluded its preliminary entry of data into the Regional Water Planning Application (DB17) and requested the available reports generated based on this information. This memorandum contains the information presented in these reports as well as other information as required in the First Amended General Guidelines for Regional Water Plan Development (Exhibit C). This submittal is made as authorized by the Region H Water Planning Group (RHWPG) at their May 7, 2014 meeting and to be ratified at the August 6 meeting of the RHWPG. Please feel free to direct any questions regarding this submittal to my attention at [jason.afinowicz@freese.com](mailto:jason.afinowicz@freese.com).

### **Regional Water Planning Application Reports**

The following reports for the Region H Water Planning Area (RHWA) can be found attached to this memorandum:

- TWDB: WUG POPULATION DRAFT dated 2014/07/30,
- TWDB: WUG DEMAND DRAFT dated 2014/07/30,
- TWDB: WUG CATEGORY SUMMARY DRAFT dated 2014/07/30,
- TWDB: WUG NEEDS/SURPLUS dated 2014/07/30,
- TWDB: SOURCE AVAILABILITY DRAFT dated 2014/07/30,
- TWDB: EXISTING SUPPLY DRAFT dated 2014/07/30, and
- TWDB: SOURCE WATER BALANCE DRAFT dated 2014/07/30.

The RHWPG recognizes that the information contained within these reports is to be considered draft at this point and subject to ongoing planning within the RHWA as well as coordination with other, adjoining planning regions. The RHWPG and its consultants will update the entries in DB17 as appropriate in completion of the 2016 Region H Regional Water Plan (RWP).

### **Potentially Feasible Water Management Strategies**

The RHWPG considered a list of potentially feasible Water Management Strategies (WMS) at their June 6, 2012 meeting. These were adapted largely from the 2011 RWP and are as follows. Potential WMS in bold text have been added since the development of the 2011 RWP.

- Conservation
  - Municipal
  - Industrial
  - Irrigation
- Contractual Transfers
  - TRA to COH
  - TRA to SJRA
- Groundwater Strategies
  - Expanded Use of Groundwater
  - **Brackish Groundwater**
- GRPs
  - City of Houston
  - NHCRWA
  - WHCRWA
  - CHCRWA
  - NFBWA
  - Montgomery County
  - Richmond/Rosenberg
  - City of Sugar Land
  - Missouri City
  - Fort Bend MUD 25
  - Pecan Grove
  - Fort Bend WCID 2
  - River Plantation
- Surface Water Systems
  - CLCND West Chambers County System
- Interbasin Transfers
  - Luce Bayou
  - Sabine to Region H
  - **Trinity or San Jacinto to Brazos River Basin Transfer**
- Reservoirs
  - Allens Creek
  - GCWA Off-Channel
  - Dow Off-Channel
  - Other Brazos River Off-Channel Reservoir Projects
  - Little River Off-Channel
  - **Montgomery County Reservoirs**
- Surface Water Supply Development
  - BRA System Operations Permit
- Reuse Strategies
  - NHCRWA Indirect Reuse

- City of Fulshear Reuse
- Montgomery County Muds 8 and 9 Reuse
- Wastewater Reclamation for Industry
- Wastewater Reclamation for Municipal Irrigation
- **Regional Return Flows Permit**
- **Trinity Basin Reuse from Region C**
- **Enhanced Industrial Reuse**
- Facilities Strategies
  - COH Treatment Expansion
  - COH Regional Distribution Expansion
  - Brazos Saltwater Barrier
  - Seawater Desalination
  - Huntsville WTP
  - City of Pearland WTP
  - Montgomery County MUDs 8 and 9 Brackish Groundwater Desal
  - **Regional Transmission Strategies**
- Other Strategies
  - **Alternative Supplies for Non-Potable Demands**

**Water Availability Models Utilized in Development of Available Supplies**

The RHWPG and its consultants have utilized a number of Water Availability Models (WAMs) in the development of available water supplies as presented in the DB17 reports discussed above and in the ongoing development of the 2016 Region H RWP. These models are described below in **Table 1**.

**Table 1 – Summary of WAM Input Files for Region H Plan Development**

| Model Root File Name | Basin                         | Date       |
|----------------------|-------------------------------|------------|
| TSJ3                 | Trinity-San Jacinto           | 2009-11-23 |
| trin3adopt           | Trinity                       | 2011-09-09 |
| trinSB3_2020         | Trinity                       | 2012-05-10 |
| trinSB3_2030         | Trinity                       | 2012-05-10 |
| trinSB3_2040         | Trinity                       | 2012-05-10 |
| trinSB3_2050         | Trinity                       | 2012-05-10 |
| trinSB3_2060         | Trinity                       | 2012-05-11 |
| trinSB3_2070         | Trinity                       | 2012-05-11 |
| SJ_ROR               | San Jacinto                   | 2012-05-08 |
| SJ2020LkConroe       | San Jacinto                   | 2012-05-08 |
| SJ2020LkHouston      | San Jacinto                   | 2012-05-08 |
| SJ2070LkConroe       | San Jacinto                   | 2012-05-08 |
| SJ2070LkHouston      | San Jacinto                   | 2012-05-08 |
| NT3                  | Neches-Trinity                | 2009-11-23 |
| C3                   | Brazos-Colorado               | 2007-08-01 |
| bwam3_2020           | Brazos and San Jacinto-Brazos | 2013-11-26 |
| bwam3_2070           | Brazos and San Jacinto-Brazos | 2013-11-27 |

### WUG POPULATION

| REGION H                                      | WUG POPULATION |               |               |               |               |               |
|---|----------------|---------------|---------------|---------------|---------------|---------------|
|   | 2020           | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>AUSTIN COUNTY</b>                          |                |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                           |                |               |               |               |               |               |
| BELLVILLE                                     | 4,386          | 4,716         | 5,070         | 5,485         | 5,940         | 6,445         |
| SAN FELIPE                                    | 868            | 1,006         | 1,154         | 1,328         | 1,518         | 1,729         |
| SEALY   | 6,740          | 7,577         | 8,475         | 9,527         | 10,682        | 11,963        |
| COUNTY-OTHER                                  | 15,670         | 18,759        | 22,075        | 25,962        | 30,227        | 34,963        |
| <b>BRAZOS BASIN TOTAL POPULATION</b>          | <b>27,664</b>  | <b>32,058</b> | <b>36,774</b> | <b>42,302</b> | <b>48,367</b> | <b>55,100</b> |
| <b>BRAZOS-COLORADO BASIN</b>                  |                |               |               |               |               |               |
| SEALY   | 14             | 15            | 17            | 19            | 21            | 24            |
| WALLIS  | 1,329          | 1,416         | 1,510         | 1,620         | 1,740         | 1,874         |
| COUNTY-OTHER                                  | 3,684          | 4,394         | 5,156         | 6,048         | 7,028         | 8,115         |
| <b>BRAZOS-COLORADO BASIN TOTAL POPULATION</b> | <b>5,027</b>   | <b>5,825</b>  | <b>6,683</b>  | <b>7,687</b>  | <b>8,789</b>  | <b>10,013</b> |
| <b>COLORADO BASIN</b>                         |                |               |               |               |               |               |
| COUNTY-OTHER                                  | 323            | 374           | 429           | 494           | 565           | 643           |
| <b>COLORADO BASIN TOTAL POPULATION</b>        | <b>323</b>     | <b>374</b>    | <b>429</b>    | <b>494</b>    | <b>565</b>    | <b>643</b>    |
| <b>AUSTIN COUNTY TOTAL POPULATION</b>         | <b>33,014</b>  | <b>38,257</b> | <b>43,886</b> | <b>50,483</b> | <b>57,721</b> | <b>65,756</b> |
| <b>BRAZORIA COUNTY</b>                        |                |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                           |                |               |               |               |               |               |
| BAILEY'S PRAIRIE                              | 217            | 228           | 237           | 247           | 256           | 265           |
| BRAZORIA                                      | 677            | 682           | 686           | 691           | 696           | 701           |
| FREEPORT                                      | 1,297          | 1,480         | 1,659         | 1,836         | 2,001         | 2,137         |
| LAKE JACKSON                                  | 181            | 221           | 297           | 383           | 479           | 588           |
| VARNER CREEK UD                               | 1,529          | 1,532         | 1,534         | 1,536         | 1,537         | 1,539         |
| WEST COLUMBIA                                 | 3,321          | 3,329         | 3,340         | 3,353         | 3,367         | 3,383         |
| COUNTY-OTHER                                  | 6,189          | 7,213         | 8,741         | 10,262        | 11,820        | 13,460        |
| <b>BRAZOS BASIN TOTAL POPULATION</b>          | <b>13,411</b>  | <b>14,685</b> | <b>16,494</b> | <b>18,308</b> | <b>20,156</b> | <b>22,073</b> |
| <b>BRAZOS-COLORADO BASIN</b>                  |                |               |               |               |               |               |
| BRAZORIA                                      | 2,444          | 2,530         | 2,599         | 2,656         | 2,704         | 2,747         |
| FREEPORT                                      | 6              | 9             | 12            | 14            | 16            | 17            |
| JONES CREEK                                   | 2,042          | 2,068         | 2,088         | 2,102         | 2,113         | 2,121         |
| SWEENEY                                       | 3,704          | 3,716         | 3,731         | 3,747         | 3,765         | 3,785         |
| WEST COLUMBIA                                 | 602            | 610           | 619           | 630           | 642           | 656           |
| COUNTY-OTHER                                  | 22,659         | 27,824        | 32,579        | 37,153        | 41,725        | 46,445        |
| <b>BRAZOS-COLORADO BASIN TOTAL POPULATION</b> | <b>31,457</b>  | <b>36,757</b> | <b>41,628</b> | <b>46,302</b> | <b>50,965</b> | <b>55,771</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>               |                |               |               |               |               |               |
| ALVIN   | 26,830         | 28,832        | 31,157        | 34,065        | 37,803        | 42,709        |
| ANGLETON                                      | 19,064         | 19,208        | 19,342        | 19,482        | 19,629        | 19,785        |
| BAILEY'S PRAIRIE                              | 531            | 558           | 567           | 577           | 586           | 596           |
| BRAZORIA COUNTY MUD #2                        | 5,348          | 5,348         | 5,351         | 5,355         | 5,359         | 5,363         |
| BRAZORIA COUNTY MUD #21                       | 3,707          | 3,867         | 4,168         | 4,469         | 4,770         | 4,968         |
| BRAZORIA COUNTY MUD #3                        | 3,653          | 3,659         | 3,717         | 3,775         | 3,833         | 3,911         |
| BRAZORIA COUNTY MUD #6                        | 3,158          | 3,158         | 3,169         | 3,180         | 3,192         | 3,207         |
| BROOKSIDE VILLAGE                             | 1,691          | 1,849         | 2,373         | 3,006         | 3,769         | 4,689         |
| CLUTE   | 11,440         | 11,830        | 12,255        | 12,706        | 13,189        | 13,705        |
| DANBURY                                       | 1,722          | 1,722         | 1,722         | 1,723         | 1,723         | 1,724         |
| FREEPORT                                      | 11,560         | 12,156        | 12,685        | 13,169        | 13,644        | 14,145        |
| HILLCREST                                     | 730            | 731           | 733           | 734           | 736           | 737           |

### WUG POPULATION

| REGION H  | WUG POPULATION |                |                |                |                |                |
|---|----------------|----------------|----------------|----------------|----------------|----------------|
|   | 2020           | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>BRAZORIA COUNTY</b>                            |                |                |                |                |                |                |
| <b>SAN JACINTO-BRAZOS BASIN</b>                   |                |                |                |                |                |                |
| HOLIDAY LAKES                                     | 1,109          | 1,110          | 1,112          | 1,115          | 1,117          | 1,119          |
| IOWA COLONY                                       | 2,312          | 2,635          | 3,115          | 3,546          | 3,941          | 4,187          |
| LAKE JACKSON                                      | 27,127         | 27,875         | 28,636         | 29,460         | 30,354         | 31,326         |
| MANVEL  | 11,619         | 18,954         | 25,612         | 33,127         | 41,930         | 52,829         |
| OYSTER CREEK                                      | 1,131          | 1,154          | 1,182          | 1,217          | 1,259          | 1,310          |
| PEARLAND  | 97,542         | 104,025        | 112,321        | 121,290        | 131,111        | 140,420        |
| RICHWOOD  | 3,647          | 3,797          | 3,948          | 4,109          | 4,282          | 4,467          |
| COUNTY-OTHER                                      | 81,146         | 107,477        | 132,599        | 158,981        | 188,020        | 219,527        |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL POPULATION</b>  | <b>315,067</b> | <b>359,945</b> | <b>405,764</b> | <b>455,086</b> | <b>510,247</b> | <b>570,724</b> |
| <b>BRAZORIA COUNTY TOTAL POPULATION</b>           | <b>359,935</b> | <b>411,387</b> | <b>463,886</b> | <b>519,696</b> | <b>581,368</b> | <b>648,568</b> |
| <b>CHAMBERS COUNTY</b>                            |                |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                       |                |                |                |                |                |                |
| ANAHUAC   | 1,840          | 1,865          | 1,891          | 1,919          | 1,949          | 1,980          |
| TRINITY BAY CONSERVATION DISTRICT                 | 10,227         | 12,260         | 14,362         | 16,625         | 19,046         | 21,588         |
| COUNTY-OTHER                                      | 298            | 699            | 1,112          | 1,557          | 2,033          | 2,534          |
| <b>NECHES-TRINITY BASIN TOTAL POPULATION</b>      | <b>12,365</b>  | <b>14,824</b>  | <b>17,365</b>  | <b>20,101</b>  | <b>23,028</b>  | <b>26,102</b>  |
| <b>TRINITY BASIN</b>                              |                |                |                |                |                |                |
| ANAHUAC   | 429            | 435            | 441            | 447            | 454            | 462            |
| BEACH CITY  | 284            | 339            | 396            | 458            | 524            | 593            |
| COVE  | 656            | 829            | 1,008          | 1,201          | 1,407          | 1,624          |
| MONT BELVIEU                                      | 3,855          | 4,929          | 6,040          | 7,237          | 8,517          | 9,860          |
| OLD RIVER-WINFREE                                 | 1,327          | 1,590          | 1,863          | 2,157          | 2,470          | 2,800          |
| TRINITY BAY CONSERVATION DISTRICT                 | 2,670          | 3,200          | 3,749          | 4,340          | 4,972          | 5,635          |
| COUNTY-OTHER                                      | 7,693          | 8,954          | 10,256         | 11,657         | 13,156         | 14,730         |
| <b>TRINITY BASIN TOTAL POPULATION</b>             | <b>16,914</b>  | <b>20,276</b>  | <b>23,753</b>  | <b>27,497</b>  | <b>31,500</b>  | <b>35,704</b>  |
| <b>TRINITY-SAN JACINTO BASIN</b>                  |                |                |                |                |                |                |
| BAYTOWN   | 4,866          | 5,756          | 6,676          | 7,667          | 8,726          | 9,839          |
| BEACH CITY  | 2,346          | 2,803          | 3,275          | 3,783          | 4,326          | 4,897          |
| MONT BELVIEU                                      | 1,158          | 1,481          | 1,815          | 2,174          | 2,558          | 2,962          |
| COUNTY-OTHER                                      | 4,513          | 5,403          | 6,326          | 7,319          | 8,381          | 9,495          |
| <b>TRINITY-SAN JACINTO BASIN TOTAL POPULATION</b> | <b>12,883</b>  | <b>15,443</b>  | <b>18,092</b>  | <b>20,943</b>  | <b>23,991</b>  | <b>27,193</b>  |
| <b>CHAMBERS COUNTY TOTAL POPULATION</b>           | <b>42,162</b>  | <b>50,543</b>  | <b>59,210</b>  | <b>68,541</b>  | <b>78,519</b>  | <b>88,999</b>  |
| <b>FORT BEND COUNTY</b>                           |                |                |                |                |                |                |
| <b>BRAZOS BASIN</b>                               |                |                |                |                |                |                |
| BEASLEY   | 49             | 72             | 113            | 171            | 250            | 357            |
| FAIRCHILDS  | 783            | 915            | 1,026          | 1,186          | 1,422          | 1,778          |
| FORT BEND COUNTY MUD #116                         | 2,505          | 2,843          | 3,340          | 3,729          | 4,118          | 4,506          |
| FORT BEND COUNTY MUD #121                         | 3,188          | 3,461          | 4,094          | 4,741          | 5,389          | 6,037          |
| FORT BEND COUNTY MUD #129                         | 2,680          | 3,848          | 4,933          | 5,838          | 6,471          | 6,475          |
| FORT BEND COUNTY MUD #25                          | 1,180          | 1,186          | 1,190          | 1,194          | 1,199          | 1,203          |
| FULSHEAR  | 813            | 1,513          | 2,014          | 2,450          | 2,838          | 3,191          |
| GREATWOOD   | 12,140         | 12,601         | 12,669         | 12,736         | 12,803         | 12,870         |
| MISSOURI CITY                                     | 7,198          | 9,893          | 12,538         | 14,701         | 16,076         | 16,740         |
| NEEDVILLE   | 1,285          | 1,297          | 1,314          | 1,340          | 1,379          | 1,437          |

### WUG POPULATION

| REGION H   | WUG POPULATION |                  |                  |                  |                  |                  |
|--|----------------|------------------|------------------|------------------|------------------|------------------|
|  | 2020           | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>FORT BEND COUNTY</b>                          |                |                  |                  |                  |                  |                  |
| <b>BRAZOS BASIN</b>                              |                |                  |                  |                  |                  |                  |
| NORTH FORT BEND WATER AUTHORITY                  | 10,233         | 16,610           | 79,520           | 112,328          | 125,240          | 127,302          |
| PECAN GROVE MUD #1                               | 11,421         | 11,446           | 11,491           | 11,530           | 11,563           | 11,593           |
| PLANTATION MUD                                   | 3,948          | 3,948            | 3,948            | 3,948            | 3,948            | 3,948            |
| PLEAK  | 1,350          | 1,580            | 1,691            | 1,797            | 1,907            | 2,034            |
| RICHMOND   | 12,400         | 12,890           | 13,510           | 14,375           | 15,236           | 16,093           |
| ROSENBERG  | 40,381         | 42,520           | 44,831           | 47,204           | 49,946           | 53,226           |
| SIENNA PLANTATION                                | 4,966          | 6,376            | 7,822            | 9,268            | 10,714           | 12,318           |
| SIMONTON   | 884            | 1,047            | 1,369            | 1,623            | 1,826            | 1,992            |
| SUGAR LAND                                       | 57,295         | 61,865           | 67,971           | 74,302           | 79,824           | 83,448           |
| WESTON LAKES                                     | 2,621          | 2,791            | 3,019            | 3,247            | 3,475            | 3,704            |
| COUNTY-OTHER                                     | 119,460        | 181,679          | 185,585          | 220,787          | 277,825          | 351,619          |
| <b>BRAZOS BASIN TOTAL POPULATION</b>             | <b>296,780</b> | <b>380,381</b>   | <b>463,988</b>   | <b>548,495</b>   | <b>633,449</b>   | <b>721,871</b>   |
| <b>BRAZOS-COLORADO BASIN</b>                     |                |                  |                  |                  |                  |                  |
| BEASLEY  | 617            | 655              | 734              | 842              | 990              | 1,194            |
| NEEDVILLE  | 1,551          | 1,577            | 1,608            | 1,655            | 1,725            | 1,830            |
| ROSENBERG  | 3              | 40               | 97               | 174              | 281              | 428              |
| COUNTY-OTHER                                     | 10,685         | 17,788           | 30,317           | 48,632           | 75,429           | 114,670          |
| <b>BRAZOS-COLORADO BASIN TOTAL POPULATION</b>    | <b>12,856</b>  | <b>20,060</b>    | <b>32,756</b>    | <b>51,303</b>    | <b>78,425</b>    | <b>118,122</b>   |
| <b>SAN JACINTO BASIN</b>                         |                |                  |                  |                  |                  |                  |
| HOUSTON  | 25,294         | 27,280           | 28,259           | 29,151           | 29,866           | 30,305           |
| KATY   | 6,908          | 16,048           | 16,136           | 16,205           | 16,259           | 16,302           |
| MEADOWS PLACE                                    | 4,288          | 4,380            | 4,475            | 4,571            | 4,668            | 4,768            |
| MISSOURI CITY                                    | 10,014         | 11,747           | 13,444           | 14,174           | 14,632           | 15,298           |
| NORTH FORT BEND WATER AUTHORITY                  | 148,140        | 176,426          | 180,480          | 182,392          | 184,084          | 186,051          |
| STAFFORD   | 5,207          | 5,467            | 5,759            | 6,097            | 6,487            | 6,939            |
| SUGAR LAND                                       | 4,199          | 4,201            | 4,202            | 4,204            | 4,205            | 4,207            |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY      | 11,255         | 11,534           | 11,591           | 11,656           | 11,750           | 11,850           |
| COUNTY-OTHER                                     | 942            | 1,176            | 1,384            | 1,495            | 1,557            | 1,615            |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>        | <b>216,247</b> | <b>258,259</b>   | <b>265,730</b>   | <b>269,945</b>   | <b>273,508</b>   | <b>277,335</b>   |
| <b>SAN JACINTO-BRAZOS BASIN</b>                  |                |                  |                  |                  |                  |                  |
| ARCOLA   | 1,874          | 2,848            | 3,748            | 4,605            | 5,302            | 5,999            |
| FORT BEND COUNTY MUD #23                         | 11,693         | 12,464           | 12,884           | 13,305           | 13,725           | 14,145           |
| FORT BEND COUNTY MUD #25                         | 8,232          | 8,316            | 8,459            | 8,628            | 8,801            | 8,978            |
| FULSHEAR   | 11,293         | 12,242           | 12,918           | 13,475           | 13,946           | 14,352           |
| HOUSTON  | 16,295         | 16,804           | 17,836           | 18,725           | 19,463           | 20,127           |
| MEADOWS PLACE                                    | 381            | 381              | 381              | 382              | 384              | 385              |
| MISSOURI CITY                                    | 58,637         | 71,707           | 84,738           | 97,048           | 104,776          | 109,256          |
| NORTH FORT BEND WATER AUTHORITY                  | 120,824        | 193,777          | 211,003          | 225,108          | 236,529          | 245,782          |
| PEARLAND   | 3,495          | 3,766            | 4,691            | 5,615            | 6,543            | 7,621            |
| PECAN GROVE MUD #1                               | 89             | 89               | 90               | 90               | 90               | 90               |
| SIENNA PLANTATION                                | 13,481         | 17,217           | 24,291           | 31,365           | 38,440           | 44,698           |
| STAFFORD   | 12,554         | 12,774           | 13,086           | 13,421           | 13,784           | 14,176           |
| SUGAR LAND                                       | 44,016         | 48,842           | 49,999           | 50,769           | 51,195           | 51,657           |
| COUNTY-OTHER                                     | 53,219         | 35,196           | 52,709           | 69,654           | 85,422           | 100,570          |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL POPULATION</b> | <b>356,083</b> | <b>436,423</b>   | <b>496,833</b>   | <b>552,190</b>   | <b>598,400</b>   | <b>637,836</b>   |
| <b>FORT BEND COUNTY TOTAL POPULATION</b>         | <b>881,966</b> | <b>1,095,123</b> | <b>1,259,307</b> | <b>1,421,933</b> | <b>1,583,782</b> | <b>1,755,164</b> |

### WUG POPULATION

| REGION H   | WUG POPULATION |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
|  | 2020           | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>GALVESTON COUNTY</b>                          |                |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                      |                |                |                |                |                |                |
| BOLIVAR PENINSULA SUD                            | 2,943          | 3,480          | 4,118          | 4,875          | 5,771          | 6,835          |
| COUNTY-OTHER                                     | 38             | 50             | 66             | 86             | 110            | 138            |
| <b>NECHES-TRINITY BASIN TOTAL POPULATION</b>     | <b>2,981</b>   | <b>3,530</b>   | <b>4,184</b>   | <b>4,961</b>   | <b>5,881</b>   | <b>6,973</b>   |
| <b>SAN JACINTO-BRAZOS BASIN</b>                  |                |                |                |                |                |                |
| BACLIFF MUD                                      | 7,310          | 7,416          | 7,524          | 7,633          | 7,742          | 7,850          |
| BAYOU VISTA                                      | 1,538          | 1,541          | 1,544          | 1,546          | 1,548          | 1,549          |
| CLEAR LAKE SHORES                                | 1,525          | 1,579          | 1,579          | 1,579          | 1,579          | 1,579          |
| DICKINSON  | 19,103         | 20,048         | 21,121         | 22,176         | 23,223         | 24,269         |
| FRIENDSWOOD                                      | 27,724         | 29,656         | 31,856         | 34,254         | 36,885         | 39,790         |
| GALVESTON  | 51,260         | 54,643         | 57,846         | 60,955         | 63,941         | 67,085         |
| HITCHCOCK  | 8,604          | 10,217         | 11,248         | 12,053         | 12,692         | 13,205         |
| JAMAICA BEACH                                    | 989            | 998            | 1,007          | 1,017          | 1,030          | 1,044          |
| KEMAH  | 4,685          | 6,166          | 6,392          | 6,572          | 6,719          | 6,842          |
| LA MARQUE  | 20,111         | 21,970         | 22,429         | 22,810         | 23,133         | 23,414         |
| LEAGUE CITY                                      | 106,764        | 120,273        | 130,742        | 139,323        | 144,257        | 147,634        |
| SAN LEON MUD                                     | 5,547          | 6,066          | 6,466          | 6,866          | 7,266          | 7,667          |
| SANTA FE   | 12,524         | 12,895         | 13,356         | 13,825         | 14,300         | 14,783         |
| TEXAS CITY                                       | 51,369         | 56,474         | 60,714         | 64,373         | 67,607         | 70,539         |
| TIKI ISLAND                                      | 972            | 979            | 987            | 994            | 998            | 1,002          |
| COUNTY-OTHER                                     | 20,564         | 22,922         | 24,825         | 26,610         | 28,325         | 29,968         |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL POPULATION</b> | <b>340,589</b> | <b>373,843</b> | <b>399,636</b> | <b>422,586</b> | <b>441,245</b> | <b>458,220</b> |
| <b>GALVESTON COUNTY TOTAL POPULATION</b>         | <b>343,570</b> | <b>377,373</b> | <b>403,820</b> | <b>427,547</b> | <b>447,126</b> | <b>465,193</b> |
| <b>HARRIS COUNTY</b>                             |                |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                         |                |                |                |                |                |                |
| BAYTOWN  | 3,131          | 3,181          | 3,246          | 3,313          | 3,380          | 3,447          |
| BELLAIRE   | 17,135         | 18,622         | 20,250         | 22,020         | 23,952         | 26,059         |
| BLUE BELL MANOR UTILITY COMPANY                  | 2,879          | 2,982          | 3,152          | 3,336          | 3,525          | 3,689          |
| BUNKER HILL VILLAGE                              | 3,803          | 4,105          | 4,431          | 4,784          | 5,164          | 5,575          |
| CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY   | 50,418         | 55,097         | 58,372         | 61,420         | 64,232         | 67,191         |
| CHIMNEY HILL MUD                                 | 5,504          | 5,589          | 5,665          | 5,750          | 5,843          | 5,946          |
| CROSBY MUD                                       | 2,603          | 2,768          | 2,823          | 2,877          | 2,932          | 2,988          |
| DEER PARK  | 10,775         | 11,128         | 11,302         | 11,480         | 11,662         | 11,849         |
| EL DORADO UD                                     | 2,807          | 2,930          | 3,057          | 3,184          | 3,233          | 3,233          |
| FOUNTAINVIEW SUBDIVISION                         | 1,929          | 1,941          | 1,953          | 1,966          | 1,980          | 1,995          |
| GALENA PARK                                      | 10,887         | 11,092         | 11,303         | 11,520         | 11,742         | 11,969         |
| GREEN TRAILS MUD                                 | 1,820          | 1,828          | 1,846          | 1,860          | 1,870          | 1,877          |
| GREENWOOD UD                                     | 4,741          | 5,452          | 5,518          | 5,586          | 5,654          | 5,725          |
| HARRIS COUNTY MUD #106                           | 4,655          | 4,725          | 4,912          | 5,046          | 5,145          | 5,219          |
| HARRIS COUNTY MUD #11                            | 3,203          | 3,293          | 3,411          | 3,537          | 3,673          | 3,819          |
| HARRIS COUNTY MUD #119                           | 5,927          | 6,119          | 6,346          | 6,590          | 6,758          | 6,908          |
| HARRIS COUNTY MUD #132                           | 5,006          | 5,079          | 5,122          | 5,154          | 5,177          | 5,195          |
| HARRIS COUNTY MUD #148 - KINGSLAKE               | 3,615          | 3,809          | 3,842          | 3,877          | 3,913          | 3,950          |
| HARRIS COUNTY MUD #151                           | 5,990          | 6,051          | 6,101          | 6,138          | 6,165          | 6,185          |
| HARRIS COUNTY MUD #152                           | 8,154          | 8,360          | 8,658          | 8,890          | 9,063          | 9,191          |
| HARRIS COUNTY MUD #153                           | 7,027          | 7,031          | 7,053          | 7,069          | 7,081          | 7,090          |
| HARRIS COUNTY MUD #154                           | 5,851          | 5,917          | 6,072          | 6,238          | 6,416          | 6,607          |

**WUG POPULATION**

| REGION H                                     | WUG POPULATION |           |           |           |           |           |
|--|----------------|-----------|-----------|-----------|-----------|-----------|
|  | 2020           | 2030      | 2040      | 2050      | 2060      | 2070      |
| <b>HARRIS COUNTY</b>                         |                |           |           |           |           |           |
| <b>SAN JACINTO BASIN</b>                     |                |           |           |           |           |           |
| HARRIS COUNTY MUD #158                       | 4,992          | 4,992     | 4,992     | 4,992     | 4,992     | 4,992     |
| HARRIS COUNTY MUD #180                       | 5,788          | 6,279     | 6,651     | 6,715     | 6,715     | 6,715     |
| HARRIS COUNTY MUD #189                       | 3,982          | 4,224     | 4,383     | 4,552     | 4,729     | 4,916     |
| HARRIS COUNTY MUD #221                       | 4,043          | 4,398     | 4,563     | 4,720     | 4,873     | 5,025     |
| HARRIS COUNTY MUD #278                       | 9,718          | 12,958    | 12,958    | 12,958    | 12,958    | 12,958    |
| HARRIS COUNTY MUD #290                       | 4,944          | 5,166     | 5,403     | 5,579     | 5,709     | 5,806     |
| HARRIS COUNTY MUD #345                       | 3,476          | 3,504     | 3,535     | 3,559     | 3,576     | 3,589     |
| HARRIS COUNTY MUD #400 - WEST                | 4,817          | 5,183     | 5,476     | 5,729     | 5,868     | 5,931     |
| HARRIS COUNTY MUD #46                        | 4,017          | 4,025     | 4,028     | 4,030     | 4,031     | 4,032     |
| HARRIS COUNTY MUD #49                        | 4,676          | 4,866     | 5,008     | 5,118     | 5,205     | 5,275     |
| HARRIS COUNTY MUD #5                         | 6,280          | 6,599     | 7,023     | 7,477     | 7,965     | 8,489     |
| HARRIS COUNTY MUD #50                        | 2,177          | 2,199     | 2,245     | 2,277     | 2,284     | 2,292     |
| HARRIS COUNTY MUD #8                         | 4,595          | 4,596     | 4,597     | 4,598     | 4,598     | 4,600     |
| HARRIS COUNTY MUD #96                        | 6,782          | 7,032     | 7,495     | 8,043     | 8,568     | 8,957     |
| HARRIS COUNTY UD #14                         | 3,025          | 3,311     | 3,603     | 3,944     | 4,364     | 5,005     |
| HARRIS COUNTY UD #15                         | 3,603          | 3,926     | 4,364     | 4,797     | 5,258     | 5,612     |
| HARRIS COUNTY WCID #1                        | 5,696          | 5,884     | 6,120     | 6,356     | 6,593     | 6,829     |
| HARRIS COUNTY WCID #133                      | 5,324          | 5,375     | 5,614     | 6,056     | 6,533     | 7,047     |
| HARRIS COUNTY WCID #74                       | 5,045          | 5,264     | 5,518     | 5,721     | 5,887     | 6,065     |
| HARRIS COUNTY WCID #96                       | 10,500         | 11,550    | 11,550    | 11,550    | 11,550    | 11,550    |
| HEDWIG VILLAGE                               | 2,580          | 2,771     | 2,975     | 3,194     | 3,429     | 3,683     |
| HILSHIRE VILLAGE                             | 749            | 791       | 857       | 951       | 1,051     | 1,160     |
| HOUSTON                                      | 2,064,279      | 2,220,602 | 2,374,857 | 2,528,947 | 2,686,749 | 2,851,123 |
| HUMBLE                                       | 17,243         | 20,928    | 23,603    | 25,590    | 27,068    | 28,170    |
| HUNTERS CREEK VILLAGE                        | 4,461          | 4,817     | 5,202     | 5,619     | 6,068     | 6,553     |
| JACINTO CITY                                 | 10,603         | 10,908    | 11,224    | 11,546    | 11,879    | 12,222    |
| JERSEY VILLAGE                               | 7,723          | 7,790     | 7,936     | 8,096     | 8,272     | 8,465     |
| KATY   | 13,337         | 14,032    | 14,556    | 15,018    | 15,438    | 15,830    |
| KINGS MANOR MUD                              | 895            | 906       | 926       | 940       | 951       | 959       |
| LA PORTE                                     | 2,225          | 2,289     | 2,350     | 2,411     | 2,474     | 2,538     |
| LONGHORN TOWN UD                             | 1,273          | 1,292     | 1,302     | 1,309     | 1,315     | 1,319     |
| MASON CREEK UD                               | 6,610          | 6,610     | 6,610     | 6,610     | 6,610     | 6,610     |
| MISSOURI CITY                                | 5,650          | 6,439     | 7,082     | 7,773     | 8,529     | 9,352     |
| MOUNT HOUSTON ROAD MUD                       | 5,017          | 6,179     | 7,015     | 7,637     | 8,101     | 8,442     |
| NEWPORT MUD                                  | 8,780          | 9,074     | 9,302     | 9,531     | 9,759     | 9,988     |
| NORTH BELT UD                                | 1,788          | 1,799     | 1,846     | 1,897     | 1,952     | 2,011     |
| NORTH CHANNEL WATER AUTHORITY                | 82,326         | 84,755    | 86,983    | 89,193    | 91,387    | 93,192    |
| NORTH FORT BEND WATER AUTHORITY              | 8,697          | 8,748     | 8,790     | 8,831     | 8,873     | 8,914     |
| NORTH GREEN MUD                              | 4,072          | 4,127     | 4,181     | 4,241     | 4,300     | 4,355     |
| NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY | 731,265        | 780,933   | 821,599   | 856,170   | 886,651   | 914,489   |
| NORTHWEST PARK MUD                           | 16,782         | 17,493    | 18,300    | 19,114    | 19,950    | 20,824    |
| PARKWAY UD                                   | 5,970          | 6,282     | 6,328     | 6,375     | 6,421     | 6,468     |
| PASADENA                                     | 118,765        | 122,380   | 125,922   | 129,514   | 133,172   | 136,947   |
| PINEY POINT VILLAGE                          | 3,178          | 3,495     | 3,847     | 4,234     | 4,659     | 5,127     |
| SOUTH HOUSTON                                | 16,983         | 17,562    | 18,161    | 18,782    | 19,425    | 20,088    |
| SOUTHSIDE PLACE                              | 1,734          | 1,865     | 2,007     | 2,159     | 2,323     | 2,500     |
| SPRING VALLEY                                | 3,870          | 4,202     | 4,541     | 4,885     | 5,258     | 5,660     |
| STAFFORD                                     | 310            | 333       | 342       | 351       | 361       | 372       |



### WUG POPULATION

| REGION H  | WUG POPULATION   |                  |                  |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
|   | 2020             | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>HARRIS COUNTY</b>                              |                  |                  |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                          |                  |                  |                  |                  |                  |                  |
| SUNBELT FWSD                                      | 16,510           | 17,366           | 18,196           | 19,148           | 20,247           | 21,453           |
| THE COMMONS WATER SUPPLY INC                      | 2,981            | 3,143            | 3,273            | 3,370            | 3,442            | 3,494            |
| THE WOODLANDS                                     | 16,144           | 17,484           | 19,174           | 20,436           | 21,378           | 22,083           |
| TOMBALL   | 12,742           | 13,457           | 14,110           | 14,677           | 15,182           | 15,644           |
| TRAIL OF THE LAKES MUD                            | 9,058            | 9,453            | 9,578            | 9,671            | 9,740            | 9,791            |
| WALLER  | 478              | 492              | 513              | 540              | 574              | 617              |
| WEST HARRIS COUNTY MUD #6                         | 2,428            | 2,628            | 2,750            | 2,841            | 2,909            | 2,959            |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY       | 555,456          | 583,011          | 623,082          | 663,886          | 678,007          | 690,322          |
| WEST UNIVERSITY PLACE                             | 14,972           | 16,123           | 17,377           | 18,728           | 20,185           | 21,758           |
| WINDFERN FOREST UD                                | 4,288            | 4,302            | 4,311            | 4,317            | 4,321            | 4,324            |
| WOODCREEK MUD                                     | 2,340            | 2,354            | 2,375            | 2,396            | 2,420            | 2,445            |
| COUNTY-OTHER                                      | 203,802          | 242,564          | 256,997          | 263,780          | 291,987          | 318,695          |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>         | <b>4,259,704</b> | <b>4,570,209</b> | <b>4,849,941</b> | <b>5,115,114</b> | <b>5,373,633</b> | <b>5,632,338</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>                   |                  |                  |                  |                  |                  |                  |
| CLEAR BROOK CITY MUD                              | 17,670           | 18,631           | 20,075           | 21,345           | 22,532           | 23,648           |
| DEER PARK   | 23,480           | 24,846           | 26,180           | 27,373           | 28,469           | 29,506           |
| EL LAGO   | 2,733            | 2,750            | 2,762            | 2,773            | 2,785            | 2,797            |
| FRIENDSWOOD                                       | 11,925           | 14,393           | 16,073           | 17,783           | 19,431           | 21,257           |
| HARRIS COUNTY MUD #55                             | 14,071           | 14,923           | 15,664           | 16,582           | 18,055           | 19,802           |
| HOUSTON   | 137,465          | 156,807          | 175,590          | 195,004          | 215,556          | 238,661          |
| KIRK MONT MUD                                     | 2,323            | 2,548            | 2,759            | 2,982            | 3,223            | 3,483            |
| LA PORTE  | 32,120           | 32,485           | 32,942           | 33,374           | 33,787           | 34,191           |
| LEAGUE CITY                                       | 2,919            | 3,304            | 3,542            | 3,720            | 3,849            | 3,944            |
| NASSAU BAY  | 4,091            | 4,149            | 4,202            | 4,256            | 4,310            | 4,366            |
| PASADENA  | 35,676           | 36,461           | 37,199           | 37,936           | 38,705           | 39,501           |
| PEARLAND  | 14,127           | 17,440           | 20,943           | 23,539           | 25,464           | 26,892           |
| SAGEMEADOW UD                                     | 6,352            | 6,801            | 7,367            | 7,921            | 8,476            | 9,043            |
| SEABROOK  | 12,797           | 13,005           | 13,238           | 13,476           | 13,717           | 13,963           |
| SHOREACRES  | 1,493            | 1,505            | 1,527            | 1,550            | 1,573            | 1,596            |
| TAYLOR LAKE VILLAGE                               | 3,557            | 3,618            | 3,654            | 3,690            | 3,727            | 3,765            |
| WEBSTER   | 15,071           | 16,187           | 17,079           | 17,776           | 18,329           | 18,773           |
| COUNTY-OTHER                                      | 14,178           | 17,176           | 19,454           | 21,465           | 23,564           | 25,669           |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL POPULATION</b>  | <b>352,048</b>   | <b>387,029</b>   | <b>420,250</b>   | <b>452,545</b>   | <b>485,552</b>   | <b>520,857</b>   |
| <b>TRINITY-SAN JACINTO BASIN</b>                  |                  |                  |                  |                  |                  |                  |
| BAYTOWN   | 67,692           | 68,729           | 69,892           | 71,071           | 72,267           | 73,479           |
| HARRIS COUNTY WCID #1                             | 220              | 226              | 239              | 253              | 266              | 279              |
| HOUSTON   | 242              | 253              | 260              | 265              | 269              | 272              |
| COUNTY-OTHER                                      | 27,964           | 31,698           | 35,517           | 38,994           | 42,081           | 45,121           |
| <b>TRINITY-SAN JACINTO BASIN TOTAL POPULATION</b> | <b>96,118</b>    | <b>100,906</b>   | <b>105,908</b>   | <b>110,583</b>   | <b>114,883</b>   | <b>119,151</b>   |
| <b>HARRIS COUNTY TOTAL POPULATION</b>             | <b>4,707,870</b> | <b>5,058,144</b> | <b>5,376,099</b> | <b>5,678,242</b> | <b>5,974,068</b> | <b>6,272,346</b> |
| <b>LEON COUNTY</b>                                |                  |                  |                  |                  |                  |                  |
| <b>BRAZOS BASIN</b>                               |                  |                  |                  |                  |                  |                  |
| CONCORD-ROBBINS WSC                               | 2,219            | 2,370            | 2,492            | 2,660            | 2,805            | 2,946            |
| JEWETT  | 388              | 462              | 521              | 603              | 673              | 742              |
| NORMANGEE   | 165              | 177              | 186              | 199              | 211              | 222              |
| COUNTY-OTHER                                      | 1,929            | 2,035            | 2,120            | 2,236            | 2,337            | 2,436            |

### WUG POPULATION

| REGION H   | WUG POPULATION |               |               |               |               |               |
|--|----------------|---------------|---------------|---------------|---------------|---------------|
|  | 2020           | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>LEON COUNTY</b>                                   |                |               |               |               |               |               |
| <b>BRAZOS BASIN TOTAL POPULATION</b>                 | <b>4,701</b>   | <b>5,044</b>  | <b>5,319</b>  | <b>5,698</b>  | <b>6,026</b>  | <b>6,346</b>  |
| <b>TRINITY BASIN</b>                                 |                |               |               |               |               |               |
| BUFFALO  | 1,907          | 1,954         | 1,992         | 2,045         | 2,091         | 2,136         |
| CENTERVILLE  | 967            | 1,038         | 1,094         | 1,172         | 1,240         | 1,306         |
| CONCORD-ROBBINS WSC                                  | 613            | 655           | 689           | 735           | 775           | 815           |
| FLO COMMUNITY WSC                                    | 3,916          | 3,978         | 4,028         | 4,097         | 4,156         | 4,214         |
| JEWETT   | 1,074          | 1,277         | 1,441         | 1,666         | 1,861         | 2,052         |
| NORMANGEE  | 496            | 532           | 561           | 602           | 636           | 670           |
| OAKWOOD  | 475            | 477           | 479           | 482           | 484           | 486           |
| COUNTY-OTHER   | 4,062          | 4,581         | 5,000         | 5,574         | 6,071         | 6,557         |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>13,510</b>  | <b>14,492</b> | <b>15,284</b> | <b>16,373</b> | <b>17,314</b> | <b>18,236</b> |
| <b>LEON COUNTY TOTAL POPULATION</b>                  | <b>18,211</b>  | <b>19,536</b> | <b>20,603</b> | <b>22,071</b> | <b>23,340</b> | <b>24,582</b> |
| <b>LIBERTY COUNTY</b>                                |                |               |               |               |               |               |
| <b>NECHES BASIN</b>                                  |                |               |               |               |               |               |
| DAISETTA   | 396            | 446           | 494           | 541           | 587           | 631           |
| HARDIN WSC   | 297            | 380           | 458           | 537           | 612           | 684           |
| WEST HARDIN WSC                                      | 357            | 395           | 431           | 468           | 503           | 536           |
| COUNTY-OTHER   | 860            | 931           | 999           | 1,067         | 1,131         | 1,193         |
| <b>NECHES BASIN TOTAL POPULATION</b>                 | <b>1,910</b>   | <b>2,152</b>  | <b>2,382</b>  | <b>2,613</b>  | <b>2,833</b>  | <b>3,044</b>  |
| <b>NECHES-TRINITY BASIN</b>                          |                |               |               |               |               |               |
| COUNTY-OTHER   | 110            | 124           | 137           | 150           | 165           | 176           |
| <b>NECHES-TRINITY BASIN TOTAL POPULATION</b>         | <b>110</b>     | <b>124</b>    | <b>137</b>    | <b>150</b>    | <b>165</b>    | <b>176</b>    |
| <b>SAN JACINTO BASIN</b>                             |                |               |               |               |               |               |
| CLEVELAND  | 7,785          | 7,907         | 8,023         | 8,139         | 8,250         | 8,356         |
| PLUM GROVE   | 685            | 772           | 854           | 937           | 1,016         | 1,092         |
| TARKINGTON SUD                                       | 3,011          | 3,536         | 4,037         | 4,539         | 5,019         | 5,478         |
| COUNTY-OTHER   | 13,488         | 15,915        | 18,222        | 20,539        | 22,756        | 24,873        |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>            | <b>24,969</b>  | <b>28,130</b> | <b>31,136</b> | <b>34,154</b> | <b>37,041</b> | <b>39,799</b> |
| <b>TRINITY BASIN</b>                                 |                |               |               |               |               |               |
| AMES   | 1,145          | 1,290         | 1,427         | 1,566         | 1,698         | 1,824         |
| DAISETTA   | 707            | 796           | 881           | 967           | 1,048         | 1,126         |
| DAYTON   | 10,189         | 13,231        | 16,125        | 19,030        | 21,809        | 24,464        |
| HARDIN   | 944            | 1,072         | 1,194         | 1,316         | 1,433         | 1,545         |
| HARDIN WSC   | 4,110          | 5,249         | 6,334         | 7,422         | 8,464         | 9,459         |
| KENEFICK   | 643            | 724           | 801           | 879           | 953           | 1,024         |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 2,883          | 3,833         | 4,736         | 5,643         | 6,511         | 7,340         |
| LIBERTY  | 9,104          | 9,829         | 10,519        | 11,211        | 11,873        | 12,506        |
| OLD RIVER-WINFREE                                    | 161            | 182           | 201           | 221           | 239           | 257           |
| TARKINGTON SUD                                       | 899            | 1,057         | 1,206         | 1,356         | 1,500         | 1,637         |
| WOODLAND HILLS WATER COMPANY                         | 6,507          | 8,957         | 11,288        | 13,628        | 15,867        | 18,005        |
| COUNTY-OTHER   | 18,899         | 17,083        | 15,357        | 13,621        | 11,962        | 10,377        |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>56,191</b>  | <b>63,303</b> | <b>70,069</b> | <b>76,860</b> | <b>83,357</b> | <b>89,564</b> |
| <b>TRINITY-SAN JACINTO BASIN</b>                     |                |               |               |               |               |               |
| DAYTON   | 31             | 40            | 49            | 57            | 66            | 74            |
| COUNTY-OTHER   | 3,092          | 3,478         | 3,845         | 4,214         | 4,566         | 4,903         |

### WUG POPULATION

| REGION H                                   | WUG POPULATION |               |                |                |                |                |
|--|----------------|---------------|----------------|----------------|----------------|----------------|
|  | 2020           | 2030          | 2040           | 2050           | 2060           | 2070           |
| <b>LIBERTY COUNTY</b>                      |                |               |                |                |                |                |
| TRINITY-SAN JACINTO BASIN TOTAL POPULATION | 3,123          | 3,518         | 3,894          | 4,271          | 4,632          | 4,977          |
| <b>LIBERTY COUNTY TOTAL POPULATION</b>     | <b>86,303</b>  | <b>97,227</b> | <b>107,618</b> | <b>118,048</b> | <b>128,028</b> | <b>137,560</b> |
| <b>MADISON COUNTY</b>                      |                |               |                |                |                |                |
| <b>BRAZOS BASIN</b>                        |                |               |                |                |                |                |
| COUNTY-OTHER                               | 1,133          | 1,215         | 1,290          | 1,373          | 1,451          | 1,527          |
| <b>BRAZOS BASIN TOTAL POPULATION</b>       | <b>1,133</b>   | <b>1,215</b>  | <b>1,290</b>   | <b>1,373</b>   | <b>1,451</b>   | <b>1,527</b>   |
| <b>TRINITY BASIN</b>                       |                |               |                |                |                |                |
| MADISONVILLE                               | 4,747          | 5,089         | 5,401          | 5,750          | 6,077          | 6,395          |
| NORMANGEE                                  | 83             | 88            | 94             | 100            | 106            | 111            |
| COUNTY-OTHER                               | 8,790          | 9,425         | 10,001         | 10,649         | 11,252         | 11,844         |
| <b>TRINITY BASIN TOTAL POPULATION</b>      | <b>13,620</b>  | <b>14,602</b> | <b>15,496</b>  | <b>16,499</b>  | <b>17,435</b>  | <b>18,350</b>  |
| <b>MADISON COUNTY TOTAL POPULATION</b>     | <b>14,753</b>  | <b>15,817</b> | <b>16,786</b>  | <b>17,872</b>  | <b>18,886</b>  | <b>19,877</b>  |
| <b>MONTGOMERY COUNTY</b>                   |                |               |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                   |                |               |                |                |                |                |
| BENDERS LANDING WATER SYSTEM               | 5,094          | 8,091         | 11,167         | 14,243         | 17,304         | 17,304         |
| CLEVELAND                                  | 30             | 36            | 51             | 69             | 92             | 120            |
| CONROE                                     | 77,926         | 93,516        | 107,457        | 120,314        | 134,086        | 148,830        |
| CUT AND SHOOT                              | 1,311          | 1,421         | 1,666          | 1,990          | 2,419          | 2,986          |
| DOBBIN-PLANTERSVILLE WSC                   | 8,335          | 11,255        | 15,183         | 20,335         | 27,097         | 35,974         |
| EAST PLANTATION UD                         | 1,074          | 1,105         | 1,300          | 1,495          | 1,723          | 1,783          |
| HOUSTON                                    | 4,839          | 6,934         | 9,275          | 11,538         | 13,736         | 14,375         |
| INDIGO LAKE WATER SYSTEM                   | 2,934          | 4,050         | 5,820          | 8,319          | 11,846         | 17,602         |
| KINGS MANOR MUD                            | 1,909          | 1,963         | 2,061          | 2,133          | 2,187          | 2,227          |
| LAKE WINDCREST WATER SYSTEM                | 2,544          | 2,868         | 3,645          | 4,731          | 6,250          | 8,377          |
| MAGNOLIA                                   | 3,105          | 3,729         | 4,545          | 5,740          | 7,492          | 10,211         |
| MONTGOMERY                                 | 2,676          | 4,985         | 6,185          | 7,393          | 8,625          | 10,565         |
| MONTGOMERY COUNTY MUD #15                  | 3,792          | 4,082         | 4,708          | 5,534          | 6,747          | 8,466          |
| MONTGOMERY COUNTY MUD #18                  | 4,676          | 6,041         | 6,868          | 7,695          | 8,522          | 10,527         |
| MONTGOMERY COUNTY MUD #19                  | 1,996          | 2,009         | 2,023          | 2,039          | 2,057          | 2,076          |
| MONTGOMERY COUNTY MUD #8                   | 2,963          | 3,173         | 3,560          | 3,947          | 4,334          | 5,205          |
| MONTGOMERY COUNTY MUD #83                  | 1,494          | 1,544         | 1,595          | 1,646          | 1,698          | 1,734          |
| MONTGOMERY COUNTY MUD #89                  | 4,254          | 4,346         | 4,413          | 4,761          | 5,261          | 5,429          |
| MONTGOMERY COUNTY MUD #9                   | 3,240          | 3,377         | 3,849          | 4,320          | 4,792          | 5,744          |
| MONTGOMERY COUNTY MUD #94                  | 3,441          | 3,480         | 3,857          | 4,234          | 4,609          | 4,609          |
| MONTGOMERY COUNTY UD #2                    | 1,391          | 1,423         | 1,498          | 1,598          | 1,732          | 1,910          |
| MONTGOMERY COUNTY UD #3                    | 1,825          | 2,134         | 2,154          | 2,459          | 3,114          | 3,967          |
| MONTGOMERY COUNTY UD #4                    | 3,069          | 4,004         | 4,037          | 4,634          | 5,924          | 7,607          |
| MONTGOMERY COUNTY WCID #1                  | 2,989          | 3,279         | 3,602          | 3,960          | 4,360          | 4,805          |
| NEW CANEY MUD                              | 8,923          | 9,867         | 10,884         | 12,099         | 13,563         | 15,342         |
| OAK RIDGE NORTH                            | 3,121          | 3,265         | 3,485          | 3,610          | 3,655          | 3,670          |
| PANORAMA VILLAGE                           | 2,557          | 2,601         | 2,773          | 3,002          | 3,309          | 3,718          |
| PATTON VILLAGE                             | 2,175          | 2,363         | 2,624          | 2,955          | 3,375          | 3,908          |
| POINT AQUARIUS MUD                         | 1,655          | 1,663         | 1,779          | 1,935          | 2,143          | 2,420          |
| PORTER SUD                                 | 25,185         | 31,483        | 37,835         | 44,073         | 50,332         | 55,511         |
| RAYFORD ROAD MUD                           | 7,878          | 8,217         | 8,878          | 9,615          | 10,395         | 10,672         |
| RIVER PLANTATION MUD                       | 2,107          | 2,244         | 2,742          | 3,239          | 3,786          | 3,994          |

### WUG POPULATION

| REGION H   | WUG POPULATION |                |                  |                  |                  |                  |
|--|----------------|----------------|------------------|------------------|------------------|------------------|
|  | 2020           | 2030           | 2040             | 2050             | 2060             | 2070             |
| <b>MONTGOMERY COUNTY</b>                             |                |                |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                             |                |                |                  |                  |                  |                  |
| ROMAN FOREST   | 1,553          | 1,571          | 1,755            | 1,991            | 2,291            | 2,674            |
| SHENANDOAH   | 2,959          | 3,854          | 4,226            | 4,476            | 4,764            | 5,130            |
| SOUTHERN MONTGOMERY COUNTY MUD                       | 7,488          | 7,767          | 7,960            | 8,115            | 8,239            | 8,369            |
| SPLENDORA  | 1,821          | 1,989          | 2,381            | 2,878            | 3,506            | 4,300            |
| SPRING CREEK UD                                      | 7,307          | 8,058          | 8,502            | 9,295            | 10,279           | 10,600           |
| STAGECOACH   | 541            | 645            | 1,049            | 1,632            | 2,553            | 4,142            |
| STANLEY LAKE MUD                                     | 2,586          | 2,906          | 3,766            | 4,910            | 6,413            | 8,295            |
| THE WOODLANDS  | 100,003        | 105,894        | 111,674          | 118,464          | 128,339          | 140,330          |
| WESTWOOD NORTH WSC                                   | 1,967          | 2,083          | 2,322            | 2,561            | 2,801            | 3,143            |
| WILLIS   | 6,533          | 6,768          | 7,296            | 8,025            | 9,036            | 10,442           |
| WOODBANCH  | 1,369          | 1,487          | 1,801            | 2,199            | 2,704            | 3,345            |
| COUNTY-OTHER   | 293,282        | 427,682        | 585,027          | 777,715          | 1,018,645        | 1,313,625        |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>            | <b>627,917</b> | <b>811,252</b> | <b>1,019,278</b> | <b>1,267,916</b> | <b>1,576,135</b> | <b>1,946,063</b> |
| <b>MONTGOMERY COUNTY TOTAL POPULATION</b>            | <b>627,917</b> | <b>811,252</b> | <b>1,019,278</b> | <b>1,267,916</b> | <b>1,576,135</b> | <b>1,946,063</b> |
| <b>POLK COUNTY</b>                                   |                |                |                  |                  |                  |                  |
| <b>TRINITY BASIN</b>                                 |                |                |                  |                  |                  |                  |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 15,677         | 17,513         | 18,957           | 20,188           | 21,192           | 22,002           |
| LIVINGSTON   | 6,093          | 6,807          | 7,368            | 7,847            | 8,237            | 8,552            |
| ONALASKA   | 2,468          | 3,130          | 3,651            | 4,095            | 4,457            | 4,749            |
| COUNTY-OTHER   | 18,673         | 20,485         | 21,912           | 23,129           | 24,122           | 24,922           |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>42,911</b>  | <b>47,935</b>  | <b>51,888</b>    | <b>55,259</b>    | <b>58,008</b>    | <b>60,225</b>    |
| <b>POLK COUNTY TOTAL POPULATION</b>                  | <b>42,911</b>  | <b>47,935</b>  | <b>51,888</b>    | <b>55,259</b>    | <b>58,008</b>    | <b>60,225</b>    |
| <b>SAN JACINTO COUNTY</b>                            |                |                |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                             |                |                |                  |                  |                  |                  |
| COLDSRING  | 320            | 352            | 378              | 407              | 430              | 451              |
| SAN JACINTO SUD                                      | 734            | 808            | 867              | 932              | 986              | 1,033            |
| COUNTY-OTHER   | 11,525         | 12,700         | 13,622           | 14,640           | 15,487           | 16,237           |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>            | <b>12,579</b>  | <b>13,860</b>  | <b>14,867</b>    | <b>15,979</b>    | <b>16,903</b>    | <b>17,721</b>    |
| <b>TRINITY BASIN</b>                                 |                |                |                  |                  |                  |                  |
| COLDSRING  | 638            | 703            | 754              | 810              | 857              | 898              |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 3,973          | 4,378          | 4,696            | 5,047            | 5,339            | 5,597            |
| POINT BLANK  | 773            | 851            | 913              | 981              | 1,038            | 1,088            |
| RIVERSIDE WSC  | 567            | 625            | 670              | 720              | 762              | 799              |
| SAN JACINTO SUD                                      | 1,854          | 2,044          | 2,192            | 2,356            | 2,492            | 2,613            |
| SHEPHERD   | 2,603          | 2,868          | 3,076            | 3,307            | 3,498            | 3,667            |
| COUNTY-OTHER   | 6,623          | 7,298          | 7,828            | 8,414            | 8,900            | 9,331            |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>17,031</b>  | <b>18,767</b>  | <b>20,129</b>    | <b>21,635</b>    | <b>22,886</b>    | <b>23,993</b>    |
| <b>SAN JACINTO COUNTY TOTAL POPULATION</b>           | <b>29,610</b>  | <b>32,627</b>  | <b>34,996</b>    | <b>37,614</b>    | <b>39,789</b>    | <b>41,714</b>    |
| <b>TRINITY COUNTY</b>                                |                |                |                  |                  |                  |                  |
| <b>TRINITY BASIN</b>                                 |                |                |                  |                  |                  |                  |
| GROVETON   | 655            | 708            | 713              | 693              | 725              | 759              |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 1,615          | 1,747          | 1,760            | 1,710            | 1,790            | 1,873            |
| TRINITY  | 3,051          | 3,300          | 3,325            | 3,231            | 3,380            | 3,537            |
| TRINITY RURAL WSC                                    | 4,459          | 4,822          | 4,858            | 4,721            | 4,940            | 5,169            |

### WUG POPULATION

| REGION H   | WUG POPULATION   |                  |                  |                  |                   |                   |
|--|------------------|------------------|------------------|------------------|-------------------|-------------------|
|  | 2020             | 2030             | 2040             | 2050             | 2060              | 2070              |
| <b>TRINITY COUNTY</b>                                |                  |                  |                  |                  |                   |                   |
| <b>TRINITY BASIN</b>                                 |                  |                  |                  |                  |                   |                   |
| COUNTY-OTHER   | 2,974            | 3,216            | 3,241            | 3,149            | 3,295             | 3,447             |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>12,754</b>    | <b>13,793</b>    | <b>13,897</b>    | <b>13,504</b>    | <b>14,130</b>     | <b>14,785</b>     |
| <b>TRINITY COUNTY TOTAL POPULATION</b>               |                  |                  |                  |                  |                   |                   |
|  | <b>12,754</b>    | <b>13,793</b>    | <b>13,897</b>    | <b>13,504</b>    | <b>14,130</b>     | <b>14,785</b>     |
| <b>WALKER COUNTY</b>                                 |                  |                  |                  |                  |                   |                   |
| <b>SAN JACINTO BASIN</b>                             |                  |                  |                  |                  |                   |                   |
| HUNTSVILLE   | 33,854           | 35,479           | 36,650           | 37,748           | 38,602            | 39,294            |
| NEW WAVERLY  | 1,085            | 1,132            | 1,166            | 1,198            | 1,223             | 1,243             |
| WALKER COUNTY SUD                                    | 3,372            | 3,585            | 3,739            | 3,883            | 3,995             | 4,086             |
| COUNTY-OTHER   | 8,238            | 8,585            | 8,834            | 9,068            | 9,250             | 9,397             |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>            | <b>46,549</b>    | <b>48,781</b>    | <b>50,389</b>    | <b>51,897</b>    | <b>53,070</b>     | <b>54,020</b>     |
| <b>TRINITY BASIN</b>                                 |                  |                  |                  |                  |                   |                   |
| HUNTSVILLE   | 6,934            | 7,267            | 7,507            | 7,732            | 7,907             | 8,048             |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 391              | 410              | 423              | 436              | 446               | 454               |
| RIVERSIDE  | 565              | 613              | 648              | 681              | 707               | 728               |
| RIVERSIDE WSC  | 5,206            | 5,738            | 6,121            | 6,481            | 6,761             | 6,988             |
| THE CONSOLIDATED WSC                                 | 142              | 161              | 175              | 188              | 198               | 206               |
| TRINITY RURAL WSC                                    | 339              | 376              | 403              | 428              | 447               | 463               |
| WALKER COUNTY SUD                                    | 4,500            | 4,785            | 4,990            | 5,183            | 5,333             | 5,454             |
| COUNTY-OTHER   | 7,174            | 7,112            | 7,068            | 7,024            | 6,990             | 6,963             |
| <b>TRINITY BASIN TOTAL POPULATION</b>                | <b>25,251</b>    | <b>26,462</b>    | <b>27,335</b>    | <b>28,153</b>    | <b>28,789</b>     | <b>29,304</b>     |
| <b>WALKER COUNTY TOTAL POPULATION</b>                |                  |                  |                  |                  |                   |                   |
|  | <b>71,800</b>    | <b>75,243</b>    | <b>77,724</b>    | <b>80,050</b>    | <b>81,859</b>     | <b>83,324</b>     |
| <b>WALLER COUNTY</b>                                 |                  |                  |                  |                  |                   |                   |
| <b>BRAZOS BASIN</b>                                  |                  |                  |                  |                  |                   |                   |
| BROOKSHIRE   | 5,811            | 7,107            | 8,544            | 10,112           | 11,844            | 13,722            |
| G & W WSC  | 953              | 1,293            | 1,669            | 2,081            | 2,535             | 3,028             |
| HEMPSTEAD  | 6,726            | 7,843            | 9,081            | 10,433           | 11,926            | 13,544            |
| PINE ISLAND  | 1,112            | 1,256            | 1,416            | 1,591            | 1,784             | 1,993             |
| PRAIRIE VIEW   | 6,060            | 7,167            | 8,394            | 9,734            | 11,213            | 12,817            |
| COUNTY-OTHER   | 12,019           | 14,798           | 17,882           | 21,246           | 24,963            | 28,994            |
| <b>BRAZOS BASIN TOTAL POPULATION</b>                 | <b>32,681</b>    | <b>39,464</b>    | <b>46,986</b>    | <b>55,197</b>    | <b>64,265</b>     | <b>74,098</b>     |
| <b>SAN JACINTO BASIN</b>                             |                  |                  |                  |                  |                   |                   |
| G & W WSC  | 2,925            | 3,969            | 5,127            | 6,390            | 7,785             | 9,297             |
| KATY   | 1,468            | 1,833            | 2,237            | 2,678            | 3,165             | 3,693             |
| PRAIRIE VIEW   | 549              | 649              | 760              | 881              | 1,015             | 1,160             |
| WALLER   | 2,036            | 2,219            | 2,421            | 2,642            | 2,886             | 3,150             |
| COUNTY-OTHER   | 12,879           | 15,309           | 18,004           | 20,948           | 24,198            | 27,724            |
| <b>SAN JACINTO BASIN TOTAL POPULATION</b>            | <b>19,857</b>    | <b>23,979</b>    | <b>28,549</b>    | <b>33,539</b>    | <b>39,049</b>     | <b>45,024</b>     |
| <b>WALLER COUNTY TOTAL POPULATION</b>                |                  |                  |                  |                  |                   |                   |
|  | <b>52,538</b>    | <b>63,443</b>    | <b>75,535</b>    | <b>88,736</b>    | <b>103,314</b>    | <b>119,122</b>    |
| <b>REGION H TOTAL POPULATION</b>                     |                  |                  |                  |                  |                   |                   |
|  | <b>7,325,314</b> | <b>8,207,700</b> | <b>9,024,533</b> | <b>9,867,512</b> | <b>10,766,073</b> | <b>11,743,278</b> |

### WUG DEMAND

| REGION H                                  | WUG DEMAND (ACRE-FEET PER YEAR) |               |               |               |               |               |
|---|---------------------------------|---------------|---------------|---------------|---------------|---------------|
|   | 2020                            | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>AUSTIN COUNTY</b>                      |                                 |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                       |                                 |               |               |               |               |               |
| BELLVILLE                                 | 1,217                           | 1,286         | 1,366         | 1,468         | 1,588         | 1,722         |
| SAN FELIPE                                | 231                             | 263           | 298           | 341           | 389           | 443           |
| SEALY                                     | 1,377                           | 1,514         | 1,667         | 1,859         | 2,081         | 2,329         |
| COUNTY-OTHER                              | 1,856                           | 2,148         | 2,475         | 2,883         | 3,348         | 3,869         |
| MANUFACTURING                             | 89                              | 96            | 103           | 109           | 119           | 130           |
| MINING                                    | 97                              | 243           | 195           | 147           | 100           | 68            |
| LIVESTOCK                                 | 1,171                           | 1,171         | 1,171         | 1,171         | 1,171         | 1,171         |
| IRRIGATION                                | 2,398                           | 2,398         | 2,398         | 2,398         | 2,398         | 2,398         |
| <b>BRAZOS BASIN TOTAL DEMAND</b>          | <b>8,436</b>                    | <b>9,119</b>  | <b>9,673</b>  | <b>10,376</b> | <b>11,194</b> | <b>12,130</b> |
| <b>BRAZOS-COLORADO BASIN</b>              |                                 |               |               |               |               |               |
| SEALY                                     | 3                               | 3             | 4             | 4             | 5             | 5             |
| WALLIS                                    | 161                             | 165           | 171           | 180           | 193           | 207           |
| COUNTY-OTHER                              | 437                             | 504           | 579           | 672           | 779           | 898           |
| MANUFACTURING                             | 19                              | 21            | 23            | 24            | 26            | 28            |
| MINING                                    | 28                              | 70            | 57            | 43            | 29            | 20            |
| LIVESTOCK                                 | 329                             | 329           | 329           | 329           | 329           | 329           |
| IRRIGATION                                | 4,080                           | 4,080         | 4,080         | 4,080         | 4,080         | 4,080         |
| <b>BRAZOS-COLORADO BASIN TOTAL DEMAND</b> | <b>5,057</b>                    | <b>5,172</b>  | <b>5,243</b>  | <b>5,332</b>  | <b>5,441</b>  | <b>5,567</b>  |
| <b>COLORADO BASIN</b>                     |                                 |               |               |               |               |               |
| COUNTY-OTHER                              | 39                              | 43            | 49            | 55            | 63            | 72            |
| MINING                                    | 2                               | 7             | 5             | 4             | 3             | 2             |
| LIVESTOCK                                 | 23                              | 23            | 23            | 23            | 23            | 23            |
| <b>COLORADO BASIN TOTAL DEMAND</b>        | <b>64</b>                       | <b>73</b>     | <b>77</b>     | <b>82</b>     | <b>89</b>     | <b>97</b>     |
| <b>AUSTIN COUNTY TOTAL DEMAND</b>         | <b>13,557</b>                   | <b>14,364</b> | <b>14,993</b> | <b>15,790</b> | <b>16,724</b> | <b>17,794</b> |
| <b>BRAZORIA COUNTY</b>                    |                                 |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                       |                                 |               |               |               |               |               |
| BAILEY'S PRAIRIE                          | 26                              | 26            | 26            | 27            | 28            | 29            |
| BRAZORIA                                  | 69                              | 67            | 65            | 64            | 64            | 65            |
| FREEPORT                                  | 145                             | 158           | 171           | 185           | 201           | 215           |
| LAKE JACKSON                              | 36                              | 43            | 56            | 71            | 89            | 109           |
| VARNER CREEK UD                           | 213                             | 207           | 201           | 201           | 201           | 201           |
| WEST COLUMBIA                             | 369                             | 354           | 340           | 341           | 341           | 343           |
| COUNTY-OTHER                              | 942                             | 1,067         | 1,273         | 1,484         | 1,706         | 1,942         |
| MANUFACTURING                             | 9,174                           | 9,900         | 10,626        | 11,353        | 12,079        | 12,805        |
| MINING                                    | 135                             | 167           | 195           | 226           | 258           | 297           |
| LIVESTOCK                                 | 118                             | 118           | 118           | 118           | 118           | 118           |
| IRRIGATION                                | 4,855                           | 4,855         | 4,855         | 4,855         | 4,855         | 4,855         |
| <b>BRAZOS BASIN TOTAL DEMAND</b>          | <b>16,082</b>                   | <b>16,962</b> | <b>17,926</b> | <b>18,925</b> | <b>19,940</b> | <b>20,979</b> |
| <b>BRAZOS-COLORADO BASIN</b>              |                                 |               |               |               |               |               |
| BRAZORIA                                  | 249                             | 246           | 244           | 244           | 248           | 251           |
| FREEPORT                                  | 1                               | 1             | 2             | 2             | 2             | 2             |
| JONES CREEK                               | 207                             | 200           | 193           | 192           | 192           | 193           |
| SWEENY                                    | 540                             | 525           | 513           | 508           | 509           | 511           |
| WEST COLUMBIA                             | 68                              | 65            | 64            | 64            | 65            | 66            |
| COUNTY-OTHER                              | 3,448                           | 4,112         | 4,743         | 5,372         | 6,023         | 6,700         |
| MANUFACTURING                             | 44,381                          | 47,894        | 51,408        | 54,921        | 58,435        | 61,948        |

### WUG DEMAND

| REGION H                                     | WUG DEMAND (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|---------------------------------|----------------|----------------|----------------|----------------|----------------|
|  | 2020                            | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>BRAZORIA COUNTY</b>                       |                                 |                |                |                |                |                |
| <b>BRAZOS-COLORADO BASIN</b>                 |                                 |                |                |                |                |                |
| MINING                                       | 252                             | 309            | 361            | 418            | 479            | 553            |
| LIVESTOCK                                    | 443                             | 443            | 443            | 443            | 443            | 443            |
| IRRIGATION                                   | 5,071                           | 5,071          | 5,071          | 5,071          | 5,071          | 5,071          |
| <b>BRAZOS-COLORADO BASIN TOTAL DEMAND</b>    | <b>54,660</b>                   | <b>58,866</b>  | <b>63,042</b>  | <b>67,235</b>  | <b>71,467</b>  | <b>75,738</b>  |
| <b>SAN JACINTO-BRAZOS BASIN</b>              |                                 |                |                |                |                |                |
| ALVIN  | 4,644                           | 4,866          | 5,161          | 5,587          | 6,186          | 6,983          |
| ANGLETON                                     | 1,964                           | 1,893          | 1,835          | 1,810          | 1,816          | 1,830          |
| BAILEY'S PRAIRIE                             | 63                              | 64             | 63             | 63             | 64             | 65             |
| BRAZORIA COUNTY MUD #2                       | 2,199                           | 2,190          | 2,185          | 2,183          | 2,183          | 2,184          |
| BRAZORIA COUNTY MUD #21                      | 549                             | 568            | 610            | 653            | 695            | 724            |
| BRAZORIA COUNTY MUD #3                       | 566                             | 558            | 560            | 565            | 572            | 584            |
| BRAZORIA COUNTY MUD #6                       | 681                             | 676            | 676            | 676            | 677            | 680            |
| BROOKSIDE VILLAGE                            | 198                             | 207            | 258            | 325            | 406            | 504            |
| CLUTE  | 1,476                           | 1,475          | 1,486          | 1,518          | 1,570          | 1,631          |
| DANBURY                                      | 176                             | 169            | 163            | 160            | 159            | 159            |
| FREEPORT                                     | 1,283                           | 1,290          | 1,299          | 1,325          | 1,368          | 1,417          |
| HILLCREST                                    | 118                             | 115            | 112            | 111            | 111            | 111            |
| HOLIDAY LAKES                                | 75                              | 75             | 75             | 75             | 76             | 76             |
| IOWA COLONY                                  | 292                             | 326            | 381            | 431            | 479            | 508            |
| LAKE JACKSON                                 | 5,284                           | 5,303          | 5,345          | 5,443          | 5,596          | 5,774          |
| MANVEL                                       | 1,658                           | 2,645          | 3,548          | 4,575          | 5,786          | 7,286          |
| OYSTER CREEK                                 | 250                             | 250            | 251            | 256            | 265            | 275            |
| PEARLAND                                     | 14,000                          | 14,710         | 15,750         | 16,925         | 18,254         | 19,539         |
| RICHWOOD                                     | 377                             | 377            | 380            | 388            | 403            | 420            |
| COUNTY-OTHER                                 | 12,344                          | 15,885         | 19,303         | 22,985         | 27,137         | 31,664         |
| MANUFACTURING                                | 194,383                         | 209,773        | 225,161        | 240,550        | 255,938        | 271,328        |
| MINING                                       | 581                             | 713            | 833            | 965            | 1,105          | 1,276          |
| LIVESTOCK                                    | 1,089                           | 1,089          | 1,089          | 1,089          | 1,089          | 1,089          |
| IRRIGATION                                   | 99,877                          | 99,877         | 99,877         | 99,877         | 99,877         | 99,877         |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL DEMAND</b> | <b>344,127</b>                  | <b>365,094</b> | <b>386,401</b> | <b>408,535</b> | <b>431,812</b> | <b>455,984</b> |
| <b>BRAZORIA COUNTY TOTAL DEMAND</b>          | <b>414,869</b>                  | <b>440,922</b> | <b>467,369</b> | <b>494,695</b> | <b>523,219</b> | <b>552,701</b> |
| <b>CHAMBERS COUNTY</b>                       |                                 |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                  |                                 |                |                |                |                |                |
| ANAHUAC                                      | 216                             | 210            | 206            | 206            | 208            | 211            |
| TRINITY BAY CONSERVATION DISTRICT            | 1,793                           | 2,091          | 2,408          | 2,766          | 3,162          | 3,582          |
| COUNTY-OTHER                                 | 34                              | 78             | 121            | 168            | 219            | 273            |
| MINING                                       | 3,316                           | 3,316          | 3,316          | 3,316          | 3,316          | 3,316          |
| LIVESTOCK                                    | 312                             | 312            | 312            | 312            | 312            | 312            |
| IRRIGATION                                   | 67,413                          | 67,413         | 67,413         | 67,413         | 67,413         | 67,413         |
| <b>NECHES-TRINITY BASIN TOTAL DEMAND</b>     | <b>73,084</b>                   | <b>73,420</b>  | <b>73,776</b>  | <b>74,181</b>  | <b>74,630</b>  | <b>75,107</b>  |
| <b>TRINITY BASIN</b>                         |                                 |                |                |                |                |                |
| ANAHUAC                                      | 51                              | 50             | 49             | 48             | 49             | 50             |
| BEACH CITY                                   | 34                              | 40             | 46             | 52             | 60             | 67             |
| COVE   | 79                              | 96             | 114            | 134            | 157            | 181            |
| MONT BELVIEU                                 | 1,680                           | 2,134          | 2,606          | 3,116          | 3,665          | 4,243          |
| OLD RIVER-WINFREE                            | 130                             | 147            | 166            | 190            | 217            | 246            |





### WUG DEMAND

| REGION H                                     | WUG DEMAND (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|---------------------------------|----------------|----------------|----------------|----------------|----------------|
|  | 2020                            | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>FORT BEND COUNTY</b>                      |                                 |                |                |                |                |                |
| <b>BRAZOS BASIN TOTAL DEMAND</b>             | <b>144,316</b>                  | <b>167,992</b> | <b>199,298</b> | <b>231,438</b> | <b>265,566</b> | <b>304,232</b> |
| <b>BRAZOS-COLORADO BASIN</b>                 |                                 |                |                |                |                |                |
| BEASLEY                                      | 72                              | 73             | 80             | 90             | 106            | 128            |
| NEEDVILLE                                    | 164                             | 160            | 158            | 160            | 165            | 175            |
| ROSENBERG                                    | 1                               | 5              | 11             | 20             | 31             | 47             |
| COUNTY-OTHER                                 | 1,499                           | 2,453          | 4,152          | 6,636          | 10,281         | 15,616         |
| MINING                                       | 16                              | 17             | 13             | 9              | 6              | 4              |
| LIVESTOCK                                    | 205                             | 205            | 205            | 205            | 205            | 205            |
| IRRIGATION                                   | 19,344                          | 19,344         | 19,344         | 19,344         | 19,344         | 19,344         |
| <b>BRAZOS-COLORADO BASIN TOTAL DEMAND</b>    | <b>21,301</b>                   | <b>22,257</b>  | <b>23,963</b>  | <b>26,464</b>  | <b>30,138</b>  | <b>35,519</b>  |
| <b>SAN JACINTO BASIN</b>                     |                                 |                |                |                |                |                |
| HOUSTON                                      | 5,124                           | 5,408          | 5,513          | 5,642          | 5,770          | 5,852          |
| KATY   | 1,664                           | 3,798          | 3,796          | 3,800          | 3,810          | 3,819          |
| MEADOWS PLACE                                | 709                             | 703            | 701            | 707            | 720            | 736            |
| MISSOURI CITY                                | 1,566                           | 1,787          | 2,013          | 2,107          | 2,172          | 2,270          |
| NORTH FORT BEND WATER AUTHORITY              | 33,056                          | 39,018         | 39,802         | 40,166         | 40,511         | 40,935         |
| STAFFORD                                     | 1,243                           | 1,286          | 1,340          | 1,410          | 1,497          | 1,601          |
| SUGAR LAND                                   | 1,122                           | 1,110          | 1,103          | 1,099          | 1,098          | 1,098          |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY  | 1,441                           | 1,449          | 1,438          | 1,436          | 1,445          | 1,457          |
| COUNTY-OTHER                                 | 132                             | 162            | 190            | 204            | 212            | 220            |
| MANUFACTURING                                | 2,871                           | 2,978          | 3,064          | 3,122          | 2,955          | 2,797          |
| LIVESTOCK                                    | 69                              | 69             | 69             | 69             | 69             | 69             |
| IRRIGATION                                   | 569                             | 569            | 569            | 569            | 569            | 569            |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>        | <b>49,566</b>                   | <b>58,337</b>  | <b>59,598</b>  | <b>60,331</b>  | <b>60,828</b>  | <b>61,423</b>  |
| <b>SAN JACINTO-BRAZOS BASIN</b>              |                                 |                |                |                |                |                |
| ARCOLA                                       | 226                             | 330            | 428            | 523            | 601            | 680            |
| FORT BEND COUNTY MUD #23                     | 1,318                           | 1,387          | 1,428          | 1,469          | 1,511          | 1,556          |
| FORT BEND COUNTY MUD #25                     | 1,060                           | 1,049          | 1,052          | 1,062          | 1,080          | 1,102          |
| FULSHEAR                                     | 1,285                           | 1,378          | 1,452          | 1,512          | 1,565          | 1,609          |
| HOUSTON                                      | 3,302                           | 3,331          | 3,481          | 3,624          | 3,760          | 3,887          |
| MEADOWS PLACE                                | 64                              | 62             | 60             | 60             | 60             | 60             |
| MISSOURI CITY                                | 9,166                           | 10,907         | 12,686         | 14,423         | 15,547         | 16,205         |
| NORTH FORT BEND WATER AUTHORITY              | 26,962                          | 42,857         | 46,533         | 49,574         | 52,055         | 54,077         |
| PEARLAND                                     | 502                             | 533            | 658            | 784            | 911            | 1,061          |
| PECAN GROVE MUD #1                           | 16                              | 16             | 15             | 15             | 15             | 15             |
| SIENNA PLANTATION                            | 3,212                           | 4,074          | 5,734          | 7,393          | 9,052          | 10,523         |
| STAFFORD                                     | 2,995                           | 3,004          | 3,043          | 3,102          | 3,181          | 3,271          |
| SUGAR LAND                                   | 11,753                          | 12,899         | 13,114         | 13,266         | 13,361         | 13,480         |
| COUNTY-OTHER                                 | 7,463                           | 4,852          | 7,219          | 9,504          | 11,642         | 13,696         |
| MANUFACTURING                                | 3,768                           | 3,908          | 4,022          | 4,097          | 3,877          | 3,670          |
| MINING                                       | 15                              | 15             | 12             | 9              | 6              | 4              |
| LIVESTOCK                                    | 198                             | 198            | 198            | 198            | 198            | 198            |
| IRRIGATION                                   | 4,579                           | 4,579          | 4,579          | 4,579          | 4,579          | 4,579          |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL DEMAND</b> | <b>77,884</b>                   | <b>95,379</b>  | <b>105,714</b> | <b>115,194</b> | <b>123,001</b> | <b>129,673</b> |
| <b>FORT BEND COUNTY TOTAL DEMAND</b>         | <b>293,067</b>                  | <b>343,965</b> | <b>388,573</b> | <b>433,427</b> | <b>479,533</b> | <b>530,847</b> |

**WUG DEMAND**

| REGION H                                       | WUG DEMAND (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|---------------------------------|----------------|----------------|----------------|----------------|----------------|
|  | 2020                            | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>GALVESTON COUNTY</b>                        |                                 |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                    |                                 |                |                |                |                |                |
| BOLIVAR PENINSULA SUD                          | 198                             | 234            | 277            | 328            | 388            | 460            |
| COUNTY-OTHER                                   | 5                               | 8              | 8              | 11             | 13             | 16             |
| MINING   | 78                              | 84             | 92             | 100            | 107            | 114            |
| LIVESTOCK                                      | 57                              | 57             | 57             | 57             | 57             | 57             |
| IRRIGATION                                     | 17                              | 17             | 17             | 17             | 17             | 17             |
| <b>NECHES-TRINITY BASIN TOTAL DEMAND</b>       | <b>355</b>                      | <b>400</b>     | <b>451</b>     | <b>513</b>     | <b>582</b>     | <b>664</b>     |
| <b>SAN JACINTO-BRAZOS BASIN</b>                |                                 |                |                |                |                |                |
| BACLIFF MUD                                    | 539                             | 516            | 506            | 514            | 521            | 528            |
| BAYOU VISTA                                    | 276                             | 270            | 265            | 262            | 262            | 262            |
| CLEAR LAKE SHORES                              | 562                             | 575            | 571            | 571            | 570            | 570            |
| DICKINSON                                      | 2,435                           | 2,480          | 2,554          | 2,649          | 2,766          | 2,889          |
| FRIENDSWOOD                                    | 4,882                           | 5,104          | 5,399          | 5,759          | 6,189          | 6,673          |
| GALVESTON                                      | 16,623                          | 17,422         | 18,285         | 19,244         | 20,165         | 21,152         |
| HITCHCOCK                                      | 949                             | 1,079          | 1,157          | 1,224          | 1,285          | 1,337          |
| JAMAICA BEACH                                  | 261                             | 259            | 259            | 260            | 263            | 266            |
| KEMAH  | 1,181                           | 1,538          | 1,588          | 1,629          | 1,665          | 1,695          |
| LA MARQUE                                      | 3,137                           | 3,339          | 3,351          | 3,376          | 3,419          | 3,459          |
| LEAGUE CITY                                    | 14,194                          | 15,650         | 16,806         | 17,792         | 18,386         | 18,808         |
| SAN LEON MUD                                   | 373                             | 408            | 435            | 462            | 489            | 516            |
| SANTA FE                                       | 1,695                           | 1,696          | 1,717          | 1,755          | 1,810          | 1,870          |
| TEXAS CITY                                     | 7,077                           | 7,522          | 7,896          | 8,270          | 8,665          | 9,037          |
| TIKI ISLAND                                    | 243                             | 241            | 240            | 241            | 241            | 242            |
| COUNTY-OTHER                                   | 2,554                           | 2,754          | 2,920          | 3,094          | 3,285          | 3,474          |
| MANUFACTURING                                  | 56,394                          | 57,522         | 58,672         | 59,846         | 61,042         | 62,263         |
| MINING   | 303                             | 324            | 358            | 386            | 413            | 441            |
| LIVESTOCK                                      | 197                             | 197            | 197            | 197            | 197            | 197            |
| IRRIGATION                                     | 6,283                           | 6,283          | 6,283          | 6,283          | 6,283          | 6,283          |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL DEMAND</b>   | <b>120,158</b>                  | <b>125,179</b> | <b>129,459</b> | <b>133,814</b> | <b>137,916</b> | <b>141,962</b> |
| <b>GALVESTON COUNTY TOTAL DEMAND</b>           | <b>120,513</b>                  | <b>125,579</b> | <b>129,910</b> | <b>134,327</b> | <b>138,498</b> | <b>142,626</b> |
| <b>HARRIS COUNTY</b>                           |                                 |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                       |                                 |                |                |                |                |                |
| BAYTOWN  | 420                             | 413            | 410            | 413            | 420            | 428            |
| BELLAIRE                                       | 3,804                           | 4,045          | 4,329          | 4,669          | 5,070          | 5,514          |
| BLUE BELL MANOR UTILITY COMPANY                | 646                             | 656            | 681            | 715            | 754            | 788            |
| BUNKER HILL VILLAGE                            | 1,626                           | 1,734          | 1,856          | 1,995          | 2,152          | 2,323          |
| CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY | 4,789                           | 5,082          | 5,288          | 5,507          | 5,738          | 5,998          |
| CHIMNEY HILL MUD                               | 583                             | 569            | 559            | 557            | 564            | 573            |
| CROSBY MUD                                     | 313                             | 317            | 322            | 327            | 332            | 338            |
| DEER PARK                                      | 1,349                           | 1,345          | 1,329          | 1,331          | 1,348          | 1,369          |
| EL DORADO UD                                   | 260                             | 257            | 256            | 261            | 264            | 264            |
| FOUNTAINVIEW SUBDIVISION                       | 176                             | 168            | 160            | 160            | 161            | 162            |
| GALENA PARK                                    | 842                             | 806            | 779            | 775            | 790            | 805            |
| GREEN TRAILS MUD                               | 555                             | 548            | 547            | 550            | 553            | 555            |
| GREENWOOD UD                                   | 359                             | 398            | 395            | 395            | 399            | 403            |
| HARRIS COUNTY MUD #106                         | 1,301                           | 1,315          | 1,364          | 1,399          | 1,425          | 1,445          |
| HARRIS COUNTY MUD #11                          | 332                             | 330            | 332            | 339            | 351            | 364            |
| HARRIS COUNTY MUD #119                         | 504                             | 491            | 484            | 490            | 500            | 510            |

**WUG DEMAND**

| REGION H                                     | WUG DEMAND (ACRE-FEET PER YEAR) |         |         |         |         |         |
|--|---------------------------------|---------|---------|---------|---------|---------|
|  | 2020                            | 2030    | 2040    | 2050    | 2060    | 2070    |
| <b>HARRIS COUNTY</b>                         |                                 |         |         |         |         |         |
| <b>SAN JACINTO BASIN</b>                     |                                 |         |         |         |         |         |
| HARRIS COUNTY MUD #132                       | 898                             | 885     | 873     | 876     | 878     | 881     |
| HARRIS COUNTY MUD #148 - KINGSLAKE           | 269                             | 276     | 274     | 274     | 276     | 278     |
| HARRIS COUNTY MUD #151                       | 1,012                           | 1,006   | 1,003   | 1,002   | 1,004   | 1,007   |
| HARRIS COUNTY MUD #152                       | 1,107                           | 1,114   | 1,140   | 1,162   | 1,182   | 1,198   |
| HARRIS COUNTY MUD #153                       | 1,200                           | 1,185   | 1,177   | 1,174   | 1,173   | 1,174   |
| HARRIS COUNTY MUD #154                       | 746                             | 735     | 737     | 748     | 767     | 790     |
| HARRIS COUNTY MUD #158                       | 534                             | 518     | 505     | 498     | 497     | 497     |
| HARRIS COUNTY MUD #180                       | 514                             | 536     | 553     | 550     | 548     | 548     |
| HARRIS COUNTY MUD #189                       | 357                             | 362     | 375     | 388     | 402     | 417     |
| HARRIS COUNTY MUD #221                       | 399                             | 428     | 443     | 456     | 469     | 484     |
| HARRIS COUNTY MUD #278                       | 967                             | 1,269   | 1,265   | 1,263   | 1,261   | 1,260   |
| HARRIS COUNTY MUD #290                       | 609                             | 630     | 658     | 677     | 692     | 703     |
| HARRIS COUNTY MUD #345                       | 786                             | 781     | 779     | 779     | 781     | 784     |
| HARRIS COUNTY MUD #400 - WEST                | 785                             | 839     | 885     | 925     | 946     | 956     |
| HARRIS COUNTY MUD #46                        | 664                             | 651     | 640     | 634     | 633     | 633     |
| HARRIS COUNTY MUD #49                        | 456                             | 465     | 472     | 479     | 486     | 492     |
| HARRIS COUNTY MUD #5                         | 508                             | 509     | 522     | 544     | 577     | 614     |
| HARRIS COUNTY MUD #50                        | 273                             | 263     | 265     | 267     | 267     | 268     |
| HARRIS COUNTY MUD #8                         | 485                             | 462     | 443     | 442     | 440     | 440     |
| HARRIS COUNTY MUD #96                        | 582                             | 592     | 625     | 666     | 707     | 738     |
| HARRIS COUNTY UD #14                         | 204                             | 223     | 243     | 266     | 294     | 337     |
| HARRIS COUNTY UD #15                         | 521                             | 552     | 601     | 654     | 715     | 763     |
| HARRIS COUNTY WCID #1                        | 574                             | 561     | 564     | 583     | 602     | 624     |
| HARRIS COUNTY WCID #133                      | 658                             | 641     | 648     | 687     | 738     | 796     |
| HARRIS COUNTY WCID #74                       | 785                             | 792     | 809     | 827     | 849     | 874     |
| HARRIS COUNTY WCID #96                       | 1,942                           | 2,123   | 2,122   | 2,121   | 2,119   | 2,118   |
| HEDWIG VILLAGE                               | 1,477                           | 1,572   | 1,677   | 1,794   | 1,925   | 2,067   |
| HILSHIRE VILLAGE                             | 196                             | 203     | 217     | 239     | 263     | 291     |
| HOUSTON                                      | 418,177                         | 440,169 | 463,377 | 489,420 | 519,026 | 550,556 |
| HUMBLE                                       | 2,687                           | 3,157   | 3,493   | 3,753   | 3,962   | 4,122   |
| HUNTERS CREEK VILLAGE                        | 2,353                           | 2,516   | 2,698   | 2,904   | 3,134   | 3,384   |
| JACINTO CITY                                 | 774                             | 747     | 755     | 776     | 799     | 822     |
| JERSEY VILLAGE                               | 1,746                           | 1,733   | 1,742   | 1,764   | 1,799   | 1,841   |
| KATY   | 3,212                           | 3,321   | 3,425   | 3,522   | 3,618   | 3,709   |
| KINGS MANOR MUD                              | 105                             | 104     | 104     | 104     | 105     | 106     |
| LA PORTE                                     | 312                             | 311     | 311     | 314     | 321     | 330     |
| LONGHORN TOWN UD                             | 287                             | 288     | 289     | 290     | 291     | 292     |
| MASON CREEK UD                               | 1,268                           | 1,232   | 1,211   | 1,208   | 1,206   | 1,206   |
| MISSOURI CITY                                | 884                             | 980     | 1,061   | 1,156   | 1,266   | 1,388   |
| MOUNT HOUSTON ROAD MUD                       | 496                             | 599     | 676     | 733     | 775     | 807     |
| NEWPORT MUD                                  | 945                             | 956     | 967     | 983     | 1,003   | 1,027   |
| NORTH BELT UD                                | 341                             | 335     | 337     | 343     | 352     | 363     |
| NORTH CHANNEL WATER AUTHORITY                | 10,215                          | 10,207  | 10,237  | 10,363  | 10,585  | 10,791  |
| NORTH FORT BEND WATER AUTHORITY              | 1,941                           | 1,935   | 1,939   | 1,945   | 1,953   | 1,962   |
| NORTH GREEN MUD                              | 476                             | 468     | 462     | 463     | 468     | 474     |
| NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY | 123,598                         | 129,683 | 134,863 | 139,655 | 144,379 | 148,850 |
| NORTHWEST PARK MUD                           | 3,080                           | 3,154   | 3,257   | 3,378   | 3,518   | 3,671   |

### WUG DEMAND

| REGION H                                    | WUG DEMAND (ACRE-FEET PER YEAR) |                  |                  |                  |                  |                  |
|---|---------------------------------|------------------|------------------|------------------|------------------|------------------|
|   | 2020                            | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>HARRIS COUNTY</b>                        |                                 |                  |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                    |                                 |                  |                  |                  |                  |                  |
| PARKWAY UD                                  | 520                             | 528              | 520              | 516              | 518              | 521              |
| PASADENA                                    | 17,555                          | 17,564           | 17,650           | 17,920           | 18,378           | 18,893           |
| PINEY POINT VILLAGE                         | 1,743                           | 1,898            | 2,073            | 2,277            | 2,504            | 2,754            |
| SOUTH HOUSTON                               | 1,945                           | 1,932            | 1,933            | 1,963            | 2,023            | 2,091            |
| SOUTHSIDE PLACE                             | 263                             | 274              | 288              | 306              | 329              | 353              |
| SPRING VALLEY                               | 1,048                           | 1,117            | 1,191            | 1,272            | 1,368            | 1,472            |
| STAFFORD                                    | 74                              | 79               | 80               | 82               | 84               | 86               |
| SUNBELT FWSD                                | 1,693                           | 1,692            | 1,701            | 1,760            | 1,854            | 1,963            |
| THE COMMONS WATER SUPPLY INC                | 359                             | 373              | 385              | 394              | 401              | 407              |
| THE WOODLANDS                               | 3,873                           | 4,150            | 4,520            | 4,800            | 5,014            | 5,177            |
| TOMBALL                                     | 3,210                           | 3,345            | 3,474            | 3,595            | 3,714            | 3,826            |
| TRAIL OF THE LAKES MUD                      | 1,043                           | 1,066            | 1,066            | 1,068            | 1,073            | 1,078            |
| WALLER                                      | 84                              | 84               | 87               | 90               | 96               | 103              |
| WEST HARRIS COUNTY MUD #6                   | 327                             | 344              | 352              | 360              | 368              | 374              |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY | 71,086                          | 73,202           | 77,277           | 81,779           | 83,359           | 84,827           |
| WEST UNIVERSITY PLACE                       | 2,885                           | 3,029            | 3,202            | 3,416            | 3,674            | 3,959            |
| WINDFERN FOREST UD                          | 843                             | 830              | 819              | 813              | 812              | 812              |
| WOODCREEK MUD                               | 288                             | 282              | 277              | 276              | 278              | 281              |
| COUNTY-OTHER                                | 28,262                          | 32,569           | 33,868           | 34,433           | 38,021           | 41,470           |
| MANUFACTURING                               | 246,361                         | 260,546          | 273,111          | 282,515          | 277,795          | 273,154          |
| MINING                                      | 2,913                           | 2,894            | 2,843            | 2,812            | 2,787            | 2,768            |
| STEAM ELECTRIC POWER                        | 22,378                          | 26,163           | 30,776           | 36,400           | 43,255           | 51,401           |
| LIVESTOCK                                   | 1,517                           | 1,517            | 1,517            | 1,517            | 1,517            | 1,517            |
| IRRIGATION                                  | 6,531                           | 6,531            | 6,531            | 6,531            | 6,531            | 6,531            |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>       | <b>1,027,065</b>                | <b>1,082,551</b> | <b>1,136,351</b> | <b>1,190,827</b> | <b>1,236,625</b> | <b>1,285,390</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>             |                                 |                  |                  |                  |                  |                  |
| CLEAR BROOK CITY MUD                        | 1,649                           | 1,683            | 1,772            | 1,861            | 1,957            | 2,052            |
| DEER PARK                                   | 2,939                           | 3,002            | 3,079            | 3,172            | 3,289            | 3,407            |
| EL LAGO                                     | 322                             | 310              | 301              | 302              | 302              | 303              |
| FRIENDSWOOD                                 | 2,100                           | 2,477            | 2,724            | 2,990            | 3,261            | 3,565            |
| HARRIS COUNTY MUD #55                       | 1,442                           | 1,461            | 1,480            | 1,537            | 1,666            | 1,825            |
| HOUSTON                                     | 27,847                          | 31,082           | 34,261           | 37,739           | 41,642           | 46,086           |
| KIRK MONT MUD                               | 378                             | 401              | 425              | 453              | 489              | 528              |
| LA PORTE                                    | 4,497                           | 4,404            | 4,348            | 4,340            | 4,381            | 4,432            |
| LEAGUE CITY                                 | 389                             | 430              | 456              | 476              | 491              | 503              |
| NASSAU BAY                                  | 1,065                           | 1,060            | 1,057            | 1,065            | 1,077            | 1,091            |
| PASADENA                                    | 5,274                           | 5,234            | 5,214            | 5,249            | 5,342            | 5,450            |
| PEARLAND                                    | 2,028                           | 2,467            | 2,937            | 3,285            | 3,546            | 3,742            |
| SAGEMEADOW UD                               | 727                             | 745              | 780              | 825              | 879              | 937              |
| SEABROOK                                    | 1,857                           | 1,842            | 1,839            | 1,852            | 1,880            | 1,913            |
| SHOREACRES                                  | 332                             | 327              | 327              | 328              | 333              | 337              |
| TAYLOR LAKE VILLAGE                         | 657                             | 651              | 643              | 642              | 647              | 653              |
| WEBSTER                                     | 3,860                           | 4,104            | 4,305            | 4,466            | 4,601            | 4,711            |
| COUNTY-OTHER                                | 1,966                           | 2,306            | 2,564            | 2,803            | 3,069            | 3,341            |
| MANUFACTURING                               | 84,953                          | 89,844           | 94,176           | 97,418           | 95,791           | 94,192           |
| MINING                                      | 196                             | 195              | 192              | 190              | 188              | 187              |
| STEAM ELECTRIC POWER                        | 1,178                           | 1,377            | 1,620            | 1,916            | 2,277            | 2,705            |



**WUG DEMAND**

| REGION H   | WUG DEMAND (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|---------------------------------|---------------|---------------|---------------|---------------|---------------|
|  | 2020                            | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>LIBERTY COUNTY</b>                                |                                 |               |               |               |               |               |
| <b>NECHES BASIN TOTAL DEMAND</b>                     | <b>11,689</b>                   | <b>11,736</b> | <b>11,781</b> | <b>11,827</b> | <b>11,873</b> | <b>11,923</b> |
| <b>NECHES-TRINITY BASIN</b>                          |                                 |               |               |               |               |               |
| COUNTY-OTHER   | 14                              | 15            | 16            | 17            | 19            | 20            |
| MINING   | 22                              | 23            | 22            | 23            | 25            | 27            |
| LIVESTOCK  | 45                              | 45            | 45            | 45            | 45            | 45            |
| IRRIGATION   | 22,063                          | 22,063        | 22,063        | 22,063        | 22,063        | 22,063        |
| <b>NECHES-TRINITY BASIN TOTAL DEMAND</b>             | <b>22,144</b>                   | <b>22,146</b> | <b>22,146</b> | <b>22,148</b> | <b>22,152</b> | <b>22,155</b> |
| <b>SAN JACINTO BASIN</b>                             |                                 |               |               |               |               |               |
| CLEVELAND  | 1,551                           | 1,539         | 1,531         | 1,537         | 1,555         | 1,575         |
| PLUM GROVE   | 81                              | 87            | 94            | 102           | 110           | 118           |
| TARKINGTON SUD                                       | 320                             | 363           | 406           | 452           | 499           | 543           |
| COUNTY-OTHER   | 1,641                           | 1,861         | 2,065         | 2,287         | 2,526         | 2,759         |
| MANUFACTURING  | 128                             | 148           | 168           | 186           | 202           | 220           |
| MINING   | 79                              | 82            | 80            | 85            | 89            | 97            |
| LIVESTOCK  | 157                             | 157           | 157           | 157           | 157           | 157           |
| IRRIGATION   | 2,517                           | 2,517         | 2,517         | 2,517         | 2,517         | 2,517         |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>                | <b>6,474</b>                    | <b>6,754</b>  | <b>7,018</b>  | <b>7,323</b>  | <b>7,655</b>  | <b>7,986</b>  |
| <b>TRINITY BASIN</b>                                 |                                 |               |               |               |               |               |
| AMES   | 100                             | 106           | 112           | 121           | 131           | 140           |
| DAISETTA   | 82                              | 89            | 95            | 103           | 111           | 119           |
| DAYTON   | 2,266                           | 2,889         | 3,489         | 4,100         | 4,694         | 5,264         |
| HARDIN   | 122                             | 134           | 146           | 160           | 173           | 187           |
| HARDIN WSC   | 410                             | 504           | 596           | 692           | 788           | 880           |
| KENEFICK   | 76                              | 83            | 89            | 97            | 104           | 112           |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 196                             | 258           | 319           | 380           | 438           | 494           |
| LIBERTY  | 1,543                           | 1,620         | 1,698         | 1,790         | 1,892         | 1,992         |
| OLD RIVER-WINFREE                                    | 16                              | 17            | 18            | 20            | 21            | 23            |
| TARKINGTON SUD                                       | 96                              | 109           | 122           | 135           | 149           | 163           |
| WOODLAND HILLS WATER COMPANY                         | 500                             | 661           | 818           | 980           | 1,138         | 1,290         |
| COUNTY-OTHER   | 2,300                           | 2,000         | 1,740         | 1,517         | 1,327         | 1,151         |
| MANUFACTURING  | 136                             | 157           | 179           | 199           | 216           | 234           |
| MINING   | 258                             | 270           | 263           | 276           | 292           | 318           |
| LIVESTOCK  | 519                             | 519           | 519           | 519           | 519           | 519           |
| IRRIGATION   | 22,884                          | 22,884        | 22,884        | 22,884        | 22,884        | 22,884        |
| <b>TRINITY BASIN TOTAL DEMAND</b>                    | <b>31,504</b>                   | <b>32,300</b> | <b>33,087</b> | <b>33,973</b> | <b>34,877</b> | <b>35,770</b> |
| <b>TRINITY-SAN JACINTO BASIN</b>                     |                                 |               |               |               |               |               |
| DAYTON   | 7                               | 9             | 11            | 13            | 15            | 16            |
| COUNTY-OTHER   | 377                             | 408           | 436           | 470           | 507           | 545           |
| MINING   | 26                              | 27            | 27            | 28            | 30            | 32            |
| LIVESTOCK  | 49                              | 49            | 49            | 49            | 49            | 49            |
| IRRIGATION   | 3,268                           | 3,268         | 3,268         | 3,268         | 3,268         | 3,268         |
| <b>TRINITY-SAN JACINTO BASIN TOTAL DEMAND</b>        | <b>3,727</b>                    | <b>3,761</b>  | <b>3,791</b>  | <b>3,828</b>  | <b>3,869</b>  | <b>3,910</b>  |
| <b>LIBERTY COUNTY TOTAL DEMAND</b>                   | <b>75,538</b>                   | <b>76,697</b> | <b>77,823</b> | <b>79,099</b> | <b>80,426</b> | <b>81,744</b> |
| <b>MADISON COUNTY</b>                                |                                 |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                                  |                                 |               |               |               |               |               |
| COUNTY-OTHER   | 207                             | 216           | 226           | 238           | 251           | 264           |
| MINING   | 119                             | 194           | 151           | 108           | 65            | 39            |

**WUG DEMAND**

| REGION H                           | WUG DEMAND (ACRE-FEET PER YEAR) |              |              |              |              |              |
|------------------------------------|---------------------------------|--------------|--------------|--------------|--------------|--------------|
|                                    | 2020                            | 2030         | 2040         | 2050         | 2060         | 2070         |
| <b>MADISON COUNTY</b>              |                                 |              |              |              |              |              |
| <b>BRAZOS BASIN</b>                |                                 |              |              |              |              |              |
| LIVESTOCK                          | 152                             | 152          | 152          | 152          | 152          | 152          |
| IRRIGATION                         | 2                               | 2            | 2            | 2            | 2            | 2            |
| <b>BRAZOS BASIN TOTAL DEMAND</b>   | <b>480</b>                      | <b>564</b>   | <b>531</b>   | <b>500</b>   | <b>470</b>   | <b>457</b>   |
| <b>TRINITY BASIN</b>               |                                 |              |              |              |              |              |
| MADISONVILLE                       | 870                             | 909          | 947          | 998          | 1,053        | 1,107        |
| NORMANGEE                          | 14                              | 14           | 15           | 16           | 17           | 17           |
| COUNTY-OTHER                       | 1,601                           | 1,676        | 1,746        | 1,841        | 1,942        | 2,043        |
| MANUFACTURING                      | 226                             | 247          | 268          | 287          | 311          | 337          |
| MINING                             | 478                             | 778          | 603          | 430          | 258          | 155          |
| STEAM ELECTRIC POWER               | 238                             | 278          | 327          | 387          | 459          | 546          |
| LIVESTOCK                          | 872                             | 872          | 872          | 872          | 872          | 872          |
| IRRIGATION                         | 14                              | 14           | 14           | 14           | 14           | 14           |
| <b>TRINITY BASIN TOTAL DEMAND</b>  | <b>4,313</b>                    | <b>4,788</b> | <b>4,792</b> | <b>4,845</b> | <b>4,926</b> | <b>5,091</b> |
| <b>MADISON COUNTY TOTAL DEMAND</b> | <b>4,793</b>                    | <b>5,352</b> | <b>5,323</b> | <b>5,345</b> | <b>5,396</b> | <b>5,548</b> |
| <b>MONTGOMERY COUNTY</b>           |                                 |              |              |              |              |              |
| <b>SAN JACINTO BASIN</b>           |                                 |              |              |              |              |              |
| BENDERS LANDING WATER SYSTEM       | 2,188                           | 3,456        | 4,762        | 6,070        | 7,373        | 7,372        |
| CLEVELAND                          | 6                               | 8            | 10           | 14           | 18           | 23           |
| CONROE                             | 13,336                          | 15,705       | 17,863       | 19,899       | 22,144       | 24,564       |
| CUT AND SHOOT                      | 116                             | 120          | 134          | 158          | 190          | 235          |
| DOBBIN-PLANTERSVILLE WSC           | 642                             | 840          | 1,117        | 1,485        | 1,972        | 2,614        |
| EAST PLANTATION UD                 | 212                             | 213          | 244          | 278          | 320          | 331          |
| HOUSTON                            | 981                             | 1,375        | 1,810        | 2,233        | 2,654        | 2,776        |
| INDIGO LAKE WATER SYSTEM           | 1,133                           | 1,548        | 2,212        | 3,156        | 4,491        | 6,671        |
| KINGS MANOR MUD                    | 224                             | 225          | 231          | 236          | 242          | 246          |
| LAKE WINDCREST WATER SYSTEM        | 916                             | 1,026        | 1,298        | 1,681        | 2,219        | 2,972        |
| MAGNOLIA                           | 694                             | 823          | 997          | 1,256        | 1,637        | 2,230        |
| MONTGOMERY                         | 631                             | 1,164        | 1,442        | 1,722        | 2,008        | 2,459        |
| MONTGOMERY COUNTY MUD #15          | 497                             | 525          | 598          | 699          | 850          | 1,065        |
| MONTGOMERY COUNTY MUD #18          | 1,285                           | 1,644        | 1,861        | 2,080        | 2,302        | 2,842        |
| MONTGOMERY COUNTY MUD #19          | 261                             | 253          | 247          | 245          | 247          | 249          |
| MONTGOMERY COUNTY MUD #8           | 445                             | 462          | 506          | 554          | 607          | 728          |
| MONTGOMERY COUNTY MUD #83          | 281                             | 289          | 298          | 307          | 316          | 323          |
| MONTGOMERY COUNTY MUD #89          | 335                             | 337          | 341          | 366          | 402          | 415          |
| MONTGOMERY COUNTY MUD #9           | 507                             | 520          | 584          | 651          | 720          | 862          |
| MONTGOMERY COUNTY MUD #94          | 592                             | 595          | 657          | 720          | 783          | 782          |
| MONTGOMERY COUNTY UD #2            | 172                             | 168          | 172          | 183          | 197          | 217          |
| MONTGOMERY COUNTY UD #3            | 267                             | 303          | 305          | 347          | 438          | 557          |
| MONTGOMERY COUNTY UD #4            | 509                             | 642          | 637          | 724          | 923          | 1,184        |
| MONTGOMERY COUNTY WCID #1          | 255                             | 262          | 274          | 299          | 328          | 361          |
| NEW CANEY MUD                      | 742                             | 774          | 818          | 889          | 992          | 1,120        |
| OAK RIDGE NORTH                    | 559                             | 569          | 595          | 609          | 616          | 618          |
| PANORAMA VILLAGE                   | 585                             | 586          | 617          | 663          | 730          | 819          |
| PATTON VILLAGE                     | 151                             | 159          | 177          | 199          | 227          | 263          |
| POINT AQUARIUS MUD                 | 339                             | 336          | 355          | 383          | 424          | 478          |
| PORTER SUD                         | 1,693                           | 2,116        | 2,543        | 2,963        | 3,383        | 3,731        |
| RAYFORD ROAD MUD                   | 994                             | 1,015        | 1,080        | 1,159        | 1,249        | 1,282        |

**WUG DEMAND**

| REGION H   | WUG DEMAND (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|---------------------------------|----------------|----------------|----------------|----------------|----------------|
|  | 2020                            | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>MONTGOMERY COUNTY</b>                             |                                 |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                             |                                 |                |                |                |                |                |
| RIVER PLANTATION MUD                                 | 511                             | 534            | 651            | 767            | 895            | 944            |
| ROMAN FOREST   | 320                             | 317            | 348            | 391            | 449            | 524            |
| SHENANDOAH   | 1,292                           | 1,667          | 1,820          | 1,923          | 2,046          | 2,203          |
| SOUTHERN MONTGOMERY COUNTY MUD                       | 861                             | 865            | 865            | 870            | 880            | 894            |
| SPLENDORA  | 180                             | 190            | 222            | 265            | 322            | 394            |
| SPRING CREEK UD                                      | 645                             | 689            | 715            | 773            | 851            | 877            |
| STAGECOACH   | 37                              | 44             | 71             | 110            | 172            | 279            |
| STANLEY LAKE MUD                                     | 569                             | 630            | 807            | 1,047          | 1,365          | 1,765          |
| THE WOODLANDS  | 23,987                          | 25,132         | 26,326         | 27,820         | 30,098         | 32,896         |
| WESTWOOD NORTH WSC                                   | 351                             | 369            | 410            | 451            | 492            | 551            |
| WILLIS   | 817                             | 826            | 874            | 951            | 1,068          | 1,232          |
| WOODBRAINCH  | 105                             | 106            | 122            | 148            | 182            | 225            |
| COUNTY-OTHER   | 35,816                          | 50,901         | 68,894         | 91,167         | 119,227        | 153,649        |
| MANUFACTURING  | 2,135                           | 2,388          | 2,640          | 2,863          | 3,107          | 3,372          |
| MINING   | 1,453                           | 1,363          | 1,077          | 921            | 806            | 728            |
| STEAM ELECTRIC POWER                                 | 8,537                           | 9,981          | 11,741         | 13,886         | 16,502         | 19,611         |
| LIVESTOCK  | 521                             | 521            | 521            | 521            | 521            | 521            |
| IRRIGATION   | 737                             | 737            | 737            | 737            | 737            | 737            |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>                | <b>110,422</b>                  | <b>135,318</b> | <b>163,626</b> | <b>197,839</b> | <b>240,722</b> | <b>291,791</b> |
| <b>MONTGOMERY COUNTY TOTAL DEMAND</b>                | <b>110,422</b>                  | <b>135,318</b> | <b>163,626</b> | <b>197,839</b> | <b>240,722</b> | <b>291,791</b> |
| <b>POLK COUNTY</b>                                   |                                 |                |                |                |                |                |
| <b>TRINITY BASIN</b>                                 |                                 |                |                |                |                |                |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 1,066                           | 1,178          | 1,275          | 1,357          | 1,425          | 1,479          |
| LIVINGSTON   | 2,557                           | 2,823          | 3,032          | 3,216          | 3,374          | 3,502          |
| ONALASKA   | 316                             | 390            | 449            | 501            | 544            | 579            |
| COUNTY-OTHER   | 1,942                           | 2,047          | 2,131          | 2,218          | 2,305          | 2,381          |
| MINING   | 124                             | 98             | 72             | 46             | 21             | 9              |
| LIVESTOCK  | 144                             | 144            | 144            | 144            | 144            | 144            |
| <b>TRINITY BASIN TOTAL DEMAND</b>                    | <b>6,149</b>                    | <b>6,680</b>   | <b>7,103</b>   | <b>7,482</b>   | <b>7,813</b>   | <b>8,094</b>   |
| <b>POLK COUNTY TOTAL DEMAND</b>                      | <b>6,149</b>                    | <b>6,680</b>   | <b>7,103</b>   | <b>7,482</b>   | <b>7,813</b>   | <b>8,094</b>   |
| <b>SAN JACINTO COUNTY</b>                            |                                 |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                             |                                 |                |                |                |                |                |
| COLDSRING  | 40                              | 42             | 45             | 47             | 50             | 52             |
| SAN JACINTO SUD                                      | 68                              | 70             | 72             | 77             | 81             | 85             |
| COUNTY-OTHER   | 1,317                           | 1,413          | 1,490          | 1,586          | 1,672          | 1,752          |
| MANUFACTURING  | 11                              | 12             | 13             | 14             | 15             | 16             |
| MINING   | 6                               | 6              | 6              | 6              | 6              | 6              |
| LIVESTOCK  | 193                             | 193            | 193            | 193            | 193            | 193            |
| IRRIGATION   | 130                             | 130            | 130            | 130            | 130            | 130            |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>                | <b>1,765</b>                    | <b>1,866</b>   | <b>1,949</b>   | <b>2,053</b>   | <b>2,147</b>   | <b>2,234</b>   |
| <b>TRINITY BASIN</b>                                 |                                 |                |                |                |                |                |
| COLDSRING  | 78                              | 84             | 87             | 94             | 98             | 103            |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 271                             | 295            | 316            | 340            | 359            | 377            |
| POINT BLANK  | 89                              | 95             | 99             | 105            | 111            | 116            |
| RIVERSIDE WSC  | 39                              | 43             | 46             | 49             | 52             | 54             |



### WUG DEMAND

| REGION H   | WUG DEMAND (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|---------------------------------|---------------|---------------|---------------|---------------|---------------|
|  | 2020                            | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>SAN JACINTO COUNTY</b>                            |                                 |               |               |               |               |               |
| <b>TRINITY BASIN</b>                                 |                                 |               |               |               |               |               |
| SAN JACINTO SUD                                      | 169                             | 177           | 182           | 192           | 203           | 212           |
| SHEPHERD   | 314                             | 334           | 349           | 370           | 390           | 409           |
| COUNTY-OTHER   | 758                             | 812           | 856           | 912           | 962           | 1,008         |
| MINING   | 2                               | 2             | 3             | 3             | 3             | 3             |
| LIVESTOCK  | 193                             | 193           | 193           | 193           | 193           | 193           |
| IRRIGATION   | 129                             | 129           | 129           | 129           | 129           | 129           |
| <b>TRINITY BASIN TOTAL DEMAND</b>                    | <b>2,042</b>                    | <b>2,164</b>  | <b>2,260</b>  | <b>2,387</b>  | <b>2,500</b>  | <b>2,604</b>  |
| <b>SAN JACINTO COUNTY TOTAL DEMAND</b>               | <b>3,807</b>                    | <b>4,030</b>  | <b>4,209</b>  | <b>4,440</b>  | <b>4,647</b>  | <b>4,838</b>  |
| <b>TRINITY COUNTY</b>                                |                                 |               |               |               |               |               |
| <b>TRINITY BASIN</b>                                 |                                 |               |               |               |               |               |
| GROVETON   | 70                              | 72            | 70            | 67            | 70            | 73            |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 110                             | 118           | 119           | 115           | 121           | 126           |
| TRINITY  | 337                             | 349           | 341           | 326           | 340           | 355           |
| TRINITY RURAL WSC                                    | 528                             | 555           | 550           | 529           | 551           | 577           |
| COUNTY-OTHER   | 214                             | 217           | 218           | 212           | 222           | 232           |
| MINING   | 5                               | 5             | 5             | 5             | 5             | 5             |
| LIVESTOCK  | 249                             | 249           | 249           | 249           | 249           | 249           |
| <b>TRINITY BASIN TOTAL DEMAND</b>                    | <b>1,513</b>                    | <b>1,565</b>  | <b>1,552</b>  | <b>1,503</b>  | <b>1,558</b>  | <b>1,617</b>  |
| <b>TRINITY COUNTY TOTAL DEMAND</b>                   | <b>1,513</b>                    | <b>1,565</b>  | <b>1,552</b>  | <b>1,503</b>  | <b>1,558</b>  | <b>1,617</b>  |
| <b>WALKER COUNTY</b>                                 |                                 |               |               |               |               |               |
| <b>SAN JACINTO BASIN</b>                             |                                 |               |               |               |               |               |
| HUNTSVILLE   | 6,554                           | 6,715         | 6,817         | 6,957         | 7,101         | 7,226         |
| NEW WAVERLY  | 181                             | 184           | 185           | 188           | 192           | 195           |
| WALKER COUNTY SUD                                    | 447                             | 461           | 470           | 483           | 495           | 506           |
| COUNTY-OTHER   | 1,727                           | 1,764         | 1,786         | 1,818         | 1,851         | 1,880         |
| MANUFACTURING  | 293                             | 293           | 293           | 293           | 293           | 293           |
| MINING   | 5                               | 5             | 5             | 5             | 5             | 5             |
| LIVESTOCK  | 306                             | 306           | 306           | 306           | 306           | 306           |
| IRRIGATION   | 320                             | 320           | 320           | 320           | 320           | 320           |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b>                | <b>9,833</b>                    | <b>10,048</b> | <b>10,182</b> | <b>10,370</b> | <b>10,563</b> | <b>10,731</b> |
| <b>TRINITY BASIN</b>                                 |                                 |               |               |               |               |               |
| HUNTSVILLE   | 1,343                           | 1,376         | 1,397         | 1,425         | 1,455         | 1,481         |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 27                              | 28            | 29            | 30            | 30            | 31            |
| RIVERSIDE  | 55                              | 57            | 58            | 60            | 62            | 63            |
| RIVERSIDE WSC  | 350                             | 386           | 412           | 436           | 455           | 470           |
| THE CONSOLIDATED WSC                                 | 17                              | 18            | 19            | 20            | 21            | 22            |
| TRINITY RURAL WSC                                    | 41                              | 44            | 46            | 48            | 50            | 52            |
| WALKER COUNTY SUD                                    | 596                             | 615           | 627           | 643           | 661           | 676           |
| COUNTY-OTHER   | 1,505                           | 1,462         | 1,430         | 1,408         | 1,399         | 1,394         |
| MANUFACTURING  | 19                              | 19            | 19            | 19            | 19            | 19            |
| MINING   | 6                               | 6             | 6             | 6             | 6             | 6             |
| LIVESTOCK  | 346                             | 346           | 346           | 346           | 346           | 346           |
| IRRIGATION   | 355                             | 355           | 355           | 355           | 355           | 355           |
| <b>TRINITY BASIN TOTAL DEMAND</b>                    | <b>4,660</b>                    | <b>4,712</b>  | <b>4,744</b>  | <b>4,796</b>  | <b>4,859</b>  | <b>4,915</b>  |
| <b>WALKER COUNTY TOTAL DEMAND</b>                    | <b>14,493</b>                   | <b>14,760</b> | <b>14,926</b> | <b>15,166</b> | <b>15,422</b> | <b>15,646</b> |

**WUG DEMAND**

| REGION H                              | WUG DEMAND (ACRE-FEET PER YEAR) |                  |                  |                  |                  |                  |
|---------------------------------------|---------------------------------|------------------|------------------|------------------|------------------|------------------|
|                                       | 2020                            | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>WALLER COUNTY</b>                  |                                 |                  |                  |                  |                  |                  |
| <b>BRAZOS BASIN</b>                   |                                 |                  |                  |                  |                  |                  |
| BROOKSHIRE                            | 663                             | 782              | 921              | 1,080            | 1,262            | 1,460            |
| G & W WSC                             | 111                             | 146              | 187              | 231              | 281              | 335              |
| HEMPSTEAD                             | 1,304                           | 1,490            | 1,703            | 1,944            | 2,218            | 2,518            |
| PINE ISLAND                           | 152                             | 167              | 184              | 205              | 230              | 256              |
| PRAIRIE VIEW                          | 1,436                           | 1,669            | 1,934            | 2,232            | 2,567            | 2,933            |
| COUNTY-OTHER                          | 1,470                           | 1,756            | 2,085            | 2,456            | 2,879            | 3,340            |
| MANUFACTURING                         | 115                             | 128              | 141              | 152              | 165              | 179              |
| MINING                                | 4                               | 4                | 4                | 4                | 4                | 4                |
| LIVESTOCK                             | 824                             | 824              | 824              | 824              | 824              | 824              |
| IRRIGATION                            | 7,012                           | 7,012            | 7,012            | 7,012            | 7,012            | 7,012            |
| <b>BRAZOS BASIN TOTAL DEMAND</b>      | <b>13,091</b>                   | <b>13,978</b>    | <b>14,995</b>    | <b>16,140</b>    | <b>17,442</b>    | <b>18,861</b>    |
| <b>SAN JACINTO BASIN</b>              |                                 |                  |                  |                  |                  |                  |
| G & W WSC                             | 339                             | 448              | 571              | 709              | 861              | 1,028            |
| KATY                                  | 354                             | 434              | 527              | 628              | 742              | 866              |
| PRAIRIE VIEW                          | 131                             | 152              | 176              | 202              | 233              | 266              |
| WALLER                                | 356                             | 379              | 407              | 440              | 479              | 523              |
| COUNTY-OTHER                          | 1,575                           | 1,817            | 2,099            | 2,422            | 2,790            | 3,194            |
| MANUFACTURING                         | 19                              | 21               | 23               | 25               | 27               | 29               |
| MINING                                | 3                               | 3                | 3                | 3                | 3                | 3                |
| LIVESTOCK                             | 245                             | 245              | 245              | 245              | 245              | 245              |
| IRRIGATION                            | 14,084                          | 14,084           | 14,084           | 14,084           | 14,084           | 14,084           |
| <b>SAN JACINTO BASIN TOTAL DEMAND</b> | <b>17,106</b>                   | <b>17,583</b>    | <b>18,135</b>    | <b>18,758</b>    | <b>19,464</b>    | <b>20,238</b>    |
| <b>WALLER COUNTY TOTAL DEMAND</b>     | <b>30,197</b>                   | <b>31,561</b>    | <b>33,130</b>    | <b>34,898</b>    | <b>36,906</b>    | <b>39,099</b>    |
| <b>REGION H TOTAL DEMAND</b>          |                                 |                  |                  |                  |                  |                  |
|                                       | <b>2,488,883</b>                | <b>2,674,720</b> | <b>2,853,311</b> | <b>3,038,675</b> | <b>3,217,833</b> | <b>3,415,333</b> |

**WUG CATEGORY SUMMARY**

| <b>REGION H</b>                        | <b>2020</b> | <b>2030</b> | <b>2040</b> | <b>2050</b> | <b>2060</b> | <b>2070</b> |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>MUNICIPAL</b>                       |             |             |             |             |             |             |
| POPULATION                             | 6,306,537   | 6,904,382   | 7,458,017   | 7,971,820   | 8,439,277   | 8,900,775   |
| DEMANDS (acre-feet per year)           | 1,121,031   | 1,208,872   | 1,292,432   | 1,374,487   | 1,455,702   | 1,537,099   |
| EXISTING SUPPLIES (acre-feet per year) | 1,185,090   | 1,171,908   | 1,197,067   | 1,222,957   | 1,227,650   | 1,231,185   |
| NEEDS (acre-feet per year)             | (116,122)   | (194,686)   | (234,891)   | (280,646)   | (348,434)   | (419,011)   |
| <b>COUNTY-OTHER</b>                    |             |             |             |             |             |             |
| POPULATION                             | 1,018,777   | 1,303,318   | 1,566,516   | 1,895,692   | 2,326,796   | 2,842,503   |
| DEMANDS (acre-feet per year)           | 136,245     | 169,020     | 199,450     | 239,079     | 292,350     | 356,298     |
| EXISTING SUPPLIES (acre-feet per year) | 147,856     | 147,086     | 149,016     | 151,862     | 155,768     | 159,597     |
| NEEDS (acre-feet per year)             | (31,400)    | (57,452)    | (83,306)    | (118,435)   | (163,987)   | (220,551)   |
| <b>MANUFACTURING</b>                   |             |             |             |             |             |             |
| DEMANDS (acre-feet per year)           | 753,307     | 800,223     | 844,300     | 882,719     | 896,354     | 910,294     |
| EXISTING SUPPLIES (acre-feet per year) | 728,879     | 733,235     | 747,250     | 747,595     | 745,981     | 744,470     |
| NEEDS (acre-feet per year)             | (122,859)   | (150,936)   | (173,441)   | (199,077)   | (214,745)   | (230,479)   |
| <b>MINING</b>                          |             |             |             |             |             |             |
| DEMANDS (acre-feet per year)           | 15,486      | 16,267      | 15,426      | 14,646      | 13,938      | 13,657      |
| EXISTING SUPPLIES (acre-feet per year) | 11,157      | 11,119      | 10,797      | 10,111      | 9,273       | 8,698       |
| NEEDS (acre-feet per year)             | (4,815)     | (5,617)     | (5,113)     | (5,158)     | (5,387)     | (5,746)     |
| <b>STEAM ELECTRIC POWER</b>            |             |             |             |             |             |             |
| DEMANDS (acre-feet per year)           | 103,629     | 121,153     | 142,518     | 168,559     | 200,304     | 238,800     |
| EXISTING SUPPLIES (acre-feet per year) | 190,718     | 191,322     | 192,635     | 193,221     | 193,901     | 194,641     |
| NEEDS (acre-feet per year)             | (8,013)     | (11,631)    | (15,421)    | (21,013)    | (30,689)    | (67,706)    |
| <b>LIVESTOCK</b>                       |             |             |             |             |             |             |
| DEMANDS (acre-feet per year)           | 13,346      | 13,346      | 13,346      | 13,346      | 13,346      | 13,346      |
| EXISTING SUPPLIES (acre-feet per year) | 10,904      | 10,648      | 10,388      | 10,238      | 10,052      | 9,880       |
| NEEDS (acre-feet per year)             | (2,480)     | (2,736)     | (2,996)     | (3,146)     | (3,332)     | (3,504)     |
| <b>IRRIGATION</b>                      |             |             |             |             |             |             |
| DEMANDS (acre-feet per year)           | 345,839     | 345,839     | 345,839     | 345,839     | 345,839     | 345,839     |
| EXISTING SUPPLIES (acre-feet per year) | 293,999     | 294,799     | 293,883     | 291,402     | 289,221     | 286,828     |
| NEEDS (acre-feet per year)             | (123,997)   | (123,638)   | (126,329)   | (128,532)   | (130,483)   | (132,643)   |
| <b>REGION TOTALS</b>                   |             |             |             |             |             |             |
| POPULATION                             | 7,325,314   | 8,207,700   | 9,024,533   | 9,867,512   | 10,766,073  | 11,743,278  |
| DEMANDS (acre-feet per year)           | 2,488,883   | 2,674,720   | 2,853,311   | 3,038,675   | 3,217,833   | 3,415,333   |
| EXISTING SUPPLIES (acre-feet per year) | 2,568,603   | 2,560,117   | 2,601,036   | 2,627,386   | 2,631,846   | 2,635,299   |
| NEEDS (acre-feet per year)             | (409,686)   | (546,696)   | (641,497)   | (756,007)   | (897,057)   | (1,079,640) |

**WUG (NEEDS)/SURPLUS**

| REGION H                        | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|---------------------------------|--|----------|----------|----------|----------|----------|
|                                 | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>AUSTIN COUNTY</b>            |  |          |          |          |          |          |
| <b>BRAZOS BASIN</b>             |  |          |          |          |          |          |
| BELLVILLE                       | 0  | 0        | 0        | 0        | 0        | 0        |
| SAN FELIPE                      | (23)                                     | (55)     | (90)     | (133)    | (181)    | (235)    |
| SEALY                           | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                    | 0  | 0        | 0        | 0        | (329)    | (850)    |
| MANUFACTURING                   | 0  | (7)      | (14)     | (20)     | (30)     | (41)     |
| MINING                          | 0  | (146)    | (98)     | (50)     | (3)      | 0        |
| LIVESTOCK                       | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION                      | 0  | 0        | 0        | 0        | 0        | 0        |
| <b>BRAZOS-COLORADO BASIN</b>    |  |          |          |          |          |          |
| SEALY                           | 0  | 0        | 0        | 0        | 0        | 0        |
| WALLIS                          | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                    | 0  | (17)     | (92)     | (185)    | (292)    | (411)    |
| MANUFACTURING                   | 0  | 0        | 0        | 0        | 0        | 0        |
| MINING                          | 0  | (42)     | (29)     | (15)     | (1)      | 0        |
| LIVESTOCK                       | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION                      | 0  | 0        | 0        | 0        | 0        | 0        |
| <b>COLORADO BASIN</b>           |  |          |          |          |          |          |
| COUNTY-OTHER                    | 0  | 0        | 0        | 0        | 0        | 0        |
| MINING                          | 0  | (5)      | (3)      | (2)      | (1)      | 0        |
| LIVESTOCK                       | 0  | 0        | 0        | 0        | 0        | 0        |
| <b>BRAZORIA COUNTY</b>          |  |          |          |          |          |          |
| <b>BRAZOS BASIN</b>             |  |          |          |          |          |          |
| BAILEY'S PRAIRIE                | 0  | 0        | 0        | 0        | 0        | (1)      |
| BRAZORIA                        | 4  | 5        | 6        | 6        | 5        | 4        |
| FREEPORT                        | 83                                       | 87       | 90       | 90       | 87       | 80       |
| LAKE JACKSON                    | 3  | 1        | (2)      | (5)      | (11)     | (18)     |
| VARNER CREEK UD                 | 0  | 0        | 0        | 0        | 0        | 0        |
| WEST COLUMBIA                   | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                    | 0  | 0        | 0        | 0        | 0        | (114)    |
| MANUFACTURING                   | 15,019                                   | 14,061   | 13,128   | 12,188   | 11,243   | 10,304   |
| MINING                          | (111)                                    | (145)    | (174)    | (206)    | (240)    | (280)    |
| LIVESTOCK                       | (9)                                      | (17)     | (23)     | (29)     | (35)     | (42)     |
| IRRIGATION                      | (170)                                    | (311)    | (413)    | (524)    | (644)    | (755)    |
| <b>BRAZOS-COLORADO BASIN</b>    |  |          |          |          |          |          |
| BRAZORIA                        | 14                                       | 18       | 21       | 22       | 19       | 16       |
| FREEPORT                        | 1  | 1        | 1        | 1        | 1        | 1        |
| JONES CREEK                     | 0  | 0        | 0        | 0        | 0        | 0        |
| SWEENY                          | 0  | 0        | 0        | 0        | 0        | 0        |
| WEST COLUMBIA                   | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                    | 1,743                                    | 1,198    | 738      | 201      | (431)    | (1,096)  |
| MANUFACTURING                   | (39,316)                                 | (42,961) | (46,571) | (50,189) | (53,815) | (57,432) |
| MINING                          | (206)                                    | (266)    | (321)    | (380)    | (444)    | (521)    |
| LIVESTOCK                       | (137)                                    | (159)    | (175)    | (192)    | (211)    | (228)    |
| IRRIGATION                      | (402)                                    | (736)    | (977)    | (1,240)  | (1,524)  | (1,786)  |
| <b>SAN JACINTO-BRAZOS BASIN</b> |  |          |          |          |          |          |
| ALVIN                           | 77                                       | 77       | 77       | 77       | 77       | 77       |
| ANGLETON                        | 156                                      | 227      | 285      | 310      | 304      | 225      |

**WUG (NEEDS)/SURPLUS**

| REGION H                          | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|-----------------------------------|--|----------|----------|----------|----------|----------|
|                                   | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>BRAZORIA COUNTY</b>            |  |          |          |          |          |          |
| <b>SAN JACINTO-BRAZOS BASIN</b>   |  |          |          |          |          |          |
| BAILEY'S PRAIRIE                  | 0  | 0        | 0        | 0        | 0        | 0        |
| BRAZORIA COUNTY MUD #2            | 0  | 0        | 0        | 0        | 0        | 0        |
| BRAZORIA COUNTY MUD #21           | 0  | 0        | 0        | 0        | 0        | 0        |
| BRAZORIA COUNTY MUD #3            | 0  | 0        | 0        | 0        | 0        | 0        |
| BRAZORIA COUNTY MUD #6            | 0  | 0        | 0        | 0        | 0        | 0        |
| BROOKSIDE VILLAGE                 | 0  | 0        | 0        | 0        | 0        | 0        |
| CLUTE                             | (28)                                     | (52)     | (71)     | (97)     | (135)    | (180)    |
| DANBURY                           | 0  | 0        | 0        | 0        | 0        | 0        |
| FREEMPORT                         | 737                                      | 713      | 687      | 647      | 591      | 529      |
| HILLCREST                         | 0  | 0        | 0        | 0        | 0        | 0        |
| HOLIDAY LAKES                     | 0  | 0        | 0        | 0        | 0        | 0        |
| IOWA COLONY                       | 0  | 0        | 0        | 0        | 0        | 0        |
| LAKE JACKSON                      | 500                                      | 295      | 140      | (49)     | (277)    | (518)    |
| MANVEL                            | 46                                       | (566)    | (1,469)  | (2,496)  | (3,707)  | (5,207)  |
| OYSTER CREEK                      | (11)                                     | (21)     | (28)     | (37)     | (48)     | (60)     |
| PEARLAND                          | (1,936)                                  | (2,407)  | (2,958)  | (3,571)  | (4,318)  | (5,147)  |
| RICHWOOD                          | (9)                                      | (17)     | (23)     | (31)     | (42)     | (55)     |
| COUNTY-OTHER                      | (4,825)                                  | (8,767)  | (12,491) | (16,526) | (21,070) | (25,970) |
| MANUFACTURING                     | (17,368)                                 | (29,730) | (42,856) | (55,987) | (69,121) | (82,250) |
| MINING                            | (417)                                    | (561)    | (689)    | (831)    | (980)    | (1,161)  |
| LIVESTOCK                         | (93)                                     | (164)    | (216)    | (272)    | (332)    | (388)    |
| IRRIGATION                        | (70,495)                                 | (71,034) | (71,423) | (71,848) | (72,306) | (73,088) |
| <b>CHAMBERS COUNTY</b>            |  |          |          |          |          |          |
| <b>NECHES-TRINITY BASIN</b>       |  |          |          |          |          |          |
| ANAHUAC                           | 678                                      | 683      | 687      | 690      | 686      | 682      |
| TRINITY BAY CONSERVATION DISTRICT | 1,046                                    | 1,046    | 1,046    | 1,046    | 1,046    | 1,046    |
| COUNTY-OTHER                      | 0  | 0        | 0        | 0        | 0        | 0        |
| MINING                            | 0  | 0        | 0        | 0        | 0        | 0        |
| LIVESTOCK                         | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION                        | 61,123                                   | 61,123   | 61,123   | 61,123   | 61,123   | 61,123   |
| <b>TRINITY BASIN</b>              |  |          |          |          |          |          |
| ANAHUAC                           | 160                                      | 162      | 163      | 161      | 162      | 162      |
| BEACH CITY                        | (3)                                      | (9)      | (15)     | (21)     | (29)     | (36)     |
| COVE                              | 0  | 0        | 0        | 0        | 0        | 0        |
| MONT BELVIEU                      | 0  | 0        | (172)    | (682)    | (1,231)  | (1,809)  |
| OLD RIVER-WINFREE                 | (9)                                      | (26)     | (45)     | (69)     | (96)     | (125)    |
| TRINITY BAY CONSERVATION DISTRICT | 274                                      | 274      | 274      | 274      | 274      | 274      |
| COUNTY-OTHER                      | 0  | 0        | 0        | 0        | 0        | 0        |
| MANUFACTURING                     | 0  | (157)    | (315)    | (456)    | (638)    | (835)    |
| MINING                            | 0  | 0        | 0        | 0        | 0        | 0        |
| LIVESTOCK                         | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION                        | (12,580)                                 | (12,580) | (12,580) | (12,580) | (12,580) | (12,580) |
| <b>TRINITY-SAN JACINTO BASIN</b>  |  |          |          |          |          |          |
| BAYTOWN                           | 372                                      | 434      | 489      | 534      | 564      | 586      |
| BEACH CITY                        | (28)                                     | (72)     | (121)    | (176)    | (236)    | (301)    |
| MONT BELVIEU                      | 0  | 0        | (56)     | (210)    | (375)    | (548)    |
| COUNTY-OTHER                      | 0  | 0        | 0        | 0        | 0        | 0        |

**WUG (NEEDS)/SURPLUS**

| REGION H                         | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|----------------------------------|--|----------|----------|----------|----------|----------|
|                                  | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>CHAMBERS COUNTY</b>           |  |          |          |          |          |          |
| <b>TRINITY-SAN JACINTO BASIN</b> |  |          |          |          |          |          |
| MANUFACTURING                    | 21,734                                   | 21,015   | 20,300   | 19,656   | 18,824   | 17,931   |
| MINING                           | (112)                                    | (112)    | (112)    | (112)    | (112)    | (112)    |
| STEAM ELECTRIC POWER             | 27,584                                   | 26,986   | 26,257   | 25,369   | 24,286   | 23,547   |
| LIVESTOCK                        | 0  | 0        | 0        | 0        | (47)     | (86)     |
| IRRIGATION                       | (2,980)                                  | (2,980)  | (2,980)  | (2,980)  | (2,980)  | (3,000)  |
| <b>FORT BEND COUNTY</b>          |  |          |          |          |          |          |
| <b>BRAZOS BASIN</b>              |  |          |          |          |          |          |
| BEASLEY                          | (2)                                      | (3)      | (5)      | (8)      | (11)     | (17)     |
| FAIRCHILDS                       | (26)                                     | (30)     | (48)     | (69)     | (99)     | (142)    |
| FORT BEND COUNTY MUD #116        | (288)                                    | (450)    | (553)    | (636)    | (718)    | (803)    |
| FORT BEND COUNTY MUD #121        | (195)                                    | (292)    | (360)    | (428)    | (497)    | (569)    |
| FORT BEND COUNTY MUD #129        | 20                                       | (304)    | (525)    | (717)    | (861)    | (887)    |
| FORT BEND COUNTY MUD #25         | (25)                                     | (52)     | (56)     | (59)     | (62)     | (64)     |
| FULSHEAR                         | (66)                                     | (123)    | (174)    | (220)    | (262)    | (302)    |
| GREATWOOD                        | (729)                                    | (1,028)  | (1,066)  | (1,096)  | (1,125)  | (1,154)  |
| MISSOURI CITY                    | 210                                      | (159)    | (341)    | (538)    | (686)    | (786)    |
| NEEDVILLE                        | (38)                                     | (29)     | (39)     | (47)     | (54)     | (62)     |
| NORTH FORT BEND WATER AUTHORITY  | 20,084                                   | 13,017   | 1,976    | (5,659)  | (10,190) | (13,243) |
| PECAN GROVE MUD #1               | 5,392                                    | 5,040    | 5,006    | 4,960    | 4,924    | 4,888    |
| PLANTATION MUD                   | (174)                                    | (239)    | (246)    | (251)    | (260)    | (268)    |
| PLEAK                            | (78)                                     | (123)    | (135)    | (147)    | (159)    | (173)    |
| RICHMOND                         | 1,929                                    | 1,491    | 1,358    | 1,199    | 1,033    | 865      |
| ROSENBERG                        | 2,194                                    | 1,138    | 797      | 456      | 72       | (366)    |
| SIENNA PLANTATION                | 372                                      | (78)     | (465)    | (814)    | (1,148)  | (1,489)  |
| SIMONTON                         | (29)                                     | (37)     | (78)     | (109)    | (136)    | (158)    |
| SUGAR LAND                       | 11,002                                   | 7,159    | 6,186    | 5,233    | 4,347    | 3,579    |
| WESTON LAKES                     | (464)                                    | (392)    | (577)    | (738)    | (887)    | (1,040)  |
| COUNTY-OTHER                     | (6,903)                                  | (13,571) | (13,736) | (16,876) | (22,162) | (29,118) |
| MANUFACTURING                    | (648)                                    | (1,168)  | (1,306)  | (1,407)  | (1,358)  | (1,306)  |
| MINING                           | 454                                      | 437      | 419      | 402      | 386      | 373      |
| STEAM ELECTRIC POWER             | 61,869                                   | 50,609   | 36,836   | 20,006   | (554)    | (26,343) |
| LIVESTOCK                        | (162)                                    | (129)    | (176)    | (210)    | (236)    | (259)    |
| IRRIGATION                       | (6,676)                                  | (6,391)  | (6,798)  | (7,090)  | (7,316)  | (7,521)  |
| <b>BRAZOS-COLORADO BASIN</b>     |  |          |          |          |          |          |
| BEASLEY                          | (20)                                     | (16)     | (24)     | (32)     | (43)     | (57)     |
| NEEDVILLE                        | (46)                                     | (36)     | (48)     | (58)     | (67)     | (78)     |
| ROSENBERG                        | 1  | 2        | 2        | 2        | 0        | (3)      |
| COUNTY-OTHER                     | (419)                                    | (548)    | (2,095)  | (4,749)  | (8,527)  | (13,982) |
| MINING                           | (4)                                      | (4)      | (4)      | (3)      | (2)      | (2)      |
| LIVESTOCK                        | (57)                                     | (46)     | (62)     | (74)     | (83)     | (92)     |
| IRRIGATION                       | (7,432)                                  | (6,496)  | (7,832)  | (8,788)  | (9,531)  | (10,202) |
| <b>SAN JACINTO BASIN</b>         |  |          |          |          |          |          |
| HOUSTON                          | 0  | 0        | 0        | 0        | 0        | 0        |
| KATY                             | (825)                                    | (2,618)  | (2,740)  | (2,830)  | (2,906)  | (2,974)  |
| MEADOWS PLACE                    | 163                                      | 31       | 12       | (8)      | (30)     | (53)     |
| MISSOURI CITY                    | 1,333                                    | 795      | 517      | 263      | 101      | (13)     |
| NORTH FORT BEND WATER AUTHORITY  | (20,730)                                 | (26,507) | (28,531) | (29,360) | (29,549) | (28,406) |

**WUG (NEEDS)/SURPLUS**

| REGION H                                    | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|---|--|----------|----------|----------|----------|----------|
|   | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>FORT BEND COUNTY</b>                     |  |          |          |          |          |          |
| <b>SAN JACINTO BASIN</b>                    |  |          |          |          |          |          |
| STAFFORD                                    | 1,487                                    | 1,260    | 1,223    | 1,189    | 1,151    | 1,108    |
| SUGAR LAND                                  | 814                                      | 494      | 389      | 302      | 233      | 185      |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY | (79)                                     | (377)    | (454)    | (518)    | (557)    | (595)    |
| COUNTY-OTHER                                | (66)                                     | (112)    | (137)    | (152)    | (162)    | (171)    |
| MANUFACTURING                               | (1,423)                                  | (2,053)  | (2,211)  | (2,325)  | (2,254)  | (2,178)  |
| LIVESTOCK                                   | (29)                                     | (25)     | (30)     | (33)     | (36)     | (38)     |
| IRRIGATION                                  | (174)                                    | (143)    | (187)    | (219)    | (243)    | (266)    |
| <b>SAN JACINTO-BRAZOS BASIN</b>             |  |          |          |          |          |          |
| ARCOLA                                      | (112)                                    | (227)    | (309)    | (390)    | (475)    | (563)    |
| FORT BEND COUNTY MUD #23                    | (319)                                    | (595)    | (708)    | (798)    | (877)    | (956)    |
| FORT BEND COUNTY MUD #25                    | (172)                                    | (369)    | (405)    | (437)    | (470)    | (504)    |
| FULSHEAR                                    | (906)                                    | (988)    | (1,112)  | (1,208)  | (1,287)  | (1,354)  |
| HOUSTON                                     | 0  | 0        | 0        | 0        | 0        | 0        |
| MEADOWS PLACE                               | 15                                       | 3        | 1        | (1)      | (3)      | (5)      |
| MISSOURI CITY                               | 7,473                                    | 4,497    | 2,934    | 1,501    | 440      | (348)    |
| NORTH FORT BEND WATER AUTHORITY             | (9,096)                                  | (29,171) | (33,103) | (35,976) | (37,619) | (40,071) |
| PEARLAND                                    | (162)                                    | (196)    | (277)    | (366)    | (462)    | (573)    |
| PECAN GROVE MUD #1                          | 35                                       | 36       | 36       | 36       | 36       | 36       |
| SIENNA PLANTATION                           | 992                                      | (228)    | (1,461)  | (2,772)  | (4,133)  | (5,418)  |
| STAFFORD                                    | 3,581                                    | 2,945    | 2,777    | 2,615    | 2,446    | 2,264    |
| SUGAR LAND                                  | 8,242                                    | 5,427    | 4,343    | 3,382    | 2,601    | 2,043    |
| COUNTY-OTHER                                | (2,660)                                  | (2,294)  | (4,173)  | (6,061)  | (7,860)  | (9,656)  |
| MANUFACTURING                               | (1,344)                                  | (2,170)  | (2,378)  | (2,527)  | (2,433)  | (2,335)  |
| MINING                                      | (7)                                      | (10)     | (9)      | (6)      | (5)      | (3)      |
| LIVESTOCK                                   | (86)                                     | (77)     | (89)     | (98)     | (105)    | (112)    |
| IRRIGATION                                  | (2,876)                                  | (2,755)  | (2,927)  | (3,051)  | (3,147)  | (3,233)  |
| <b>GALVESTON COUNTY</b>                     |  |          |          |          |          |          |
| <b>NECHES-TRINITY BASIN</b>                 |  |          |          |          |          |          |
| BOLIVAR PENINSULA SUD                       | 5,802                                    | 5,766    | 5,723    | 5,672    | 5,612    | 5,540    |
| COUNTY-OTHER                                | (4)                                      | (7)      | (7)      | (10)     | (12)     | (14)     |
| MINING                                      | (71)                                     | (77)     | (84)     | (92)     | (98)     | (106)    |
| LIVESTOCK                                   | (52)                                     | (52)     | (52)     | (52)     | (52)     | (52)     |
| IRRIGATION                                  | (15)                                     | (15)     | (15)     | (15)     | (15)     | (15)     |
| <b>SAN JACINTO-BRAZOS BASIN</b>             |  |          |          |          |          |          |
| BACLIFF MUD                                 | 869                                      | 892      | 902      | 894      | 887      | 880      |
| BAYOU VISTA                                 | 252                                      | 259      | 262      | 263      | 262      | 262      |
| CLEAR LAKE SHORES                           | (151)                                    | (164)    | (160)    | (160)    | (159)    | (159)    |
| DICKINSON                                   | 1,299                                    | 1,270    | 1,189    | 1,091    | 974      | 852      |
| FRIENDSWOOD                                 | 4,936                                    | 4,409    | 3,998    | 3,557    | 3,096    | 2,588    |
| GALVESTON                                   | 8,391                                    | 7,749    | 6,875    | 5,910    | 4,992    | 4,013    |
| HITCHCOCK                                   | 763                                      | 633      | 555      | 488      | 427      | 375      |
| JAMAICA BEACH                               | 0  | 0        | 0        | 0        | 0        | 0        |
| KEMAH                                       | (490)                                    | (809)    | (862)    | (907)    | (946)    | (978)    |
| LA MARQUE                                   | 247                                      | 79       | 51       | 13       | (38)     | (85)     |
| LEAGUE CITY                                 | 14,365                                   | 13,109   | 11,984   | 11,010   | 10,404   | 9,957    |
| SAN LEON MUD                                | 1,627                                    | 1,592    | 1,565    | 1,538    | 1,511    | 1,484    |
| SANTA FE                                    | (429)                                    | (421)    | (449)    | (492)    | (549)    | (610)    |

**WUG (NEEDS)/SURPLUS**

| REGION H                                       | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |         |         |         |         |         |
|--|--|---------|---------|---------|---------|---------|
|  | 2020                                     | 2030    | 2040    | 2050    | 2060    | 2070    |
| <b>GALVESTON COUNTY</b>                        |  |         |         |         |         |         |
| <b>SAN JACINTO-BRAZOS BASIN</b>                |  |         |         |         |         |         |
| TEXAS CITY                                     | 5,218                                    | 4,848   | 4,469   | 4,090   | 3,698   | 3,327   |
| TIKI ISLAND                                    | 160                                      | 162     | 163     | 162     | 162     | 161     |
| COUNTY-OTHER                                   | (1,986)                                  | (2,154) | (2,320) | (2,492) | (2,679) | (2,865) |
| MANUFACTURING                                  | 12,296                                   | 11,168  | 10,018  | 8,844   | 7,648   | 6,427   |
| MINING   | (277)                                    | (295)   | (327)   | (354)   | (381)   | (408)   |
| LIVESTOCK                                      | (180)                                    | (179)   | (180)   | (181)   | (181)   | (182)   |
| IRRIGATION                                     | (6,039)                                  | (6,039) | (6,039) | (6,039) | (6,039) | (6,039) |
| <b>HARRIS COUNTY</b>                           |  |         |         |         |         |         |
| <b>SAN JACINTO BASIN</b>                       |  |         |         |         |         |         |
| BAYTOWN  | 264                                      | 267     | 275     | 267     | 254     | 240     |
| BELLAIRE                                       | (305)                                    | (275)   | (82)    | (124)   | (167)   | (217)   |
| BLUE BELL MANOR UTILITY COMPANY                | (259)                                    | (223)   | (65)    | (95)    | (124)   | (155)   |
| BUNKER HILL VILLAGE                            | (130)                                    | (118)   | (35)    | (53)    | (71)    | (92)    |
| CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY | (407)                                    | (1,366) | (1,956) | (2,179) | (2,405) | (2,661) |
| CHIMNEY HILL MUD                               | (159)                                    | (73)    | (6)     | (10)    | (14)    | (18)    |
| CROSBY MUD                                     | 845                                      | 845     | 856     | 849     | 843     | 837     |
| DEER PARK                                      | (23)                                     | (32)    | (16)    | (46)    | (85)    | (125)   |
| EL DORADO UD                                   | (104)                                    | (87)    | (24)    | (35)    | (44)    | (52)    |
| FOUNTAINVIEW SUBDIVISION                       | (102)                                    | (124)   | (131)   | (132)   | (134)   | (136)   |
| GALENA PARK                                    | 162                                      | 201     | 246     | 247     | 230     | 214     |
| GREEN TRAILS MUD                               | (222)                                    | (186)   | (52)    | (73)    | (91)    | (109)   |
| GREENWOOD UD                                   | (29)                                     | (27)    | (7)     | (11)    | (13)    | (16)    |
| HARRIS COUNTY MUD #106                         | (522)                                    | (447)   | (129)   | (186)   | (235)   | (285)   |
| HARRIS COUNTY MUD #11                          | (128)                                    | (107)   | (26)    | (40)    | (53)    | (67)    |
| HARRIS COUNTY MUD #119                         | (202)                                    | (167)   | (46)    | (65)    | (82)    | (101)   |
| HARRIS COUNTY MUD #132                         | (360)                                    | (301)   | (83)    | (117)   | (145)   | (174)   |
| HARRIS COUNTY MUD #148 - KINGSLAKE             | (108)                                    | (94)    | (26)    | (36)    | (46)    | (55)    |
| HARRIS COUNTY MUD #151                         | (406)                                    | (342)   | (95)    | (133)   | (166)   | (199)   |
| HARRIS COUNTY MUD #152                         | (444)                                    | (379)   | (108)   | (155)   | (195)   | (236)   |
| HARRIS COUNTY MUD #153                         | (481)                                    | (403)   | (112)   | (156)   | (193)   | (231)   |
| HARRIS COUNTY MUD #154                         | (299)                                    | (250)   | (70)    | (100)   | (126)   | (156)   |
| HARRIS COUNTY MUD #158                         | (150)                                    | (70)    | (10)    | (13)    | (16)    | (20)    |
| HARRIS COUNTY MUD #180                         | (206)                                    | (182)   | (52)    | (73)    | (90)    | (108)   |
| HARRIS COUNTY MUD #189                         | (143)                                    | (123)   | (36)    | (52)    | (66)    | (82)    |
| HARRIS COUNTY MUD #221                         | (160)                                    | (146)   | (42)    | (61)    | (77)    | (95)    |
| HARRIS COUNTY MUD #278                         | (388)                                    | (431)   | (120)   | (168)   | (208)   | (248)   |
| HARRIS COUNTY MUD #290                         | (354)                                    | (464)   | (539)   | (560)   | (577)   | (590)   |
| HARRIS COUNTY MUD #345                         | (315)                                    | (266)   | (74)    | (104)   | (129)   | (155)   |
| HARRIS COUNTY MUD #400 - WEST                  | (315)                                    | (285)   | (84)    | (123)   | (156)   | (188)   |
| HARRIS COUNTY MUD #46                          | (266)                                    | (221)   | (61)    | (84)    | (104)   | (125)   |
| HARRIS COUNTY MUD #49                          | (183)                                    | (158)   | (45)    | (64)    | (80)    | (97)    |
| HARRIS COUNTY MUD #5                           | (295)                                    | (374)   | (428)   | (450)   | (481)   | (515)   |
| HARRIS COUNTY MUD #50                          | 401                                      | 366     | 343     | 339     | 337     | 335     |
| HARRIS COUNTY MUD #8                           | (39)                                     | (31)    | (8)     | (12)    | (15)    | (17)    |
| HARRIS COUNTY MUD #96                          | (163)                                    | (81)    | (12)    | (18)    | (23)    | (29)    |
| HARRIS COUNTY UD #14                           | (82)                                     | (76)    | (23)    | (35)    | (48)    | (66)    |
| HARRIS COUNTY UD #15                           | (209)                                    | (188)   | (57)    | (87)    | (118)   | (150)   |



**WUG (NEEDS)/SURPLUS**

| REGION H                                     | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|--|--|----------|----------|----------|----------|----------|
|  | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>HARRIS COUNTY</b>                         |  |          |          |          |          |          |
| <b>SAN JACINTO BASIN</b>                     |  |          |          |          |          |          |
| HARRIS COUNTY WCID #1                        | 421                                      | 341      | 291      | 271      | 251      | 229      |
| HARRIS COUNTY WCID #133                      | (264)                                    | (218)    | (61)     | (91)     | (122)    | (157)    |
| HARRIS COUNTY WCID #74                       | (315)                                    | (269)    | (77)     | (110)    | (140)    | (172)    |
| HARRIS COUNTY WCID #96                       | (545)                                    | (289)    | (40)     | (56)     | (70)     | (84)     |
| HEDWIG VILLAGE                               | (118)                                    | (107)    | (32)     | (48)     | (63)     | (81)     |
| HILSHIRE VILLAGE                             | (55)                                     | (28)     | (4)      | (6)      | (9)      | (11)     |
| HOUSTON                                      | 0  | 0        | 0        | (9,936)  | (44,458) | (81,229) |
| HUMBLE                                       | (754)                                    | (429)    | (66)     | (100)    | (131)    | (162)    |
| HUNTERS CREEK VILLAGE                        | (189)                                    | (171)    | (51)     | (77)     | (103)    | (133)    |
| JACINTO CITY                                 | (62)                                     | (51)     | (14)     | (21)     | (26)     | (32)     |
| JERSEY VILLAGE                               | (185)                                    | (447)    | (598)    | (629)    | (669)    | (717)    |
| KATY   | (1,865)                                  | (2,444)  | (2,805)  | (2,912)  | (3,013)  | (3,113)  |
| KINGS MANOR MUD                              | (61)                                     | (76)     | (85)     | (86)     | (87)     | (89)     |
| LA PORTE                                     | 223                                      | 234      | 248      | 249      | 248      | 246      |
| LONGHORN TOWN UD                             | (115)                                    | (98)     | (27)     | (39)     | (48)     | (58)     |
| MASON CREEK UD                               | (736)                                    | (907)    | (992)    | (998)    | (1,005)  | (1,013)  |
| MISSOURI CITY                                | 678                                      | 391      | 169      | 49       | (31)     | (92)     |
| MOUNT HOUSTON ROAD MUD                       | (199)                                    | (204)    | (64)     | (98)     | (128)    | (159)    |
| NEWPORT MUD                                  | 348                                      | 192      | 104      | 84       | 61       | 34       |
| NORTH BELT UD                                | (137)                                    | (114)    | (32)     | (46)     | (58)     | (72)     |
| NORTH CHANNEL WATER AUTHORITY                | (819)                                    | (694)    | (194)    | (276)    | (349)    | (425)    |
| NORTH FORT BEND WATER AUTHORITY              | (429)                                    | 4,116    | 4,960    | 5,987    | 5,954    | 6,096    |
| NORTH GREEN MUD                              | (191)                                    | (159)    | (44)     | (62)     | (77)     | (93)     |
| NORTH HARRIS COUNTY REGIONAL WATER AUTHORITY | (36,942)                                 | (60,626) | (75,626) | (80,623) | (85,445) | (90,128) |
| NORTHWEST PARK MUD                           | (1,235)                                  | (1,072)  | (309)    | (450)    | (580)    | (724)    |
| PARKWAY UD                                   | (458)                                    | (458)    | (426)    | (427)    | (431)    | (438)    |
| PASADENA                                     | 12,993                                   | 13,147   | 13,559   | 13,301   | 12,876   | 12,394   |
| PINEY POINT VILLAGE                          | (140)                                    | (129)    | (39)     | (61)     | (83)     | (109)    |
| SOUTH HOUSTON                                | 2,517                                    | 2,552    | 2,646    | 2,607    | 2,544    | 2,474    |
| SOUTHSIDE PLACE                              | (21)                                     | (19)     | (5)      | (8)      | (11)     | (14)     |
| SPRING VALLEY                                | (420)                                    | (569)    | (562)    | (585)    | (610)    | (643)    |
| STAFFORD                                     | 82                                       | 74       | 65       | 62       | 59       | 55       |
| SUNBELT FWSD                                 | (679)                                    | (911)    | (926)    | (956)    | (986)    | (1,014)  |
| THE COMMONS WATER SUPPLY INC                 | (144)                                    | (194)    | (194)    | (202)    | (209)    | (217)    |
| THE WOODLANDS                                | (2,066)                                  | (2,871)  | (3,519)  | (3,785)  | (3,993)  | (4,163)  |
| TOMBALL                                      | (1,864)                                  | (2,462)  | (2,845)  | (2,972)  | (3,094)  | (3,212)  |
| TRAIL OF THE LAKES MUD                       | (418)                                    | (362)    | (101)    | (142)    | (177)    | (212)    |
| WALLER                                       | (49)                                     | (62)     | (72)     | (74)     | (80)     | (86)     |
| WEST HARRIS COUNTY MUD #6                    | (131)                                    | (177)    | (177)    | (184)    | (190)    | (197)    |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY  | (11,107)                                 | (25,125) | (36,702) | (40,817) | (42,509) | (44,131) |
| WEST UNIVERSITY PLACE                        | (231)                                    | (206)    | (61)     | (91)     | (121)    | (156)    |
| WINDFERN FOREST UD                           | (237)                                    | (113)    | (16)     | (22)     | (27)     | (32)     |
| WOODCREEK MUD                                | (115)                                    | (155)    | (159)    | (164)    | (168)    | (173)    |
| COUNTY-OTHER                                 | 36,179                                   | 29,509   | 27,442   | 26,569   | 23,239   | 19,975   |
| MANUFACTURING                                | 49,045                                   | 37,367   | 32,608   | 22,928   | 26,320   | 29,656   |
| MINING                                       | (2,739)                                  | (2,703)  | (2,586)  | (2,568)  | (2,554)  | (2,546)  |
| STEAM ELECTRIC POWER                         | (6,668)                                  | (10,067) | (13,621) | (18,876) | (25,273) | (32,905) |

**WUG (NEEDS)/SURPLUS**

| REGION H                         | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|----------------------------------|--|----------|----------|----------|----------|----------|
|                                  | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>HARRIS COUNTY</b>             |  |          |          |          |          |          |
| <b>SAN JACINTO BASIN</b>         |  |          |          |          |          |          |
| LIVESTOCK                        | (914)                                    | (1,129)  | (1,240)  | (1,251)  | (1,260)  | (1,270)  |
| IRRIGATION                       | 504                                      | 902      | 2,503    | 2,252    | 2,045    | 1,835    |
| <b>SAN JACINTO-BRAZOS BASIN</b>  |  |          |          |          |          |          |
| CLEAR BROOK CITY MUD             | 1,349                                    | 1,339    | 1,348    | 1,261    | 1,170    | 1,077    |
| DEER PARK                        | (51)                                     | (71)     | (36)     | (110)    | (207)    | (310)    |
| EL LAGO                          | 28                                       | 33       | 41       | 38       | 33       | 27       |
| FRIENDSWOOD                      | 2,194                                    | 2,241    | 2,276    | 2,121    | 1,921    | 1,687    |
| HARRIS COUNTY MUD #55            | 3,041                                    | 2,802    | 2,666    | 2,607    | 2,490    | 2,346    |
| HOUSTON                          | 0  | 0        | 0        | 0        | 0        | 0        |
| KIRKMONT MUD                     | (332)                                    | (348)    | (348)    | (374)    | (407)    | (443)    |
| LA PORTE                         | 3,208                                    | 3,312    | 3,466    | 3,451    | 3,394    | 3,325    |
| LEAGUE CITY                      | 291                                      | 257      | 237      | 208      | 191      | 179      |
| NASSAU BAY                       | 1,183                                    | 1,194    | 1,223    | 1,212    | 1,197    | 1,181    |
| PASADENA                         | 5,584                                    | 5,597    | 5,685    | 5,576    | 5,423    | 5,256    |
| PEARLAND                         | (411)                                    | (582)    | (706)    | (962)    | (1,205)  | (1,419)  |
| SAGEMEADOW UD                    | (640)                                    | (647)    | (639)    | (682)    | (732)    | (787)    |
| SEABROOK                         | 163                                      | 196      | 253      | 234      | 207      | 174      |
| SHOREACRES                       | 51                                       | 58       | 66       | 64       | 58       | 53       |
| TAYLOR LAKE VILLAGE              | 1,113                                    | 1,122    | 1,145    | 1,143    | 1,137    | 1,129    |
| WEBSTER                          | 5,382                                    | 5,178    | 5,096    | 4,932    | 4,794    | 4,678    |
| COUNTY-OTHER                     | 1,248                                    | 974      | 872      | 654      | 414      | 163      |
| MANUFACTURING                    | (32,156)                                 | (36,207) | (37,944) | (41,266) | (40,085) | (38,923) |
| MINING                           | (184)                                    | (182)    | (175)    | (174)    | (172)    | (172)    |
| STEAM ELECTRIC POWER             | (1,107)                                  | (1,286)  | (1,473)  | (1,750)  | (2,087)  | (2,487)  |
| <b>TRINITY-SAN JACINTO BASIN</b> |  |          |          |          |          |          |
| BAYTOWN                          | 5,711                                    | 5,766    | 5,918    | 5,717    | 5,423    | 5,104    |
| HARRIS COUNTY WCID #1            | 17                                       | 14       | 13       | 11       | 10       | 9        |
| HOUSTON                          | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                     | (2,786)                                  | (3,146)  | (3,395)  | (3,770)  | (4,126)  | (4,490)  |
| MANUFACTURING                    | (29,803)                                 | (35,230) | (38,112) | (42,737) | (42,407) | (42,096) |
| MINING                           | (154)                                    | (152)    | (145)    | (143)    | (144)    | (142)    |
| LIVESTOCK                        | (134)                                    | (132)    | (126)    | (127)    | (127)    | (128)    |
| IRRIGATION                       | 1,914                                    | 1,957    | 2,131    | 2,104    | 2,081    | 2,058    |
| <b>LEON COUNTY</b>               |  |          |          |          |          |          |
| <b>BRAZOS BASIN</b>              |  |          |          |          |          |          |
| CONCORD-ROBBINS WSC              | 0  | 0        | 0        | 0        | 0        | 0        |
| JEWETT                           | 0  | 0        | 0        | 0        | 0        | 0        |
| NORMANGEE                        | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER                     | 0  | 0        | 0        | 0        | 0        | 0        |
| MINING                           | 0  | (23)     | 0        | 0        | 0        | 0        |
| LIVESTOCK                        | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION                       | 0  | 0        | 0        | 0        | 0        | 0        |
| <b>TRINITY BASIN</b>             |  |          |          |          |          |          |
| BUFFALO                          | 0  | 0        | 0        | 0        | 0        | 0        |
| CENTERVILLE                      | 0  | 0        | 0        | 0        | 0        | 0        |
| CONCORD-ROBBINS WSC              | 0  | 0        | 0        | 0        | 0        | 0        |
| FLO COMMUNITY WSC                | 0  | 0        | 0        | 0        | 0        | 0        |

**WUG (NEEDS)/SURPLUS**

| REGION H   | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |          |
|--|--|----------|----------|----------|----------|----------|
|  | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070     |
| <b>LEON COUNTY</b>                                   |  |          |          |          |          |          |
| <b>TRINITY BASIN</b>                                 |  |          |          |          |          |          |
| JEWETT   | 0  | 0        | 0        | 0        | 0        | 0        |
| NORMANGEE  | 0  | 0        | 0        | 0        | 0        | 0        |
| OAKWOOD  | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER   | 0  | 0        | 0        | 0        | 0        | 0        |
| MANUFACTURING  | 0  | (97)     | (222)    | (335)    | (440)    | (554)    |
| MINING   | 0  | (56)     | 0        | 0        | 0        | 0        |
| LIVESTOCK  | 0  | 0        | 0        | 0        | 0        | 0        |
| IRRIGATION   | 0  | 0        | 0        | 0        | 0        | 0        |
| <b>LIBERTY COUNTY</b>                                |  |          |          |          |          |          |
| <b>NECHES BASIN</b>                                  |  |          |          |          |          |          |
| DAISETTA   | 0  | 0        | 0        | 0        | 1        | 0        |
| HARDIN WSC   | 0  | 0        | 0        | 0        | 0        | 0        |
| WEST HARDIN WSC                                      | (24)                                     | (27)     | (29)     | (32)     | (34)     | (37)     |
| COUNTY-OTHER   | 0  | 0        | 0        | 0        | 0        | 0        |
| MANUFACTURING  | 0  | (27)     | (55)     | (80)     | (102)    | (126)    |
| MINING   | (21)                                     | (24)     | (23)     | (25)     | (29)     | (34)     |
| LIVESTOCK  | (41)                                     | (41)     | (41)     | (41)     | (41)     | (41)     |
| IRRIGATION   | (11,053)                                 | (11,053) | (11,053) | (11,053) | (11,053) | (11,053) |
| <b>NECHES-TRINITY BASIN</b>                          |  |          |          |          |          |          |
| COUNTY-OTHER   | 0  | 0        | 0        | 0        | 0        | 0        |
| MINING   | 0  | (1)      | 0        | (1)      | (3)      | (5)      |
| LIVESTOCK  | (24)                                     | (24)     | (24)     | (24)     | (24)     | (24)     |
| IRRIGATION   | 7,429                                    | 7,429    | 7,429    | 7,429    | 7,429    | 7,429    |
| <b>SAN JACINTO BASIN</b>                             |  |          |          |          |          |          |
| CLEVELAND  | 0  | 0        | 0        | 0        | 0        | 0        |
| PLUM GROVE   | 0  | 0        | 0        | 0        | 0        | 0        |
| TARKINGTON SUD                                       | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER   | 0  | 0        | 0        | (188)    | (427)    | (660)    |
| MANUFACTURING  | 0  | (20)     | (40)     | (58)     | (74)     | (92)     |
| MINING   | 0  | (3)      | (1)      | (6)      | (10)     | (18)     |
| LIVESTOCK  | (73)                                     | (73)     | (73)     | (73)     | (73)     | (73)     |
| IRRIGATION   | (2,467)                                  | (2,467)  | (2,467)  | (2,467)  | (2,467)  | (2,467)  |
| <b>TRINITY BASIN</b>                                 |  |          |          |          |          |          |
| AMES   | 0  | 0        | 0        | 0        | 0        | 0        |
| DAISETTA   | 0  | 0        | 0        | 0        | 2        | 0        |
| DAYTON   | 0  | 0        | 0        | 0        | 0        | 0        |
| HARDIN   | 0  | 0        | 0        | 0        | 0        | 0        |
| HARDIN WSC   | 0  | 0        | 0        | 0        | 0        | 0        |
| KENEFICK   | 0  | 0        | 0        | 0        | 0        | 0        |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 96                                       | 113      | 127      | 140      | 151      | 162      |
| LIBERTY  | 0  | 0        | 0        | 0        | 0        | 0        |
| OLD RIVER-WINFREE                                    | 0  | 0        | 0        | 0        | 0        | 0        |
| TARKINGTON SUD                                       | 0  | 0        | 0        | 0        | 0        | 0        |
| WOODLAND HILLS WATER COMPANY                         | 0  | 0        | 0        | 0        | 0        | 0        |
| COUNTY-OTHER   | 0  | 0        | 0        | 0        | 0        | 0        |
| MANUFACTURING  | (74)                                     | (95)     | (117)    | (137)    | (154)    | (172)    |
| MINING   | (164)                                    | (176)    | (169)    | (182)    | (198)    | (224)    |

**WUG (NEEDS)/SURPLUS**

| REGION H                         | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |         |         |         |         |          |
|----------------------------------|--|---------|---------|---------|---------|----------|
|                                  | 2020                                     | 2030    | 2040    | 2050    | 2060    | 2070     |
| <b>LIBERTY COUNTY</b>            |  |         |         |         |         |          |
| <b>TRINITY BASIN</b>             |  |         |         |         |         |          |
| LIVESTOCK                        | (252)                                    | (252)   | (252)   | (252)   | (252)   | (252)    |
| IRRIGATION                       | (638)                                    | (638)   | (638)   | (638)   | (638)   | (638)    |
| <b>TRINITY-SAN JACINTO BASIN</b> |  |         |         |         |         |          |
| DAYTON                           | 0  | 0       | 0       | 0       | 0       | 0        |
| COUNTY-OTHER                     | 0  | 0       | 0       | 0       | 0       | 0        |
| MINING                           | 0  | (1)     | (1)     | (2)     | (4)     | (6)      |
| LIVESTOCK                        | (29)                                     | (29)    | (29)    | (29)    | (29)    | (29)     |
| IRRIGATION                       | 0  | 0       | 0       | 0       | 0       | 0        |
| <b>MADISON COUNTY</b>            |  |         |         |         |         |          |
| <b>BRAZOS BASIN</b>              |  |         |         |         |         |          |
| COUNTY-OTHER                     | 0  | 0       | 0       | 0       | (1)     | (14)     |
| MINING                           | 0  | (75)    | (32)    | 0       | 0       | 0        |
| LIVESTOCK                        | 0  | 0       | 0       | 0       | 0       | 0        |
| IRRIGATION                       | 0  | 0       | 0       | 0       | 0       | 0        |
| <b>TRINITY BASIN</b>             |  |         |         |         |         |          |
| MADISONVILLE                     | 0  | 0       | 0       | 0       | 0       | 0        |
| NORMANGEE                        | 0  | 0       | 0       | 0       | 0       | 0        |
| COUNTY-OTHER                     | 0  | 0       | 0       | 0       | 0       | 0        |
| MANUFACTURING                    | 0  | (21)    | (42)    | (61)    | (85)    | (111)    |
| MINING                           | 0  | (300)   | (125)   | 0       | 0       | 0        |
| STEAM ELECTRIC POWER             | (238)                                    | (278)   | (327)   | (387)   | (459)   | (546)    |
| LIVESTOCK                        | 0  | 0       | 0       | 0       | 0       | 0        |
| IRRIGATION                       | 169                                      | 169     | 169     | 169     | 169     | 169      |
| <b>MONTGOMERY COUNTY</b>         |  |         |         |         |         |          |
| <b>SAN JACINTO BASIN</b>         |  |         |         |         |         |          |
| BENDERS LANDING WATER SYSTEM     | (516)                                    | (1,784) | (3,090) | (4,398) | (5,701) | (5,700)  |
| CLEVELAND                        | 18                                       | 16      | 14      | 10      | 6       | 1        |
| CONROE                           | (604)                                    | (2,973) | (5,131) | (7,167) | (9,412) | (11,832) |
| CUT AND SHOOT                    | 64                                       | 60      | 46      | 22      | (10)    | (55)     |
| DOBBIN-PLANTERSVILLE WSC         | (485)                                    | (683)   | (960)   | (1,328) | (1,815) | (2,457)  |
| EAST PLANTATION UD               | (31)                                     | (32)    | (63)    | (97)    | (139)   | (150)    |
| HOUSTON                          | 117                                      | 0       | 0       | 0       | 0       | 0        |
| INDIGO LAKE WATER SYSTEM         | (267)                                    | (682)   | (1,346) | (2,290) | (3,625) | (5,805)  |
| KINGS MANOR MUD                  | 27                                       | 26      | 20      | 15      | 9       | 5        |
| LAKE WINDCREST WATER SYSTEM      | (216)                                    | (326)   | (598)   | (981)   | (1,519) | (2,272)  |
| MAGNOLIA                         | (65)                                     | (194)   | (368)   | (627)   | (1,008) | (1,601)  |
| MONTGOMERY                       | (149)                                    | (682)   | (960)   | (1,240) | (1,526) | (1,977)  |
| MONTGOMERY COUNTY MUD #15        | (117)                                    | (145)   | (218)   | (319)   | (470)   | (685)    |
| MONTGOMERY COUNTY MUD #18        | (327)                                    | (686)   | (903)   | (1,122) | (1,344) | (1,884)  |
| MONTGOMERY COUNTY MUD #19        | 98                                       | 106     | 112     | 114     | 112     | 110      |
| MONTGOMERY COUNTY MUD #8         | 100                                      | 83      | 39      | (9)     | (62)    | (183)    |
| MONTGOMERY COUNTY MUD #83        | 48                                       | 40      | 31      | 22      | 13      | 6        |
| MONTGOMERY COUNTY MUD #89        | 252                                      | 250     | 246     | 221     | 185     | 172      |
| MONTGOMERY COUNTY MUD #9         | (59)                                     | (72)    | (136)   | (203)   | (272)   | (414)    |
| MONTGOMERY COUNTY MUD #94        | (140)                                    | (143)   | (205)   | (268)   | (331)   | (330)    |
| MONTGOMERY COUNTY UD #2          | 92                                       | 96      | 92      | 81      | 67      | 47       |
| MONTGOMERY COUNTY UD #3          | (32)                                     | (68)    | (70)    | (112)   | (203)   | (322)    |

**WUG (NEEDS)/SURPLUS**

| REGION H   | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |          |          |          |          |           |
|--|--|----------|----------|----------|----------|-----------|
|  | 2020                                     | 2030     | 2040     | 2050     | 2060     | 2070      |
| <b>MONTGOMERY COUNTY</b>                             |  |          |          |          |          |           |
| <b>SAN JACINTO BASIN</b>                             |  |          |          |          |          |           |
| MONTGOMERY COUNTY UD #4                              | (281)                                    | (414)    | (409)    | (496)    | (695)    | (956)     |
| MONTGOMERY COUNTY WCID #1                            | (3)                                      | (10)     | (22)     | (47)     | (76)     | (109)     |
| NEW CANEY MUD  | (113)                                    | (145)    | (189)    | (260)    | (363)    | (491)     |
| OAK RIDGE NORTH                                      | (22)                                     | (32)     | (58)     | (72)     | (79)     | (81)      |
| PANORAMA VILLAGE                                     | 43                                       | 43       | 43       | 43       | 43       | 43        |
| PATTON VILLAGE                                       | (36)                                     | (44)     | (62)     | (84)     | (112)    | (148)     |
| POINT AQUARIUS MUD                                   | (46)                                     | (43)     | (62)     | (90)     | (131)    | (185)     |
| PORTER SUD   | (1,074)                                  | (1,497)  | (1,924)  | (2,344)  | (2,764)  | (3,112)   |
| RAYFORD ROAD MUD                                     | (48)                                     | (69)     | (134)    | (213)    | (303)    | (336)     |
| RIVER PLANTATION MUD                                 | 177                                      | 154      | 37       | (79)     | (207)    | (256)     |
| ROMAN FOREST   | (76)                                     | (73)     | (104)    | (147)    | (205)    | (280)     |
| SHENANDOAH   | (404)                                    | (779)    | (932)    | (1,035)  | (1,158)  | (1,315)   |
| SOUTHERN MONTGOMERY COUNTY MUD                       | (9)                                      | (13)     | (13)     | (18)     | (28)     | (42)      |
| SPLENDORA  | 311                                      | 301      | 269      | 226      | 169      | 97        |
| SPRING CREEK UD                                      | (152)                                    | (196)    | (222)    | (280)    | (358)    | (384)     |
| STAGECOACH   | (13)                                     | (20)     | (47)     | (86)     | (148)    | (255)     |
| STANLEY LAKE MUD                                     | 204                                      | 143      | (34)     | (274)    | (592)    | (992)     |
| THE WOODLANDS  | 50                                       | (1,095)  | (2,289)  | (3,783)  | (6,061)  | (8,859)   |
| WESTWOOD NORTH WSC                                   | (83)                                     | (101)    | (142)    | (183)    | (224)    | (283)     |
| WILLIS   | (193)                                    | (202)    | (250)    | (327)    | (444)    | (608)     |
| WOODBROUGH   | (21)                                     | (22)     | (38)     | (64)     | (98)     | (141)     |
| COUNTY-OTHER   | (11,751)                                 | (26,836) | (44,829) | (67,102) | (95,162) | (129,584) |
| MANUFACTURING  | (727)                                    | (980)    | (1,232)  | (1,455)  | (1,699)  | (1,964)   |
| MINING   | (343)                                    | (253)    | 33       | 189      | 304      | 382       |
| STEAM ELECTRIC POWER                                 | 5,649                                    | 4,205    | 2,445    | 300      | (2,316)  | (5,425)   |
| LIVESTOCK  | (123)                                    | (123)    | (123)    | (123)    | (123)    | (123)     |
| IRRIGATION   | 912                                      | 912      | 912      | 912      | 912      | 912       |
| <b>POLK COUNTY</b>                                   |  |          |          |          |          |           |
| <b>TRINITY BASIN</b>                                 |  |          |          |          |          |           |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 524                                      | 514      | 508      | 501      | 493      | 484       |
| LIVINGSTON   | 3,043                                    | 2,777    | 2,568    | 2,384    | 2,226    | 2,098     |
| ONALASKA   | 0  | 0        | 0        | 0        | 0        | 0         |
| COUNTY-OTHER   | 30                                       | 30       | 30       | 30       | 30       | 30        |
| MINING   | 32                                       | 32       | 32       | 32       | 32       | 32        |
| LIVESTOCK  | 38                                       | 38       | 38       | 38       | 38       | 38        |
| <b>SAN JACINTO COUNTY</b>                            |  |          |          |          |          |           |
| <b>SAN JACINTO BASIN</b>                             |  |          |          |          |          |           |
| COLDSPRING   | 0  | 0        | 0        | 0        | 0        | 0         |
| SAN JACINTO SUD                                      | 80                                       | 79       | 79       | 80       | 80       | 80        |
| COUNTY-OTHER   | 0  | 0        | 0        | 0        | 0        | 0         |
| MANUFACTURING  | 0  | 0        | 0        | 0        | 0        | 0         |
| MINING   | 0  | 0        | 0        | 0        | 0        | 0         |
| LIVESTOCK  | 0  | 0        | 0        | 0        | 0        | 0         |
| IRRIGATION   | 0  | 0        | 0        | 0        | 0        | 0         |
| <b>TRINITY BASIN</b>                                 |  |          |          |          |          |           |
| COLDSPRING   | 0  | 0        | 0        | 0        | 0        | 0         |

**WUG (NEEDS)/SURPLUS**

| REGION H   | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |       |       |       |       |       |
|--|--|-------|-------|-------|-------|-------|
|  | 2020                                     | 2030  | 2040  | 2050  | 2060  | 2070  |
| <b>SAN JACINTO COUNTY</b>                            |  |       |       |       |       |       |
| <b>TRINITY BASIN</b>                                 |  |       |       |       |       |       |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 133                                      | 129   | 126   | 126   | 124   | 123   |
| POINT BLANK  | 0  | 0     | 0     | 0     | 0     | 0     |
| RIVERSIDE WSC  | 8  | 8     | 8     | 8     | 8     | 8     |
| SAN JACINTO SUD                                      | 200                                      | 201   | 201   | 200   | 200   | 200   |
| SHEPHERD   | 0  | 0     | 0     | 0     | 0     | 0     |
| COUNTY-OTHER   | 336                                      | 336   | 336   | 336   | 336   | 336   |
| MINING   | 0  | 0     | (1)   | (1)   | (1)   | (1)   |
| LIVESTOCK  | 0  | 0     | 0     | 0     | 0     | 0     |
| IRRIGATION   | 56                                       | 56    | 56    | 56    | 56    | 56    |
| <b>TRINITY COUNTY</b>                                |  |       |       |       |       |       |
| <b>TRINITY BASIN</b>                                 |  |       |       |       |       |       |
| GROVETON   | 307                                      | 308   | 307   | 307   | 307   | 303   |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | (56)                                     | (66)  | (72)  | (73)  | (79)  | (85)  |
| TRINITY  | 938                                      | 926   | 934   | 949   | 935   | 920   |
| TRINITY RURAL WSC                                    | (52)                                     | (80)  | (76)  | (57)  | (79)  | (105) |
| COUNTY-OTHER   | 475                                      | 471   | 470   | 476   | 467   | 456   |
| MINING   | (5)                                      | (5)   | (5)   | (5)   | (5)   | (5)   |
| LIVESTOCK  | (85)                                     | (85)  | (85)  | (85)  | (85)  | (85)  |
| <b>WALKER COUNTY</b>                                 |  |       |       |       |       |       |
| <b>SAN JACINTO BASIN</b>                             |  |       |       |       |       |       |
| HUNTSVILLE   | 9,547                                    | 9,386 | 9,284 | 9,145 | 9,000 | 8,874 |
| NEW WAVERLY  | 0  | 0     | 0     | 0     | 0     | 0     |
| WALKER COUNTY SUD                                    | 0  | 0     | 0     | 0     | 0     | 0     |
| COUNTY-OTHER   | 1,603                                    | 1,640 | 1,650 | 1,643 | 1,628 | 1,613 |
| MANUFACTURING  | 0  | 0     | 0     | 0     | 0     | 0     |
| MINING   | 0  | 0     | 0     | 0     | 0     | 0     |
| LIVESTOCK  | 0  | 0     | 0     | 0     | 0     | 0     |
| IRRIGATION   | 0  | 0     | 0     | 0     | 0     | 0     |
| <b>TRINITY BASIN</b>                                 |  |       |       |       |       |       |
| HUNTSVILLE   | 1,956                                    | 1,923 | 1,902 | 1,873 | 1,844 | 1,819 |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | 13                                       | 12    | 12    | 11    | 10    | 10    |
| RIVERSIDE  | 0  | (2)   | (3)   | (5)   | (7)   | (8)   |
| RIVERSIDE WSC  | 67                                       | 67    | 67    | 67    | 67    | 67    |
| THE CONSOLIDATED WSC                                 | 0  | 0     | 0     | 0     | 0     | 0     |
| TRINITY RURAL WSC                                    | (14)                                     | (16)  | (17)  | (17)  | (19)  | (21)  |
| WALKER COUNTY SUD                                    | 0  | 0     | 0     | 0     | 0     | 0     |
| COUNTY-OTHER   | 1,397                                    | 1,360 | 1,334 | 1,309 | 1,291 | 1,277 |
| MANUFACTURING  | 337                                      | 337   | 337   | 337   | 337   | 337   |
| MINING   | 0  | 0     | 0     | 0     | 0     | 0     |
| LIVESTOCK  | 0  | 0     | 0     | 0     | 0     | 0     |
| IRRIGATION   | 0  | 0     | 0     | 0     | 0     | 0     |
| <b>WALLER COUNTY</b>                                 |  |       |       |       |       |       |
| <b>BRAZOS BASIN</b>                                  |  |       |       |       |       |       |
| BROOKSHIRE   | 0  | 0     | 0     | 0     | 0     | 0     |
| G & W WSC  | 0  | 0     | 0     | 0     | 0     | 0     |

**WUG (NEEDS)/SURPLUS**

| REGION H                 | WUG (NEEDS)/SURPLUS (ACRE-FEET PER YEAR) |      |      |       |       |         |
|--------------------------|--|------|------|-------|-------|---------|
|                          | 2020                                     | 2030 | 2040 | 2050  | 2060  | 2070    |
| <b>WALLER COUNTY</b>     |  |      |      |       |       |         |
| <b>BRAZOS BASIN</b>      |  |      |      |       |       |         |
| HEMPSTEAD                | 0  | 0    | 0    | 0     | (207) | (507)   |
| PINE ISLAND              | (8)                                      | (23) | (40) | (61)  | (86)  | (112)   |
| PRAIRIE VIEW             | 0  | 0    | 0    | 0     | 0     | 0       |
| COUNTY-OTHER             | 0  | 0    | (31) | (324) | (747) | (1,208) |
| MANUFACTURING            | 0  | (13) | (26) | (37)  | (50)  | (64)    |
| MINING                   | 0  | 0    | 0    | 0     | 0     | 0       |
| LIVESTOCK                | 0  | 0    | 0    | 0     | 0     | 0       |
| IRRIGATION               | 50                                       | 50   | 50   | 50    | 50    | 50      |
| <b>SAN JACINTO BASIN</b> |  |      |      |       |       |         |
| G & W WSC                | 0  | 0    | 0    | 0     | 0     | 0       |
| KATY                     | 0  | 0    | 0    | 0     | 0     | 0       |
| PRAIRIE VIEW             | 0  | 0    | 0    | 0     | 0     | 0       |
| WALLER                   | 0  | 0    | 0    | 0     | 0     | 0       |
| COUNTY-OTHER             | 0  | 0    | 0    | 0     | 0     | (348)   |
| MANUFACTURING            | 0  | 0    | 0    | 0     | 0     | 0       |
| MINING                   | 0  | 0    | 0    | 0     | 0     | 0       |
| LIVESTOCK                | 0  | 0    | 0    | 0     | 0     | 0       |
| IRRIGATION               | 0  | 0    | 0    | 0     | 0     | 0       |





**SOURCE AVAILABILITY**

| <b>REGION H</b>                              |               |                 |                 |   |                |                |                |                |                |
|--|---------------|-----------------|-----------------|---|----------------|----------------|----------------|----------------|----------------|
| <b>GROUNDWATER</b>                           | <b>COUNTY</b> | <b>BASIN</b>    | <b>SALINITY</b> | <b>SOURCE AVAILABILITY (ACRE-FEET PER YEAR)</b> |                |                |                |                |                |
|  |               |                 |                 | <b>2020</b>                                     | <b>2030</b>    | <b>2040</b>    | <b>2050</b>    | <b>2060</b>    | <b>2070</b>    |
| GULF COAST AQUIFER                           | MONTGOMERY    | SAN JACINTO     | FRESH           | 61,629  | 61,629         | 61,629         | 61,629         | 61,629         | 61,629         |
| GULF COAST AQUIFER                           | POLK          | TRINITY         | FRESH           | 21,830  | 21,830         | 21,783         | 21,783         | 21,783         | 21,783         |
| GULF COAST AQUIFER                           | SAN JACINTO   | SAN JACINTO     | FRESH           | 10,368  | 10,368         | 10,368         | 10,368         | 10,368         | 10,368         |
| GULF COAST AQUIFER                           | SAN JACINTO   | TRINITY         | FRESH           | 8,811   | 8,811          | 8,811          | 8,811          | 8,811          | 8,811          |
| GULF COAST AQUIFER                           | WALKER        | SAN JACINTO     | FRESH           | 9,116   | 9,116          | 9,116          | 9,116          | 9,116          | 9,116          |
| GULF COAST AQUIFER                           | WALKER        | TRINITY         | FRESH           | 8,873   | 8,873          | 8,797          | 8,797          | 8,797          | 8,797          |
| GULF COAST AQUIFER                           | WALLER        | BRAZOS          | FRESH           | 14,933  | 14,933         | 14,933         | 14,933         | 14,933         | 14,933         |
| GULF COAST AQUIFER                           | WALLER        | SAN JACINTO     | FRESH           | 26,694  | 26,694         | 26,694         | 26,694         | 26,694         | 26,694         |
| QUEEN CITY AQUIFER                           | LEON          | BRAZOS          | FRESH           | 245   | 245            | 245            | 245            | 245            | 245            |
| QUEEN CITY AQUIFER                           | LEON          | TRINITY         | FRESH           | 349   | 349            | 349            | 349            | 349            | 349            |
| QUEEN CITY AQUIFER                           | MADISON       | BRAZOS          | FRESH           | 1   | 1              | 1              | 1              | 1              | 1              |
| QUEEN CITY AQUIFER                           | MADISON       | TRINITY         | FRESH           | 379   | 379            | 379            | 379            | 379            | 379            |
| QUEEN CITY AQUIFER                           | TRINITY       | TRINITY         | FRESH           | 0   | 0              | 0              | 0              | 0              | 0              |
| QUEEN CITY AQUIFER                           | WALKER        | TRINITY         | FRESH           | 229   | 229            | 229            | 229            | 229            | 229            |
| SAN BERNARD RIVER ALLUVIUM AQUIFER           | AUSTIN        | BRAZOS-COLORADO | FRESH           | 520   | 520            | 520            | 520            | 520            | 520            |
| SAN JACINTO RIVER ALLUVIUM AQUIFER           | WALKER        | SAN JACINTO     | FRESH           | 1,450   | 1,450          | 1,450          | 1,450          | 1,450          | 1,450          |
| SPARTA AQUIFER                               | LEON          | BRAZOS          | FRESH           | 0   | 0              | 0              | 0              | 0              | 0              |
| SPARTA AQUIFER                               | LEON          | TRINITY         | FRESH           | 21  | 21             | 21             | 21             | 21             | 21             |
| SPARTA AQUIFER                               | MADISON       | BRAZOS          | FRESH           | 0   | 0              | 0              | 0              | 0              | 0              |
| SPARTA AQUIFER                               | MADISON       | TRINITY         | FRESH           | 3,313   | 3,313          | 3,313          | 3,313          | 3,313          | 3,313          |
| SPARTA AQUIFER                               | TRINITY       | TRINITY         | FRESH           | 302   | 302            | 302            | 302            | 302            | 302            |
| SPARTA AQUIFER                               | WALKER        | SAN JACINTO     | FRESH           | 266   | 266            | 266            | 266            | 266            | 266            |
| SPARTA AQUIFER                               | WALKER        | TRINITY         | FRESH           | 2,084   | 2,084          | 2,084          | 2,084          | 2,084          | 2,084          |
| TRINITY RIVER ALLUVIUM AQUIFER               | WALKER        | TRINITY         | FRESH           | 3,913   | 3,913          | 3,913          | 3,913          | 3,913          | 3,913          |
| YEGUA-JACKSON AQUIFER                        | LEON          | TRINITY         | FRESH           | 4   | 4              | 4              | 4              | 4              | 4              |
| YEGUA-JACKSON AQUIFER                        | MADISON       | BRAZOS          | FRESH           | 63  | 63             | 63             | 63             | 63             | 63             |
| YEGUA-JACKSON AQUIFER                        | MADISON       | TRINITY         | FRESH           | 1,055   | 1,055          | 1,055          | 1,055          | 1,055          | 1,055          |
| YEGUA-JACKSON AQUIFER                        | POLK          | TRINITY         | FRESH           | 0   | 0              | 0              | 0              | 0              | 0              |
| YEGUA-JACKSON AQUIFER                        | TRINITY       | TRINITY         | FRESH           | 2,191   | 2,191          | 2,191          | 2,191          | 2,191          | 2,191          |
| YEGUA-JACKSON AQUIFER                        | WALKER        | SAN JACINTO     | FRESH           | 351   | 351            | 351            | 351            | 351            | 351            |
| YEGUA-JACKSON AQUIFER                        | WALKER        | TRINITY         | FRESH           | 3,823   | 3,823          | 3,823          | 3,823          | 3,823          | 3,823          |
| <b>GROUNDWATER TOTAL SOURCE AVAILABILITY</b> |               |                 |                 | <b>738,891</b>                                  | <b>669,385</b> | <b>670,113</b> | <b>671,055</b> | <b>671,545</b> | <b>671,545</b> |

| <b>REGION H</b> |               |                    |                 |   |             |             |             |             |             |
|-----------------|---------------|--------------------|-----------------|---|-------------|-------------|-------------|-------------|-------------|
| <b>REUSE</b>    | <b>COUNTY</b> | <b>BASIN</b>       | <b>SALINITY</b> | <b>SOURCE AVAILABILITY (ACRE-FEET PER YEAR)</b> |             |             |             |             |             |
|                 |               |                    |                 | <b>2020</b>                                     | <b>2030</b> | <b>2040</b> | <b>2050</b> | <b>2060</b> | <b>2070</b> |
| DIRECT REUSE    | FORT BEND     | SAN JACINTO-BRAZOS | FRESH           | 808   | 1,891       | 3,289       | 5,200       | 7,170       | 7,170       |



**SOURCE AVAILABILITY**

| <b>REGION H</b>                                |               |                     |                 |   |                  |                  |                  |                  |                  |
|--|---------------|---------------------|-----------------|---|------------------|------------------|------------------|------------------|------------------|
| <b>REUSE</b>                                   | <b>COUNTY</b> | <b>BASIN</b>        | <b>SALINITY</b> | <b>SOURCE AVAILABILITY (ACRE-FEET PER YEAR)</b> |                  |                  |                  |                  |                  |
|  |               |                     |                 | <b>2020</b>                                     | <b>2030</b>      | <b>2040</b>      | <b>2050</b>      | <b>2060</b>      | <b>2070</b>      |
| INDIRECT REUSE   THE WOODLANDS                 | MONTGOMERY    | SAN JACINTO         | FRESH           | 144   | 144              | 144              | 144              | 144              | 144              |
| <b>REUSE TOTAL SOURCE AVAILABILITY</b>         |               |                     |                 | <b>26,809</b>                                   | <b>27,892</b>    | <b>29,290</b>    | <b>31,201</b>    | <b>33,171</b>    | <b>33,171</b>    |
| <b>REGION H</b>                                |               |                     |                 |   |                  |                  |                  |                  |                  |
| <b>SURFACE WATER</b>                           | <b>COUNTY</b> | <b>BASIN</b>        | <b>SALINITY</b> | <b>SOURCE AVAILABILITY (ACRE-FEET PER YEAR)</b> |                  |                  |                  |                  |                  |
|  |               |                     |                 | <b>2020</b>                                     | <b>2030</b>      | <b>2040</b>      | <b>2050</b>      | <b>2060</b>      | <b>2070</b>      |
| BRAZOS RUN-OF-RIVER                            | BRAZORIA      | BRAZOS              | FRESH           | 167,759   | 170,768          | 173,777          | 176,786          | 179,795          | 182,808          |
| BRAZOS RUN-OF-RIVER                            | FORT BEND     | BRAZOS              | FRESH           | 247,788   | 249,246          | 250,704          | 252,162          | 253,620          | 255,085          |
| BRAZOS RUN-OF-RIVER                            | WALLER        | BRAZOS              | FRESH           | 61  | 61               | 61               | 61               | 61               | 61               |
| BRAZOS-COLORADO RUN-OF-RIVER                   | BRAZORIA      | BRAZOS-COLORADO     | FRESH           | 3,211   | 3,211            | 3,211            | 3,211            | 3,211            | 3,211            |
| CONROE LAKE/RESERVOIR                          | RESERVOIR     | SAN JACINTO         | FRESH           | 79,300  | 78,540           | 77,780           | 77,020           | 76,260           | 75,500           |
| HOUSTON LAKE/RESERVOIR                         | RESERVOIR     | SAN JACINTO         | FRESH           | 179,000   | 177,060          | 175,120          | 173,180          | 171,240          | 169,300          |
| LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM   | RESERVOIR     | TRINITY             | FRESH           | 1,344,000                                       | 1,344,000        | 1,344,000        | 1,344,000        | 1,344,000        | 1,344,000        |
| NECHES-TRINITY RUN-OF-RIVER                    | CHAMBERS      | NECHES-TRINITY      | FRESH           | 37,700  | 37,700           | 37,700           | 37,700           | 37,700           | 37,700           |
| SAN JACINTO RUN-OF-RIVER                       | HARRIS        | SAN JACINTO         | FRESH           | 12,511  | 12,511           | 12,511           | 12,511           | 12,511           | 12,511           |
| SAN JACINTO RUN-OF-RIVER                       | MONTGOMERY    | SAN JACINTO         | FRESH           | 141   | 141              | 141              | 141              | 141              | 141              |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                | BRAZORIA      | SAN JACINTO-BRAZOS  | FRESH           | 32,599  | 32,599           | 32,599           | 32,599           | 32,599           | 32,599           |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                | FORT BEND     | SAN JACINTO-BRAZOS  | FRESH           | 5,803   | 5,803            | 5,803            | 5,803            | 5,803            | 5,803            |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                | GALVESTON     | SAN JACINTO-BRAZOS  | FRESH           | 36  | 36               | 36               | 36               | 36               | 36               |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                | HARRIS        | SAN JACINTO-BRAZOS  | FRESH           | 388   | 388              | 388              | 388              | 388              | 388              |
| TRINITY RUN-OF-RIVER                           | CHAMBERS      | TRINITY             | FRESH           | 60,835  | 60,835           | 60,835           | 60,835           | 60,835           | 60,835           |
| TRINITY RUN-OF-RIVER                           | LEON          | TRINITY             | FRESH           | 156   | 156              | 156              | 156              | 156              | 156              |
| TRINITY RUN-OF-RIVER                           | LIBERTY       | TRINITY             | FRESH           | 51,077  | 51,077           | 51,077           | 51,077           | 51,077           | 51,077           |
| TRINITY RUN-OF-RIVER                           | MADISON       | TRINITY             | FRESH           | 169   | 169              | 169              | 169              | 169              | 169              |
| TRINITY RUN-OF-RIVER                           | POLK          | TRINITY             | FRESH           | 26,510  | 26,510           | 26,510           | 26,510           | 26,510           | 26,510           |
| TRINITY RUN-OF-RIVER                           | WALKER        | TRINITY             | FRESH           | 439   | 439              | 439              | 439              | 439              | 439              |
| TRINITY-SAN JACINTO RUN-OF-RIVER               | CHAMBERS      | TRINITY-SAN JACINTO | SALINE          | 30,000  | 30,000           | 30,000           | 30,000           | 30,000           | 30,000           |
| TRINITY-SAN JACINTO RUN-OF-RIVER               | CHAMBERS      | TRINITY-SAN JACINTO | FRESH           | 1,213   | 1,213            | 1,213            | 1,213            | 1,213            | 1,213            |
| TRINITY-SAN JACINTO RUN-OF-RIVER               | HARRIS        | TRINITY-SAN JACINTO | FRESH           | 2,198   | 2,198            | 2,198            | 2,198            | 2,198            | 2,198            |
| TRINITY-SAN JACINTO RUN-OF-RIVER               | LIBERTY       | TRINITY-SAN JACINTO | FRESH           | 1,905   | 1,905            | 1,905            | 1,905            | 1,905            | 1,905            |
| <b>SURFACE WATER TOTAL SOURCE AVAILABILITY</b> |               |                     |                 | <b>2,284,799</b>                                | <b>2,286,566</b> | <b>2,288,333</b> | <b>2,290,100</b> | <b>2,291,867</b> | <b>2,293,645</b> |
| <b>REGION H TOTAL SOURCE AVAILABILITY</b>      |               |                     |                 | <b>3,050,499</b>                                | <b>2,983,843</b> | <b>2,987,736</b> | <b>2,992,356</b> | <b>2,996,583</b> | <b>2,998,361</b> |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>AUSTIN COUNTY</b>                               |  |                                      |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                                |  |                                      |               |               |               |               |               |
| BELLVILLE  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 1,217                                | 1,286         | 1,366         | 1,468         | 1,588         | 1,722         |
| SAN FELIPE   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 208                                  | 208           | 208           | 208           | 208           | 208           |
| SEALY  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 1,377                                | 1,514         | 1,667         | 1,859         | 2,081         | 2,329         |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 1,856                                | 2,148         | 2,475         | 2,883         | 3,019         | 3,019         |
| MANUFACTURING                                      | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 89                                   | 89            | 89            | 89            | 89            | 89            |
| MINING   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 97                                   | 97            | 97            | 97            | 97            | 68            |
| LIVESTOCK  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 1,171                                | 1,171         | 1,171         | 1,171         | 1,171         | 1,171         |
| IRRIGATION   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 2,398                                | 2,398         | 2,398         | 2,398         | 2,398         | 2,398         |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>          |  | <b>8,413</b>                         | <b>8,911</b>  | <b>9,471</b>  | <b>10,173</b> | <b>10,651</b> | <b>11,004</b> |
| <b>BRAZOS-COLORADO BASIN</b>                       |  |                                      |               |               |               |               |               |
| SEALY  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 3                                    | 3             | 4             | 4             | 5             | 5             |
| WALLIS   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 161                                  | 165           | 171           | 180           | 193           | 207           |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 437                                  | 487           | 487           | 487           | 487           | 487           |
| MANUFACTURING                                      | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 19                                   | 21            | 23            | 24            | 26            | 28            |
| MINING   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 28                                   | 28            | 28            | 28            | 28            | 20            |
| LIVESTOCK  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 329                                  | 329           | 329           | 329           | 329           | 329           |
| IRRIGATION   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 4,080                                | 4,080         | 4,080         | 4,080         | 4,080         | 4,080         |
| <b>BRAZOS-COLORADO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>5,057</b>                         | <b>5,113</b>  | <b>5,122</b>  | <b>5,132</b>  | <b>5,148</b>  | <b>5,156</b>  |
| <b>COLORADO BASIN</b>                              |  |                                      |               |               |               |               |               |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 39                                   | 43            | 49            | 55            | 63            | 72            |
| MINING   | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 2                                    | 2             | 2             | 2             | 2             | 2             |
| LIVESTOCK  | H   GULF COAST AQUIFER   AUSTIN COUNTY                     | 23                                   | 23            | 23            | 23            | 23            | 23            |
| <b>COLORADO BASIN TOTAL EXISTING SUPPLY</b>        |  | <b>64</b>                            | <b>68</b>     | <b>74</b>     | <b>80</b>     | <b>88</b>     | <b>97</b>     |
| <b>AUSTIN COUNTY TOTAL EXISTING SUPPLY</b>         |  | <b>13,534</b>                        | <b>14,092</b> | <b>14,667</b> | <b>15,385</b> | <b>15,887</b> | <b>16,257</b> |
| <b>BRAZORIA COUNTY</b>                             |  |                                      |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                                |  |                                      |               |               |               |               |               |
| BAILEY'S PRAIRIE                                   | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 26                                   | 26            | 26            | 27            | 28            | 28            |
| BRAZORIA   | H   BRAZOS RUN-OF-RIVER                                    | 73                                   | 72            | 71            | 70            | 69            | 69            |
| FREEMPORT  | H   BRAZOS RUN-OF-RIVER                                    | 227                                  | 244           | 260           | 274           | 287           | 295           |
| FREEMPORT  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 1                                    | 1             | 1             | 1             | 1             | 0             |
| LAKE JACKSON                                       | H   BRAZOS RUN-OF-RIVER                                    | 15                                   | 18            | 23            | 29            | 35            | 42            |
| LAKE JACKSON                                       | H   DIRECT REUSE   | 5                                    | 5             | 5             | 5             | 5             | 5             |
| LAKE JACKSON                                       | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 19                                   | 21            | 26            | 32            | 38            | 44            |
| VARNER CREEK UD                                    | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 213                                  | 207           | 201           | 201           | 201           | 201           |
| WEST COLUMBIA                                      | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 369                                  | 354           | 340           | 341           | 341           | 343           |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 942                                  | 1,067         | 1,273         | 1,484         | 1,706         | 1,828         |
| MANUFACTURING                                      | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 16,000                               | 15,744        | 15,488        | 15,232        | 14,976        | 14,720        |
| MANUFACTURING                                      | H   BRAZOS RUN-OF-RIVER                                    | 6,536                                | 6,644         | 6,753         | 6,862         | 6,971         | 7,079         |
| MANUFACTURING                                      | H   DIRECT REUSE   | 485                                  | 485           | 485           | 485           | 485           | 485           |
| MANUFACTURING                                      | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 1,172                                | 1,088         | 1,028         | 962           | 890           | 825           |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME              | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>BRAZORIA COUNTY</b>                             |  |                                      |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                                |  |                                      |               |               |               |               |               |
| MINING   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 24                                   | 22            | 21            | 20            | 18            | 17            |
| LIVESTOCK  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 109                                  | 101           | 95            | 89            | 83            | 76            |
| IRRIGATION   | H   BRAZOS RUN-OF-RIVER                  | 2,712                                | 2,712         | 2,712         | 2,712         | 2,712         | 2,712         |
| IRRIGATION   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 1,973                                | 1,832         | 1,730         | 1,619         | 1,499         | 1,388         |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>          |  | <b>30,901</b>                        | <b>30,643</b> | <b>30,538</b> | <b>30,445</b> | <b>30,345</b> | <b>30,157</b> |
| <b>BRAZOS-COLORADO BASIN</b>                       |  |                                      |               |               |               |               |               |
| BRAZORIA   | H   BRAZOS RUN-OF-RIVER                  | 263                                  | 264           | 265           | 266           | 267           | 267           |
| FREEPORT   | H   BRAZOS RUN-OF-RIVER                  | 2                                    | 2             | 3             | 3             | 3             | 3             |
| JONES CREEK  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 207                                  | 200           | 193           | 192           | 192           | 193           |
| SWEENEY  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 540                                  | 525           | 513           | 508           | 509           | 511           |
| WEST COLUMBIA                                      | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 68                                   | 65            | 64            | 64            | 65            | 66            |
| COUNTY-OTHER                                       | H   BRAZOS RUN-OF-RIVER                  | 420                                  | 420           | 420           | 420           | 420           | 420           |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 4,771                                | 4,890         | 5,061         | 5,153         | 5,172         | 5,184         |
| MANUFACTURING                                      | H   BRAZOS-COLORADO RUN-OF-RIVER         | 3,211                                | 3,211         | 3,211         | 3,211         | 3,211         | 3,211         |
| MANUFACTURING                                      | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 1,854                                | 1,722         | 1,626         | 1,521         | 1,409         | 1,305         |
| MINING   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 46                                   | 43            | 40            | 38            | 35            | 32            |
| LIVESTOCK  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 306                                  | 284           | 268           | 251           | 232           | 215           |
| IRRIGATION   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 4,669                                | 4,335         | 4,094         | 3,831         | 3,547         | 3,285         |
| <b>BRAZOS-COLORADO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>16,357</b>                        | <b>15,961</b> | <b>15,758</b> | <b>15,458</b> | <b>15,062</b> | <b>14,692</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>                    |  |                                      |               |               |               |               |               |
| ALVIN  | H   DIRECT REUSE                         | 77                                   | 77            | 77            | 77            | 77            | 77            |
| ALVIN  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 4,644                                | 4,866         | 5,161         | 5,587         | 6,186         | 6,983         |
| ANGLETON   | H   BRAZOS RUN-OF-RIVER                  | 2,016                                | 2,016         | 2,016         | 2,016         | 2,016         | 2,016         |
| ANGLETON   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 104                                  | 104           | 104           | 104           | 104           | 39            |
| BAILEY'S PRAIRIE                                   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 63                                   | 64            | 63            | 63            | 64            | 65            |
| BRAZORIA COUNTY MUD #2                             | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 2,199                                | 2,190         | 2,185         | 2,183         | 2,183         | 2,184         |
| BRAZORIA COUNTY MUD #21                            | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 549                                  | 568           | 610           | 653           | 695           | 724           |
| BRAZORIA COUNTY MUD #3                             | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 566                                  | 558           | 560           | 565           | 572           | 584           |
| BRAZORIA COUNTY MUD #6                             | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 681                                  | 676           | 676           | 676           | 677           | 680           |
| BROOKSIDE VILLAGE                                  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 198                                  | 207           | 258           | 325           | 406           | 504           |
| CLUTE  | H   BRAZOS RUN-OF-RIVER                  | 1,120                                | 1,120         | 1,120         | 1,120         | 1,120         | 1,120         |
| CLUTE  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 328                                  | 303           | 295           | 301           | 315           | 331           |
| DANBURY  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 176                                  | 169           | 163           | 160           | 159           | 159           |
| FREEPORT   | H   BRAZOS RUN-OF-RIVER                  | 2,011                                | 1,994         | 1,977         | 1,963         | 1,950         | 1,942         |
| FREEPORT   | H   DIRECT REUSE                         | 3                                    | 3             | 3             | 3             | 3             | 3             |
| FREEPORT   | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 6                                    | 6             | 6             | 6             | 6             | 1             |
| HILLCREST  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 118                                  | 115           | 112           | 111           | 111           | 111           |
| HOLIDAY LAKES                                      | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 75                                   | 75            | 75            | 75            | 76            | 76            |
| IOWA COLONY  | H   GULF COAST AQUIFER   BRAZORIA COUNTY | 292                                  | 326           | 381           | 431           | 479           | 508           |

### EXISTING WATER SUPPLY

| REGION H  | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|---|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|   |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>BRAZORIA COUNTY</b>                                |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO-BRAZOS BASIN</b>                       |  |                                      |                |                |                |                |                |
| LAKE JACKSON  | H   BRAZOS RUN-OF-RIVER                                    | 2,225                                | 2,222          | 2,217          | 2,211          | 2,205          | 2,198          |
| LAKE JACKSON  | H   DIRECT REUSE   | 742                                  | 742            | 742            | 742            | 742            | 742            |
| LAKE JACKSON  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 2,817                                | 2,634          | 2,526          | 2,441          | 2,372          | 2,316          |
| MANVEL  | H   DIRECT REUSE   | 46                                   | 46             | 46             | 46             | 46             | 46             |
| MANVEL  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 1,658                                | 2,033          | 2,033          | 2,033          | 2,033          | 2,033          |
| OYSTER CREEK  | H   BRAZOS RUN-OF-RIVER                                    | 106                                  | 106            | 106            | 106            | 106            | 106            |
| OYSTER CREEK  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 133                                  | 123            | 117            | 113            | 111            | 109            |
| PEARLAND  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 2,578                                | 3,000          | 3,673          | 4,325          | 4,934          | 5,402          |
| PEARLAND  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 9,486                                | 9,303          | 9,119          | 9,029          | 9,002          | 8,990          |
| RICHWOOD  | H   BRAZOS RUN-OF-RIVER                                    | 263                                  | 263            | 263            | 263            | 263            | 263            |
| RICHWOOD  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 105                                  | 97             | 94             | 94             | 98             | 102            |
| COUNTY-OTHER  | H   BRAZOS RUN-OF-RIVER                                    | 420                                  | 420            | 420            | 420            | 420            | 420            |
| COUNTY-OTHER  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 7,099                                | 6,698          | 6,392          | 6,039          | 5,647          | 5,274          |
| MANUFACTURING   | H   BRAZOS RUN-OF-RIVER                                    | 161,085                              | 163,388        | 165,690        | 167,992        | 170,294        | 172,599        |
| MANUFACTURING   | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 0                                    | 725            | 685            | 641            | 593            | 549            |
| MANUFACTURING   | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 15,930                               | 15,930         | 15,930         | 15,930         | 15,930         | 15,930         |
| MINING  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 164                                  | 152            | 144            | 134            | 125            | 115            |
| LIVESTOCK   | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 996                                  | 925            | 873            | 817            | 757            | 701            |
| IRRIGATION  | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 5,175                                | 5,175          | 5,175          | 5,175          | 5,175          | 5,175          |
| IRRIGATION  | H   GULF COAST AQUIFER   BRAZORIA COUNTY                   | 7,538                                | 6,999          | 6,610          | 6,185          | 5,727          | 4,945          |
| IRRIGATION  | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 16,669                               | 16,669         | 16,669         | 16,669         | 16,669         | 16,669         |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL EXISTING SUPPLY</b> |  | <b>250,461</b>                       | <b>253,087</b> | <b>255,366</b> | <b>257,824</b> | <b>260,448</b> | <b>262,791</b> |
| <b>BRAZORIA COUNTY TOTAL EXISTING SUPPLY</b>          |  | <b>297,719</b>                       | <b>299,691</b> | <b>301,662</b> | <b>303,727</b> | <b>305,855</b> | <b>307,640</b> |
| <b>CHAMBERS COUNTY</b>                                |  |                                      |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                           |  |                                      |                |                |                |                |                |
| ANAHUAC   | H   TRINITY RUN-OF-RIVER                                   | 894                                  | 893            | 893            | 896            | 894            | 893            |
| TRINITY BAY CONSERVATION DISTRICT                     | H   DIRECT REUSE   | 316                                  | 316            | 316            | 316            | 316            | 316            |
| TRINITY BAY CONSERVATION DISTRICT                     | H   TRINITY RUN-OF-RIVER                                   | 730                                  | 730            | 730            | 730            | 730            | 730            |
| TRINITY BAY CONSERVATION DISTRICT                     | I   SAM RAYBURN-STEINHAGEN LAKE/RESERVOIR SYSTEM           | 1,793                                | 2,091          | 2,408          | 2,766          | 3,162          | 3,582          |
| COUNTY-OTHER  | H   GULF COAST AQUIFER   CHAMBERS COUNTY                   | 34                                   | 78             | 121            | 168            | 219            | 273            |
| MINING  | H   GULF COAST AQUIFER   CHAMBERS COUNTY                   | 3,316                                | 3,316          | 3,316          | 3,316          | 3,316          | 3,316          |
| LIVESTOCK   | H   GULF COAST AQUIFER   CHAMBERS COUNTY                   | 312                                  | 312            | 312            | 312            | 312            | 312            |
| IRRIGATION  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 16,499                               | 16,499         | 16,499         | 16,499         | 16,499         | 16,499         |
| IRRIGATION  | H   NECHES-TRINITY RUN-OF-RIVER                            | 35,037                               | 35,037         | 35,037         | 35,037         | 35,037         | 35,037         |
| IRRIGATION  | H   TRINITY RUN-OF-RIVER                                   | 40,000                               | 40,000         | 40,000         | 40,000         | 40,000         | 40,000         |
| IRRIGATION  | I   SAM RAYBURN-STEINHAGEN LAKE/RESERVOIR SYSTEM           | 37,000                               | 37,000         | 37,000         | 37,000         | 37,000         | 37,000         |
| <b>NECHES-TRINITY BASIN TOTAL EXISTING SUPPLY</b>     |  | <b>135,931</b>                       | <b>136,272</b> | <b>136,632</b> | <b>137,040</b> | <b>137,485</b> | <b>137,958</b> |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|  |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>CHAMBERS COUNTY</b>                                 |  |                                      |                |                |                |                |                |
| <b>TRINITY BASIN</b>                                   |  |                                      |                |                |                |                |                |
| ANAHUAC  | H   TRINITY RUN-OF-RIVER                         | 211                                  | 212            | 212            | 209            | 211            | 212            |
| BEACH CITY   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 31                                   | 31             | 31             | 31             | 31             | 31             |
| COVE   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 79                                   | 96             | 114            | 134            | 157            | 181            |
| MONT BELVIEU   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 1,680                                | 2,134          | 2,434          | 2,434          | 2,434          | 2,434          |
| OLD RIVER-WINFREE                                      | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 121                                  | 121            | 121            | 121            | 121            | 121            |
| TRINITY BAY CONSERVATION DISTRICT                      | H   DIRECT REUSE                                 | 83                                   | 83             | 83             | 83             | 83             | 83             |
| TRINITY BAY CONSERVATION DISTRICT                      | H   TRINITY RUN-OF-RIVER                         | 191                                  | 191            | 191            | 191            | 191            | 191            |
| TRINITY BAY CONSERVATION DISTRICT                      | I   SAM RAYBURN-STEINHAGEN LAKE/RESERVOIR SYSTEM | 469                                  | 546            | 629            | 722            | 826            | 936            |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 874                                  | 989            | 1,116          | 1,258          | 1,417          | 1,584          |
| MANUFACTURING  | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 1,988                                | 1,988          | 1,988          | 1,988          | 1,988          | 1,988          |
| MINING   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 956                                  | 956            | 956            | 956            | 956            | 956            |
| LIVESTOCK  | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 83                                   | 83             | 83             | 83             | 83             | 83             |
| IRRIGATION   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 60                                   | 60             | 60             | 60             | 60             | 60             |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b>             |  | <b>6,826</b>                         | <b>7,490</b>   | <b>8,018</b>   | <b>8,270</b>   | <b>8,558</b>   | <b>8,860</b>   |
| <b>TRINITY-SAN JACINTO BASIN</b>                       |  |                                      |                |                |                |                |                |
| BAYTOWN  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,025                                | 1,181          | 1,333          | 1,489          | 1,647          | 1,807          |
| BEACH CITY   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 253                                  | 253            | 253            | 253            | 253            | 253            |
| MONT BELVIEU   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 505                                  | 641            | 727            | 727            | 727            | 727            |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 514                                  | 598            | 689            | 791            | 903            | 1,022          |
| MANUFACTURING  | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 156                                  | 156            | 156            | 156            | 156            | 156            |
| MANUFACTURING  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 30,633                               | 30,633         | 30,633         | 30,633         | 30,633         | 30,633         |
| MINING   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 1,237                                | 1,237          | 1,237          | 1,237          | 1,237          | 1,237          |
| STEAM ELECTRIC POWER                                   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,120                                | 1,120          | 1,120          | 1,120          | 1,120          | 1,120          |
| STEAM ELECTRIC POWER                                   | H   TRINITY-SAN JACINTO RUN-OF-RIVER SALINE      | 30,000                               | 30,000         | 30,000         | 30,000         | 30,000         | 30,000         |
| LIVESTOCK  | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 159                                  | 159            | 159            | 159            | 112            | 73             |
| IRRIGATION   | H   GULF COAST AQUIFER   CHAMBERS COUNTY         | 20                                   | 20             | 20             | 20             | 20             | 0              |
| IRRIGATION   | H   TRINITY-SAN JACINTO RUN-OF-RIVER             | 1,213                                | 1,213          | 1,213          | 1,213          | 1,213          | 1,213          |
| <b>TRINITY-SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>66,835</b>                        | <b>67,211</b>  | <b>67,540</b>  | <b>67,798</b>  | <b>68,021</b>  | <b>68,241</b>  |
| <b>CHAMBERS COUNTY TOTAL EXISTING SUPPLY</b>           |  | <b>209,592</b>                       | <b>210,973</b> | <b>212,190</b> | <b>213,108</b> | <b>214,064</b> | <b>215,059</b> |
| <b>FORT BEND COUNTY</b>                                |  |                                      |                |                |                |                |                |
| <b>BRAZOS BASIN</b>                                    |  |                                      |                |                |                |                |                |
| BEASLEY  | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 4                                    | 6              | 8              | 11             | 16             | 21             |
| FAIRCHILD  | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 68                                   | 76             | 68             | 63             | 58             | 54             |
| FORT BEND COUNTY MUD #116                              | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 292                                  | 204            | 214            | 218            | 224            | 228            |
| FORT BEND COUNTY MUD #121                              | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 199                                  | 131            | 138            | 147            | 155            | 161            |

### EXISTING WATER SUPPLY

| REGION H                        | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |        |        |        |        |        |
|---------------------------------|--|--------------------------------------|--------|--------|--------|--------|--------|
|                                 |  | 2020                                 | 2030   | 2040   | 2050   | 2060   | 2070   |
| <b>FORT BEND COUNTY</b>         |  |                                      |        |        |        |        |        |
| <b>BRAZOS BASIN</b>             |  |                                      |        |        |        |        |        |
| FORT BEND COUNTY MUD #129       | H   BRAZOS RUN-OF-RIVER                                    | 349                                  | 349    | 349    | 349    | 349    | 349    |
| FORT BEND COUNTY MUD #129       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 335                                  | 294    | 337    | 366    | 376    | 351    |
| FORT BEND COUNTY MUD #25        | H   DIRECT REUSE   | 51                                   | 51     | 51     | 51     | 51     | 51     |
| FORT BEND COUNTY MUD #25        | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 76                                   | 47     | 41     | 38     | 35     | 33     |
| FULSHEAR                        | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 27                                   | 48     | 53     | 56     | 57     | 56     |
| GREATWOOD                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 740                                  | 463    | 411    | 375    | 350    | 328    |
| MISSOURI CITY                   | H   BRAZOS RUN-OF-RIVER                                    | 1,139                                | 1,278  | 1,372  | 1,417  | 1,438  | 1,433  |
| MISSOURI CITY                   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 197                                  | 68     | 165    | 230    | 261    | 265    |
| NEEDVILLE                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 98                                   | 103    | 90     | 82     | 79     | 76     |
| NORTH FORT BEND WATER AUTHORITY | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 21,592                               | 15,774 | 15,894 | 14,438 | 12,442 | 9,872  |
| NORTH FORT BEND WATER AUTHORITY | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 776                                  | 917    | 3,620  | 4,640  | 4,931  | 4,894  |
| PECAN GROVE MUD #1              | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 3,770                                | 3,768  | 3,768  | 3,766  | 3,765  | 3,764  |
| PECAN GROVE MUD #1              | H   BRAZOS RUN-OF-RIVER                                    | 2,614                                | 2,614  | 2,614  | 2,614  | 2,614  | 2,614  |
| PECAN GROVE MUD #1              | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,008                                | 605    | 531    | 487    | 453    | 423    |
| PLANTATION MUD                  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 243                                  | 160    | 139    | 126    | 116    | 108    |
| PLEAK                           | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 80                                   | 56     | 52     | 50     | 49     | 49     |
| RICHMOND                        | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 2,932                                | 2,902  | 2,872  | 2,842  | 2,812  | 2,784  |
| RICHMOND                        | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,020                                | 635    | 584    | 564    | 554    | 544    |
| ROSENBERG                       | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 4,499                                | 4,430  | 4,360  | 4,288  | 4,216  | 4,143  |
| ROSENBERG                       | H   DIRECT REUSE   | 29                                   | 29     | 29     | 29     | 29     | 29     |
| ROSENBERG                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 2,372                                | 1,497  | 1,386  | 1,324  | 1,299  | 1,288  |
| SIENNA PLANTATION               | H   BRAZOS RUN-OF-RIVER                                    | 959                                  | 963    | 868    | 813    | 777    | 770    |
| SIENNA PLANTATION               | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 596                                  | 469    | 514    | 558    | 599    | 641    |
| SIMONTON                        | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 76                                   | 82     | 73     | 67     | 62     | 58     |
| SUGAR LAND                      | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 3,469                                | 3,439  | 3,554  | 3,671  | 3,771  | 3,826  |
| SUGAR LAND                      | H   BRAZOS RUN-OF-RIVER                                    | 12,163                               | 12,060 | 12,462 | 12,874 | 13,223 | 13,417 |
| SUGAR LAND                      | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 7,607                                | 4,962  | 4,861  | 4,862  | 4,857  | 4,733  |
| SUGAR LAND                      | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 3,061                                | 3,036  | 3,137  | 3,241  | 3,329  | 3,377  |
| WESTON LAKES                    | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,193                                | 1,366  | 1,322  | 1,301  | 1,294  | 1,285  |
| COUNTY-OTHER                    | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 9,845                                | 11,474 | 11,679 | 13,249 | 15,702 | 18,763 |
| MANUFACTURING                   | H   BRAZOS RUN-OF-RIVER                                    | 509                                  | 500    | 491    | 482    | 473    | 464    |
| MANUFACTURING                   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,175                                | 752    | 693    | 647    | 570    | 502    |
| MINING                          | H   BRAZOS RUN-OF-RIVER                                    | 465                                  | 447    | 429    | 411    | 393    | 378    |



### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|  |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>FORT BEND COUNTY</b>                            |  |                                      |                |                |                |                |                |
| <b>BRAZOS BASIN</b>                                |  |                                      |                |                |                |                |                |
| MINING   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 30                                   | 33             | 22             | 15             | 9              | 6              |
| STEAM ELECTRIC POWER                               | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 83,000                               | 83,000         | 83,000         | 83,000         | 83,000         | 83,000         |
| STEAM ELECTRIC POWER                               | H   BRAZOS RUN-OF-RIVER                                    | 46,631                               | 46,829         | 47,027         | 47,225         | 47,423         | 47,621         |
| LIVESTOCK  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 418                                  | 451            | 404            | 370            | 344            | 321            |
| IRRIGATION   | H   BRAZOS RUN-OF-RIVER                                    | 12,000                               | 12,000         | 12,000         | 12,000         | 12,000         | 12,000         |
| IRRIGATION   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 3,632                                | 3,917          | 3,510          | 3,218          | 2,992          | 2,787          |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>          |  | <b>231,339</b>                       | <b>222,285</b> | <b>225,192</b> | <b>226,575</b> | <b>227,547</b> | <b>227,867</b> |
| <b>BRAZOS-COLORADO BASIN</b>                       |  |                                      |                |                |                |                |                |
| BEASLEY  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 52                                   | 57             | 56             | 58             | 63             | 71             |
| NEEDVILLE  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 118                                  | 124            | 110            | 102            | 98             | 97             |
| ROSENBERG  | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 1                                    | 5              | 10             | 17             | 24             | 33             |
| ROSENBERG  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1                                    | 2              | 3              | 5              | 7              | 11             |
| COUNTY-OTHER                                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,080                                | 1,905          | 2,057          | 1,887          | 1,754          | 1,634          |
| MINING   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 12                                   | 13             | 9              | 6              | 4              | 2              |
| LIVESTOCK  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 148                                  | 159            | 143            | 131            | 122            | 113            |
| IRRIGATION   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 11,912                               | 12,848         | 11,512         | 10,556         | 9,813          | 9,142          |
| <b>BRAZOS-COLORADO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>13,324</b>                        | <b>15,113</b>  | <b>13,900</b>  | <b>12,762</b>  | <b>11,885</b>  | <b>11,103</b>  |
| <b>SAN JACINTO BASIN</b>                           |  |                                      |                |                |                |                |                |
| HOUSTON  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 2,583                                | 1,680          | 1,535          | 1,440          | 1,369          | 1,294          |
| HOUSTON  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 1,089                                | 2,276          | 2,526          | 2,750          | 2,949          | 3,106          |
| HOUSTON  | H   SAN JACINTO INDIRECT REUSE                             | 1,452                                | 1,452          | 1,452          | 1,452          | 1,452          | 1,452          |
| KATY   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 839                                  | 1,180          | 1,056          | 970            | 904            | 845            |
| MEADOWS PLACE                                      | H   BRAZOS RUN-OF-RIVER                                    | 515                                  | 516            | 518            | 518            | 519            | 520            |
| MEADOWS PLACE                                      | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 357                                  | 218            | 195            | 181            | 171            | 163            |
| MISSOURI CITY                                      | H   BRAZOS RUN-OF-RIVER                                    | 2,110                                | 2,027          | 1,970          | 1,832          | 1,757          | 1,755          |
| MISSOURI CITY                                      | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 789                                  | 555            | 560            | 538            | 516            | 502            |
| NORTH FORT BEND WATER AUTHORITY                    | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,088                                | 2,770          | 3,056          | 3,271          | 3,715          | 5,376          |
| NORTH FORT BEND WATER AUTHORITY                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 11,238                               | 9,741          | 8,215          | 7,535          | 7,247          | 7,153          |
| STAFFORD   | H   BRAZOS RUN-OF-RIVER                                    | 2,103                                | 2,147          | 2,190          | 2,239          | 2,293          | 2,355          |
| STAFFORD   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 627                                  | 399            | 373            | 360            | 355            | 354            |
| SUGAR LAND   | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 254                                  | 234            | 220            | 208            | 199            | 193            |
| SUGAR LAND   | H   BRAZOS RUN-OF-RIVER                                    | 892                                  | 819            | 771            | 729            | 697            | 677            |
| SUGAR LAND   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 565                                  | 345            | 307            | 281            | 260            | 243            |
| SUGAR LAND   | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 225                                  | 206            | 194            | 183            | 175            | 170            |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY        | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 727                                  | 451            | 400            | 366            | 343            | 322            |

### EXISTING WATER SUPPLY

| REGION H                                       | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>FORT BEND COUNTY</b>                        |  |                                      |               |               |               |               |               |
| <b>SAN JACINTO BASIN</b>                       |  |                                      |               |               |               |               |               |
| WEST HARRIS COUNTY REGIONAL WATER AUTHORITY    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 635                                  | 621           | 584           | 552           | 545           | 540           |
| COUNTY-OTHER                                   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 66                                   | 50            | 53            | 52            | 50            | 49            |
| MANUFACTURING                                  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,448                                | 925           | 853           | 797           | 701           | 619           |
| LIVESTOCK                                      | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 40                                   | 44            | 39            | 36            | 33            | 31            |
| IRRIGATION                                     | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 395                                  | 426           | 382           | 350           | 326           | 303           |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>30,037</b>                        | <b>29,082</b> | <b>27,449</b> | <b>26,640</b> | <b>26,576</b> | <b>28,022</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>                |  |                                      |               |               |               |               |               |
| ARCOLA   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 114                                  | 103           | 119           | 133           | 126           | 117           |
| FORT BEND COUNTY MUD #23                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 999                                  | 792           | 720           | 671           | 634           | 600           |
| FORT BEND COUNTY MUD #25                       | H   DIRECT REUSE   | 354                                  | 354           | 354           | 354           | 354           | 354           |
| FORT BEND COUNTY MUD #25                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 534                                  | 326           | 293           | 271           | 256           | 244           |
| FULSHEAR                                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 379                                  | 390           | 340           | 304           | 278           | 255           |
| HOUSTON  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,664                                | 1,035         | 969           | 925           | 892           | 860           |
| HOUSTON  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 1,638                                | 2,296         | 2,512         | 2,699         | 2,868         | 3,027         |
| MEADOWS PLACE                                  | H   BRAZOS RUN-OF-RIVER                                    | 47                                   | 46            | 44            | 44            | 43            | 42            |
| MEADOWS PLACE                                  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 32                                   | 19            | 17            | 15            | 14            | 13            |
| MISSOURI CITY                                  | H   BRAZOS RUN-OF-RIVER                                    | 12,352                               | 12,375        | 12,412        | 12,538        | 12,573        | 12,531        |
| MISSOURI CITY                                  | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 4,287                                | 3,029         | 3,208         | 3,386         | 3,414         | 3,326         |
| NORTH FORT BEND WATER AUTHORITY                | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 8,700                                | 2,987         | 3,825         | 4,298         | 5,123         | 4,556         |
| NORTH FORT BEND WATER AUTHORITY                | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 9,166                                | 10,699        | 9,605         | 9,300         | 9,313         | 9,450         |
| PEARLAND                                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 340                                  | 337           | 381           | 418           | 449           | 488           |
| PECAN GROVE MUD #1                             | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 30                                   | 31            | 30            | 30            | 30            | 30            |
| PECAN GROVE MUD #1                             | H   BRAZOS RUN-OF-RIVER                                    | 21                                   | 21            | 21            | 21            | 21            | 21            |
| SIENNA PLANTATION                              | H   BRAZOS RUN-OF-RIVER                                    | 2,604                                | 2,600         | 2,695         | 2,750         | 2,786         | 2,793         |
| SIENNA PLANTATION                              | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,600                                | 1,246         | 1,578         | 1,871         | 2,133         | 2,312         |
| STAFFORD                                       | H   BRAZOS RUN-OF-RIVER                                    | 5,066                                | 5,015         | 4,973         | 4,925         | 4,872         | 4,812         |
| STAFFORD                                       | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 1,510                                | 934           | 847           | 792           | 755           | 723           |
| SUGAR LAND                                     | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 2,665                                | 2,715         | 2,614         | 2,509         | 2,418         | 2,369         |
| SUGAR LAND                                     | H   BRAZOS RUN-OF-RIVER                                    | 9,345                                | 9,521         | 9,167         | 8,797         | 8,480         | 8,306         |
| SUGAR LAND                                     | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 5,633                                | 3,694         | 3,369         | 3,128         | 2,930         | 2,757         |
| SUGAR LAND                                     | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 2,352                                | 2,396         | 2,307         | 2,214         | 2,134         | 2,091         |
| COUNTY-OTHER                                   | H   DIRECT REUSE   | 916                                  | 916           | 916           | 916           | 916           | 916           |
| COUNTY-OTHER                                   | H   GULF COAST AQUIFER   FORT BEND COUNTY                  | 3,887                                | 1,642         | 2,130         | 2,527         | 2,866         | 3,124         |

### EXISTING WATER SUPPLY

| REGION H  | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|---|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|   |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>FORT BEND COUNTY</b>                               |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO-BRAZOS BASIN</b>                       |  |                                      |                |                |                |                |                |
| MANUFACTURING   | H   DIRECT REUSE                                 | 524                                  | 524            | 524            | 524            | 524            | 524            |
| MANUFACTURING   | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 1,900                                | 1,214          | 1,120          | 1,046          | 920            | 811            |
| MINING  | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 8                                    | 5              | 3              | 3              | 1              | 1              |
| LIVESTOCK   | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 112                                  | 121            | 109            | 100            | 93             | 86             |
| IRRIGATION  | H   GULF COAST AQUIFER   FORT BEND COUNTY        | 1,538                                | 1,659          | 1,487          | 1,363          | 1,267          | 1,181          |
| IRRIGATION  | H   SAN JACINTO-BRAZOS RUN-OF-RIVER              | 165                                  | 165            | 165            | 165            | 165            | 165            |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL EXISTING SUPPLY</b> |  | <b>80,482</b>                        | <b>69,207</b>  | <b>68,854</b>  | <b>69,037</b>  | <b>69,648</b>  | <b>68,885</b>  |
| <b>FORT BEND COUNTY TOTAL EXISTING SUPPLY</b>         |  | <b>355,182</b>                       | <b>335,687</b> | <b>335,395</b> | <b>335,014</b> | <b>335,656</b> | <b>335,877</b> |
| <b>GALVESTON COUNTY</b>                               |  |                                      |                |                |                |                |                |
| <b>NECHES-TRINITY BASIN</b>                           |  |                                      |                |                |                |                |                |
| BOLIVAR PENINSULA SUD                                 | I   SAM RAYBURN-STEINHAGEN LAKE/RESERVOIR SYSTEM | 6,000                                | 6,000          | 6,000          | 6,000          | 6,000          | 6,000          |
| COUNTY-OTHER  | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 1                                    | 1              | 1              | 1              | 1              | 2              |
| MINING  | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 7                                    | 7              | 8              | 8              | 9              | 8              |
| LIVESTOCK   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 5                                    | 5              | 5              | 5              | 5              | 5              |
| IRRIGATION  | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 2                                    | 2              | 2              | 2              | 2              | 2              |
| <b>NECHES-TRINITY BASIN TOTAL EXISTING SUPPLY</b>     |  | <b>6,015</b>                         | <b>6,015</b>   | <b>6,016</b>   | <b>6,016</b>   | <b>6,017</b>   | <b>6,017</b>   |
| <b>SAN JACINTO-BRAZOS BASIN</b>                       |  |                                      |                |                |                |                |                |
| BACLIFF MUD   | H   BRAZOS RUN-OF-RIVER                          | 1,333                                | 1,333          | 1,333          | 1,333          | 1,333          | 1,333          |
| BACLIFF MUD   | H   DIRECT REUSE                                 | 68                                   | 68             | 68             | 68             | 68             | 68             |
| BACLIFF MUD   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 7                                    | 7              | 7              | 7              | 7              | 7              |
| BAYOU VISTA   | H   BRAZOS RUN-OF-RIVER                          | 504                                  | 504            | 504            | 504            | 504            | 504            |
| BAYOU VISTA   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 24                                   | 25             | 23             | 21             | 20             | 20             |
| CLEAR LAKE SHORES                                     | H   BRAZOS RUN-OF-RIVER                          | 411                                  | 411            | 411            | 411            | 411            | 411            |
| DICKINSON   | H   BRAZOS RUN-OF-RIVER                          | 3,524                                | 3,524          | 3,524          | 3,524          | 3,524          | 3,524          |
| DICKINSON   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 210                                  | 226            | 219            | 216            | 216            | 217            |
| FRIENDSWOOD   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 420                                  | 464            | 464            | 469            | 483            | 501            |
| FRIENDSWOOD   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 9,398                                | 9,049          | 8,933          | 8,847          | 8,802          | 8,760          |
| GALVESTON   | H   BRAZOS RUN-OF-RIVER                          | 23,248                               | 23,250         | 23,250         | 23,249         | 23,246         | 23,243         |
| GALVESTON   | H   DIRECT REUSE                                 | 337                                  | 337            | 337            | 337            | 337            | 337            |
| GALVESTON   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 1,429                                | 1,584          | 1,573          | 1,568          | 1,574          | 1,585          |
| HITCHCOCK   | H   BRAZOS RUN-OF-RIVER                          | 1,680                                | 1,680          | 1,680          | 1,680          | 1,680          | 1,680          |
| HITCHCOCK   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 32                                   | 32             | 32             | 32             | 32             | 32             |
| JAMAICA BEACH   | H   BRAZOS RUN-OF-RIVER                          | 261                                  | 259            | 259            | 260            | 263            | 266            |
| KEMAH   | H   BRAZOS RUN-OF-RIVER                          | 589                                  | 589            | 589            | 589            | 589            | 589            |
| KEMAH   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 102                                  | 140            | 137            | 133            | 130            | 128            |
| LA MARQUE   | H   BRAZOS RUN-OF-RIVER                          | 3,114                                | 3,114          | 3,114          | 3,114          | 3,114          | 3,114          |
| LA MARQUE   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 270                                  | 304            | 288            | 275            | 267            | 260            |
| LEAGUE CITY   | H   BRAZOS RUN-OF-RIVER                          | 3,360                                | 3,360          | 3,360          | 3,360          | 3,360          | 3,360          |
| LEAGUE CITY   | H   DIRECT REUSE                                 | 540                                  | 540            | 540            | 540            | 540            | 540            |
| LEAGUE CITY   | H   GULF COAST AQUIFER   GALVESTON COUNTY        | 1,221                                | 1,423          | 1,446          | 1,449          | 1,436          | 1,412          |

**EXISTING WATER SUPPLY**

| REGION H  | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|---|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|   |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>GALVESTON COUNTY</b>                               |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO-BRAZOS BASIN</b>                       |  |                                      |                |                |                |                |                |
| LEAGUE CITY   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 23,438                               | 23,436         | 23,444         | 23,453         | 23,454         | 23,453         |
| SAN LEON MUD  | H   BRAZOS RUN-OF-RIVER                                    | 1,999                                | 1,999          | 1,999          | 1,999          | 1,999          | 1,999          |
| SAN LEON MUD  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 1                                    | 1              | 1              | 1              | 1              | 1              |
| SANTA FE  | H   BRAZOS RUN-OF-RIVER                                    | 1,120                                | 1,120          | 1,120          | 1,120          | 1,120          | 1,120          |
| SANTA FE  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 146                                  | 155            | 148            | 143            | 141            | 140            |
| TEXAS CITY  | H   BRAZOS RUN-OF-RIVER                                    | 11,686                               | 11,686         | 11,686         | 11,686         | 11,686         | 11,686         |
| TEXAS CITY  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 609                                  | 684            | 679            | 674            | 677            | 678            |
| TIKI ISLAND   | H   BRAZOS RUN-OF-RIVER                                    | 403                                  | 403            | 403            | 403            | 403            | 403            |
| COUNTY-OTHER  | H   BRAZOS RUN-OF-RIVER                                    | 267                                  | 267            | 267            | 267            | 267            | 267            |
| COUNTY-OTHER  | H   DIRECT REUSE   | 82                                   | 82             | 82             | 82             | 82             | 82             |
| COUNTY-OTHER  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 219                                  | 251            | 251            | 253            | 257            | 260            |
| MANUFACTURING   | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 31,820                               | 31,820         | 31,820         | 31,820         | 31,820         | 31,820         |
| MANUFACTURING   | H   BRAZOS RUN-OF-RIVER                                    | 36,569                               | 36,569         | 36,569         | 36,569         | 36,569         | 36,569         |
| MANUFACTURING   | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 301                                  | 301            | 301            | 301            | 301            | 301            |
| MINING  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 26                                   | 29             | 31             | 32             | 32             | 33             |
| LIVESTOCK   | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 17                                   | 18             | 17             | 16             | 16             | 15             |
| IRRIGATION  | H   GULF COAST AQUIFER   GALVESTON COUNTY                  | 208                                  | 208            | 208            | 208            | 208            | 208            |
| IRRIGATION  | H   SAN JACINTO-BRAZOS RUN-OF-RIVER                        | 36                                   | 36             | 36             | 36             | 36             | 36             |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL EXISTING SUPPLY</b> |  | <b>161,029</b>                       | <b>161,288</b> | <b>161,153</b> | <b>161,049</b> | <b>161,005</b> | <b>160,962</b> |
| <b>GALVESTON COUNTY TOTAL EXISTING SUPPLY</b>         |  | <b>167,044</b>                       | <b>167,303</b> | <b>167,169</b> | <b>167,065</b> | <b>167,022</b> | <b>166,979</b> |
| <b>HARRIS COUNTY</b>                                  |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                              |  |                                      |                |                |                |                |                |
| BAYTOWN   | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 25                                   | 27             | 37             | 36             | 35             | 35             |
| BAYTOWN   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 659                                  | 653            | 648            | 644            | 639            | 633            |
| BELLAIRE  | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 456                                  | 534            | 784            | 810            | 847            | 886            |
| BELLAIRE  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 3,043                                | 3,236          | 3,463          | 3,735          | 4,056          | 4,411          |
| BLUE BELL MANOR UTILITY COMPANY                       | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 387                                  | 433            | 616            | 620            | 630            | 633            |
| BUNKER HILL VILLAGE                                   | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 195                                  | 229            | 336            | 346            | 359            | 373            |
| BUNKER HILL VILLAGE                                   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 1,301                                | 1,387          | 1,485          | 1,596          | 1,722          | 1,858          |
| CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY        | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 2,008                                | 1,342          | 958            | 954            | 959            | 963            |
| CENTRAL HARRIS COUNTY REGIONAL WATER AUTHORITY        | H   HOUSTON LAKE/RESERVOIR                                 | 2,374                                | 2,374          | 2,374          | 2,374          | 2,374          | 2,374          |
| CHIMNEY HILL MUD                                      | H   DIRECT REUSE   | 5                                    | 5              | 5              | 5              | 5              | 5              |
| CHIMNEY HILL MUD                                      | H   GULF COAST AQUIFER   HARRIS COUNTY                     | 244                                  | 150            | 101            | 96             | 94             | 92             |

### EXISTING WATER SUPPLY

| REGION H                           | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |       |       |       |       |       |
|------------------------------------|--|--------------------------------------|-------|-------|-------|-------|-------|
|                                    |  | 2020                                 | 2030  | 2040  | 2050  | 2060  | 2070  |
| <b>HARRIS COUNTY</b>               |  |                                      |       |       |       |       |       |
| <b>SAN JACINTO BASIN</b>           |  |                                      |       |       |       |       |       |
| CHIMNEY HILL MUD                   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 175                                  | 341   | 447   | 446   | 451   | 458   |
| CROSBY MUD                         | H   GULF COAST AQUIFER   HARRIS COUNTY           | 38                                   | 42    | 58    | 56    | 55    | 55    |
| CROSBY MUD                         | H   SAN JACINTO RUN-OF-RIVER                     | 1,120                                | 1,120 | 1,120 | 1,120 | 1,120 | 1,120 |
| DEER PARK                          | H   GULF COAST AQUIFER   HARRIS COUNTY           | 81                                   | 89    | 120   | 115   | 113   | 110   |
| DEER PARK                          | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,245                                | 1,224 | 1,193 | 1,170 | 1,150 | 1,134 |
| EL DORADO UD                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 156                                  | 170   | 232   | 226   | 220   | 212   |
| FOUNTAINVIEW SUBDIVISION           | H   GULF COAST AQUIFER   HARRIS COUNTY           | 74                                   | 44    | 29    | 28    | 27    | 26    |
| GALENA PARK                        | H   GULF COAST AQUIFER   HARRIS COUNTY           | 50                                   | 53    | 71    | 68    | 66    | 65    |
| GALENA PARK                        | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 954                                  | 954   | 954   | 954   | 954   | 954   |
| GREEN TRAILS MUD                   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 333                                  | 362   | 495   | 477   | 462   | 446   |
| GREENWOOD UD                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 43                                   | 53    | 72    | 68    | 67    | 65    |
| GREENWOOD UD                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 287                                  | 318   | 316   | 316   | 319   | 322   |
| HARRIS COUNTY MUD #106             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 779                                  | 868   | 1,235 | 1,213 | 1,190 | 1,160 |
| HARRIS COUNTY MUD #11              | H   DIRECT REUSE                                 | 5                                    | 5     | 5     | 5     | 5     | 5     |
| HARRIS COUNTY MUD #11              | H   GULF COAST AQUIFER   HARRIS COUNTY           | 199                                  | 218   | 301   | 294   | 293   | 292   |
| HARRIS COUNTY MUD #119             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 302                                  | 324   | 438   | 425   | 418   | 409   |
| HARRIS COUNTY MUD #132             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 538                                  | 584   | 790   | 759   | 733   | 707   |
| HARRIS COUNTY MUD #148 - KINGSLAKE | H   GULF COAST AQUIFER   HARRIS COUNTY           | 161                                  | 182   | 248   | 238   | 230   | 223   |
| HARRIS COUNTY MUD #151             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 606                                  | 664   | 908   | 869   | 838   | 808   |
| HARRIS COUNTY MUD #152             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 663                                  | 735   | 1,032 | 1,007 | 987   | 962   |
| HARRIS COUNTY MUD #153             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 719                                  | 782   | 1,065 | 1,018 | 980   | 943   |
| HARRIS COUNTY MUD #154             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 447                                  | 485   | 667   | 648   | 641   | 634   |
| HARRIS COUNTY MUD #158             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 384                                  | 448   | 495   | 485   | 481   | 477   |
| HARRIS COUNTY MUD #180             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 308                                  | 354   | 501   | 477   | 458   | 440   |
| HARRIS COUNTY MUD #189             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 214                                  | 239   | 339   | 336   | 336   | 335   |
| HARRIS COUNTY MUD #221             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 239                                  | 282   | 401   | 395   | 392   | 389   |
| HARRIS COUNTY MUD #278             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 579                                  | 838   | 1,145 | 1,095 | 1,053 | 1,012 |
| HARRIS COUNTY MUD #290             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 255                                  | 166   | 119   | 117   | 115   | 113   |
| HARRIS COUNTY MUD #345             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 471                                  | 515   | 705   | 675   | 652   | 629   |
| HARRIS COUNTY MUD #400 - WEST      | H   GULF COAST AQUIFER   HARRIS COUNTY           | 470                                  | 554   | 801   | 802   | 790   | 768   |
| HARRIS COUNTY MUD #46              | H   GULF COAST AQUIFER   HARRIS COUNTY           | 398                                  | 430   | 579   | 550   | 529   | 508   |

### EXISTING WATER SUPPLY

| REGION H                 | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |         |         |         |         |         |
|--------------------------|--|--------------------------------------|---------|---------|---------|---------|---------|
|                          |  | 2020                                 | 2030    | 2040    | 2050    | 2060    | 2070    |
| <b>HARRIS COUNTY</b>     |  |                                      |         |         |         |         |         |
| <b>SAN JACINTO BASIN</b> |  |                                      |         |         |         |         |         |
| HARRIS COUNTY MUD #49    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 273                                  | 307     | 427     | 415     | 406     | 395     |
| HARRIS COUNTY MUD #5     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 213                                  | 135     | 94      | 94      | 96      | 99      |
| HARRIS COUNTY MUD #50    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 114                                  | 69      | 48      | 46      | 44      | 43      |
| HARRIS COUNTY MUD #50    | H   SAN JACINTO RUN-OF-RIVER                     | 560                                  | 560     | 560     | 560     | 560     | 560     |
| HARRIS COUNTY MUD #8     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 58                                   | 61      | 81      | 76      | 73      | 71      |
| HARRIS COUNTY MUD #8     | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 388                                  | 370     | 354     | 354     | 352     | 352     |
| HARRIS COUNTY MUD #96    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 419                                  | 511     | 613     | 648     | 684     | 709     |
| HARRIS COUNTY UD #14     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 122                                  | 147     | 220     | 231     | 246     | 271     |
| HARRIS COUNTY UD #15     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 312                                  | 364     | 544     | 567     | 597     | 613     |
| HARRIS COUNTY WCID #1    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 241                                  | 148     | 102     | 101     | 100     | 100     |
| HARRIS COUNTY WCID #1    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 754                                  | 754     | 753     | 753     | 753     | 753     |
| HARRIS COUNTY WCID #133  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 394                                  | 423     | 587     | 596     | 616     | 639     |
| HARRIS COUNTY WCID #74   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 470                                  | 523     | 732     | 717     | 709     | 702     |
| HARRIS COUNTY WCID #96   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 814                                  | 560     | 384     | 368     | 354     | 340     |
| HARRIS COUNTY WCID #96   | H   HOUSTON LAKE/RESERVOIR                       | 583                                  | 1,274   | 1,698   | 1,697   | 1,695   | 1,694   |
| HEDWIG VILLAGE           | H   GULF COAST AQUIFER   HARRIS COUNTY           | 177                                  | 207     | 303     | 311     | 322     | 332     |
| HEDWIG VILLAGE           | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,182                                | 1,258   | 1,342   | 1,435   | 1,540   | 1,654   |
| HILSHIRE VILLAGE         | H   GULF COAST AQUIFER   HARRIS COUNTY           | 141                                  | 175     | 213     | 233     | 254     | 280     |
| HOUSTON                  | H   DIRECT REUSE                                 | 2,239                                | 2,239   | 2,239   | 2,239   | 2,239   | 2,239   |
| HOUSTON                  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 93,658                               | 67,858  | 62,003  | 62,751  | 64,648  | 66,480  |
| HOUSTON                  | H   HOUSTON LAKE/RESERVOIR                       | 0                                    | 40,637  | 63,502  | 62,533  | 61,565  | 60,596  |
| HOUSTON                  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 322,280                              | 329,435 | 329,848 | 346,176 | 340,331 | 334,227 |
| HOUSTON                  | H   SAN JACINTO RUN-OF-RIVER                     | 0                                    | 0       | 5,785   | 5,785   | 5,785   | 5,785   |
| HUMBLE                   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 1,933                                | 2,728   | 3,427   | 3,653   | 3,831   | 3,960   |
| HUNTERS CREEK VILLAGE    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 282                                  | 332     | 489     | 504     | 524     | 544     |
| HUNTERS CREEK VILLAGE    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,882                                | 2,013   | 2,158   | 2,323   | 2,507   | 2,707   |
| JACINTO CITY             | H   GULF COAST AQUIFER   HARRIS COUNTY           | 93                                   | 98      | 137     | 134     | 134     | 132     |
| JACINTO CITY             | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 619                                  | 598     | 604     | 621     | 639     | 658     |
| JERSEY VILLAGE           | H   GULF COAST AQUIFER   HARRIS COUNTY           | 732                                  | 457     | 315     | 306     | 301     | 295     |
| JERSEY VILLAGE           | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 829                                  | 829     | 829     | 829     | 829     | 829     |
| KATY                     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 1,347                                | 877     | 620     | 610     | 605     | 596     |
| KINGS MANOR MUD          | H   GULF COAST AQUIFER   HARRIS COUNTY           | 44                                   | 28      | 19      | 18      | 18      | 17      |







### EXISTING WATER SUPPLY

| REGION H                                       | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                  |                  |                  |                  |                  |
|--|--|--------------------------------------|------------------|------------------|------------------|------------------|------------------|
|  |  | 2020                                 | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>HARRIS COUNTY</b>                           |  |                                      |                  |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                       |  |                                      |                  |                  |                  |                  |                  |
| LIVESTOCK                                      | H   GULF COAST AQUIFER   HARRIS COUNTY           | 603                                  | 388              | 277              | 266              | 257              | 247              |
| IRRIGATION                                     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 3,913                                | 4,311            | 5,912            | 5,661            | 5,454            | 5,244            |
| IRRIGATION                                     | H   SAN JACINTO RUN-OF-RIVER                     | 2,734                                | 2,734            | 2,734            | 2,734            | 2,734            | 2,734            |
| IRRIGATION                                     | H   SAN JACINTO-BRAZOS RUN-OF-RIVER              | 388                                  | 388              | 388              | 388              | 388              | 388              |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>1,050,152</b>                     | <b>1,048,843</b> | <b>1,073,634</b> | <b>1,091,389</b> | <b>1,086,921</b> | <b>1,082,178</b> |
| <b>SAN JACINTO-BRAZOS BASIN</b>                |  |                                      |                  |                  |                  |                  |                  |
| CLEAR BROOK CITY MUD                           | H   GULF COAST AQUIFER   HARRIS COUNTY           | 198                                  | 222              | 320              | 322              | 327              | 329              |
| CLEAR BROOK CITY MUD                           | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 2,800                                | 2,800            | 2,800            | 2,800            | 2,800            | 2,800            |
| DEER PARK                                      | H   GULF COAST AQUIFER   HARRIS COUNTY           | 176                                  | 198              | 279              | 275              | 275              | 274              |
| DEER PARK                                      | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 2,712                                | 2,733            | 2,764            | 2,787            | 2,807            | 2,823            |
| EL LAGO  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 19                                   | 20               | 27               | 26               | 25               | 24               |
| EL LAGO  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 331                                  | 323              | 315              | 314              | 310              | 306              |
| FRIENDSWOOD                                    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 252                                  | 327              | 493              | 518              | 544              | 572              |
| FRIENDSWOOD                                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 4,042                                | 4,391            | 4,507            | 4,593            | 4,638            | 4,680            |
| HARRIS COUNTY MUD #55                          | H   GULF COAST AQUIFER   HARRIS COUNTY           | 605                                  | 385              | 268              | 266              | 278              | 293              |
| HARRIS COUNTY MUD #55                          | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 3,878                                | 3,878            | 3,878            | 3,878            | 3,878            | 3,878            |
| HOUSTON  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 2,472                                | 2,222            | 2,197            | 2,609            | 2,594            | 2,590            |
| HOUSTON  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 25,375                               | 28,860           | 32,064           | 35,130           | 39,048           | 43,496           |
| KIRK MONT MUD                                  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 46                                   | 53               | 77               | 79               | 82               | 85               |
| LA PORTE                                       | H   DIRECT REUSE                                 | 183                                  | 183              | 183              | 183              | 183              | 183              |
| LA PORTE                                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 270                                  | 290              | 394              | 376              | 366              | 356              |
| LA PORTE                                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 7,252                                | 7,243            | 7,237            | 7,232            | 7,226            | 7,218            |
| LEAGUE CITY                                    | H   DIRECT REUSE                                 | 15                                   | 15               | 15               | 15               | 15               | 15               |
| LEAGUE CITY                                    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 23                                   | 28               | 42               | 42               | 41               | 40               |
| LEAGUE CITY                                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 642                                  | 644              | 636              | 627              | 626              | 627              |
| NASSAU BAY                                     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 64                                   | 70               | 96               | 93               | 90               | 88               |
| NASSAU BAY                                     | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 2,184                                | 2,184            | 2,184            | 2,184            | 2,184            | 2,184            |
| PASADENA                                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 316                                  | 345              | 472              | 455              | 446              | 438              |
| PASADENA                                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 10,542                               | 10,486           | 10,427           | 10,370           | 10,319           | 10,268           |
| PEARLAND                                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 243                                  | 325              | 531              | 570              | 592              | 601              |
| PEARLAND                                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,374                                | 1,560            | 1,700            | 1,753            | 1,749            | 1,722            |
| SAGEMEADOW UD                                  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 87                                   | 98               | 141              | 143              | 147              | 150              |
| SEABROOK                                       | H   GULF COAST AQUIFER   HARRIS COUNTY           | 111                                  | 121              | 167              | 160              | 157              | 153              |
| SEABROOK                                       | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,909                                | 1,917            | 1,925            | 1,926            | 1,930            | 1,934            |
| SHOREACRES                                     | H   GULF COAST AQUIFER   HARRIS COUNTY           | 20                                   | 22               | 30               | 29               | 28               | 27               |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                  |                  |                  |                  |                  |
|--|--|--------------------------------------|------------------|------------------|------------------|------------------|------------------|
|  |  | 2020                                 | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>HARRIS COUNTY</b>                                   |  |                                      |                  |                  |                  |                  |                  |
| <b>SAN JACINTO-BRAZOS BASIN</b>                        |  |                                      |                  |                  |                  |                  |                  |
| SHOREACRES   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 363                                  | 363              | 363              | 363              | 363              | 363              |
| TAYLOR LAKE VILLAGE                                    | H   GULF COAST AQUIFER   HARRIS COUNTY           | 40                                   | 43               | 58               | 55               | 54               | 52               |
| TAYLOR LAKE VILLAGE                                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,730                                | 1,730            | 1,730            | 1,730            | 1,730            | 1,730            |
| WEBSTER  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 231                                  | 271              | 390              | 387              | 384              | 378              |
| WEBSTER  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 9,011                                | 9,011            | 9,011            | 9,011            | 9,011            | 9,011            |
| COUNTY-OTHER   | H   DIRECT REUSE                                 | 436                                  | 436              | 436              | 436              | 436              | 436              |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 230                                  | 296              | 452              | 473              | 499              | 520              |
| COUNTY-OTHER   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 2,548                                | 2,548            | 2,548            | 2,548            | 2,548            | 2,548            |
| MANUFACTURING  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 5,090                                | 5,930            | 8,525            | 8,445            | 7,999            | 7,562            |
| MANUFACTURING  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 47,707                               | 47,707           | 47,707           | 47,707           | 47,707           | 47,707           |
| MINING   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 12                                   | 13               | 17               | 16               | 16               | 15               |
| STEAM ELECTRIC POWER                                   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 71                                   | 91               | 147              | 166              | 190              | 218              |
| <b>SAN JACINTO-BRAZOS BASIN TOTAL EXISTING SUPPLY</b>  |  | <b>135,610</b>                       | <b>140,382</b>   | <b>147,553</b>   | <b>151,092</b>   | <b>154,642</b>   | <b>158,694</b>   |
| <b>TRINITY-SAN JACINTO BASIN</b>                       |  |                                      |                  |                  |                  |                  |                  |
| BAYTOWN  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 544                                  | 589              | 799              | 767              | 749              | 732              |
| BAYTOWN  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 14,244                               | 14,094           | 13,947           | 13,795           | 13,642           | 13,488           |
| HARRIS COUNTY WCID #1                                  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 10                                   | 6                | 5                | 4                | 4                | 4                |
| HARRIS COUNTY WCID #1                                  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 30                                   | 30               | 31               | 31               | 31               | 31               |
| HOUSTON  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 21                                   | 13               | 9                | 9                | 8                | 9                |
| HOUSTON  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 29                                   | 38               | 42               | 43               | 44               | 44               |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 629                                  | 648              | 823              | 858              | 891              | 919              |
| COUNTY-OTHER   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 463                                  | 463              | 463              | 463              | 463              | 463              |
| MANUFACTURING  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 5,599                                | 6,523            | 9,377            | 9,289            | 8,799            | 8,319            |
| MANUFACTURING  | H   HOUSTON LAKE/RESERVOIR                       | 5,500                                | 4,530            | 3,560            | 2,590            | 1,620            | 650              |
| MANUFACTURING  | H   SAN JACINTO RUN-OF-RIVER                     | 1,217                                | 1,217            | 1,217            | 1,217            | 1,217            | 1,217            |
| MANUFACTURING  | H   TRINITY RUN-OF-RIVER                         | 51,328                               | 51,328           | 51,328           | 51,328           | 51,328           | 51,328           |
| MINING   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 10                                   | 11               | 14               | 14               | 13               | 13               |
| LIVESTOCK  | H   GULF COAST AQUIFER   HARRIS COUNTY           | 16                                   | 18               | 24               | 23               | 23               | 22               |
| IRRIGATION   | H   GULF COAST AQUIFER   HARRIS COUNTY           | 425                                  | 468              | 642              | 615              | 592              | 569              |
| IRRIGATION   | H   TRINITY-SAN JACINTO RUN-OF-RIVER             | 2,198                                | 2,198            | 2,198            | 2,198            | 2,198            | 2,198            |
| <b>TRINITY-SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>82,263</b>                        | <b>82,174</b>    | <b>84,479</b>    | <b>83,244</b>    | <b>81,622</b>    | <b>80,006</b>    |
| <b>HARRIS COUNTY TOTAL EXISTING SUPPLY</b>             |  | <b>1,268,025</b>                     | <b>1,271,399</b> | <b>1,305,666</b> | <b>1,325,725</b> | <b>1,323,185</b> | <b>1,320,878</b> |
| <b>LEON COUNTY</b>                                     |  |                                      |                  |                  |                  |                  |                  |
| <b>BRAZOS BASIN</b>                                    |  |                                      |                  |                  |                  |                  |                  |
| CONCORD-ROBBINS WSC                                    | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY         | 167                                  | 168              | 169              | 179              | 188              | 198              |
| JEWETT   | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY         | 63                                   | 74               | 82               | 94               | 105              | 115              |
| NORMANGEE  | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY         | 27                                   | 28               | 29               | 31               | 33               | 34               |

### EXISTING WATER SUPPLY

| REGION H                                   | SOURCE REGION   SOURCE NAME              | EXISTING SUPPLY (ACRE-FEET PER YEAR) |              |              |              |              |              |
|--|--|--------------------------------------|--------------|--------------|--------------|--------------|--------------|
|  |  | 2020                                 | 2030         | 2040         | 2050         | 2060         | 2070         |
| <b>LEON COUNTY</b>                         |  |                                      |              |              |              |              |              |
| <b>BRAZOS BASIN</b>                        |  |                                      |              |              |              |              |              |
| COUNTY-OTHER                               | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 142                                  | 143          | 145          | 152          | 159          | 165          |
| COUNTY-OTHER                               | H   QUEEN CITY AQUIFER   LEON COUNTY     | 77                                   | 78           | 79           | 83           | 87           | 90           |
| MINING                                     | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 721                                  | 721          | 623          | 459          | 296          | 190          |
| LIVESTOCK                                  | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 425                                  | 425          | 425          | 425          | 425          | 425          |
| IRRIGATION                                 | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 71                                   | 71           | 71           | 71           | 71           | 71           |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>  |  | <b>1,693</b>                         | <b>1,708</b> | <b>1,623</b> | <b>1,494</b> | <b>1,364</b> | <b>1,288</b> |
| <b>TRINITY BASIN</b>                       |  |                                      |              |              |              |              |              |
| BUFFALO                                    | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 374                                  | 375          | 375          | 381          | 389          | 397          |
| CENTERVILLE                                | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 180                                  | 189          | 195          | 207          | 218          | 230          |
| CONCORD-ROBBINS WSC                        | H   QUEEN CITY AQUIFER   LEON COUNTY     | 46                                   | 47           | 47           | 50           | 53           | 55           |
| FLO COMMUNITY WSC                          | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 297                                  | 286          | 278          | 276          | 280          | 284          |
| JEWETT                                     | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 175                                  | 202          | 225          | 259          | 288          | 318          |
| NORMANGEE                                  | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 81                                   | 84           | 86           | 91           | 96           | 102          |
| OAKWOOD                                    | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 74                                   | 71           | 70           | 70           | 70           | 70           |
| COUNTY-OTHER                               | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 426                                  | 459          | 493          | 551          | 601          | 652          |
| COUNTY-OTHER                               | H   QUEEN CITY AQUIFER   LEON COUNTY     | 25                                   | 25           | 25           | 25           | 25           | 25           |
| COUNTY-OTHER                               | H   SPARTA AQUIFER   LEON COUNTY         | 11                                   | 11           | 11           | 11           | 11           | 11           |
| MANUFACTURING                              | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 807                                  | 834          | 834          | 834          | 834          | 834          |
| MANUFACTURING                              | H   DIRECT REUSE                         | 27                                   | 27           | 27           | 27           | 27           | 27           |
| MINING                                     | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 1,681                                | 1,681        | 1,454        | 1,071        | 689          | 444          |
| LIVESTOCK                                  | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 969                                  | 969          | 969          | 969          | 969          | 969          |
| LIVESTOCK                                  | H   QUEEN CITY AQUIFER   LEON COUNTY     | 324                                  | 324          | 324          | 324          | 324          | 324          |
| LIVESTOCK                                  | H   SPARTA AQUIFER   LEON COUNTY         | 10                                   | 10           | 10           | 10           | 10           | 10           |
| IRRIGATION                                 | H   CARRIZO-WILCOX AQUIFER   LEON COUNTY | 57                                   | 57           | 57           | 57           | 57           | 57           |
| IRRIGATION                                 | H   TRINITY RUN-OF-RIVER                 | 156                                  | 156          | 156          | 156          | 156          | 156          |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b> |  | <b>5,720</b>                         | <b>5,807</b> | <b>5,636</b> | <b>5,369</b> | <b>5,097</b> | <b>4,965</b> |
| <b>LEON COUNTY TOTAL EXISTING SUPPLY</b>   |  | <b>7,413</b>                         | <b>7,515</b> | <b>7,259</b> | <b>6,863</b> | <b>6,461</b> | <b>6,253</b> |
| <b>LIBERTY COUNTY</b>                      |  |                                      |              |              |              |              |              |
| <b>NECHES BASIN</b>                        |  |                                      |              |              |              |              |              |
| DAISETTA                                   | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 46                                   | 49           | 53           | 57           | 63           | 67           |
| HARDIN WSC                                 | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 30                                   | 37           | 44           | 51           | 57           | 63           |
| WEST HARDIN WSC                            |  | 0                                    | 0            | 0            | 0            | 0            | 0            |
| COUNTY-OTHER                               | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 105                                  | 109          | 114          | 119          | 126          | 133          |
| MANUFACTURING                              | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 176                                  | 176          | 176          | 176          | 176          | 176          |
| MINING                                     | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 31                                   | 31           | 31           | 31           | 31           | 31           |
| LIVESTOCK                                  | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 62                                   | 62           | 62           | 62           | 62           | 62           |
| IRRIGATION                                 | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 100                                  | 100          | 100          | 100          | 100          | 100          |
| <b>NECHES BASIN TOTAL EXISTING SUPPLY</b>  |  | <b>550</b>                           | <b>564</b>   | <b>580</b>   | <b>596</b>   | <b>615</b>   | <b>632</b>   |
| <b>NECHES-TRINITY BASIN</b>                |  |                                      |              |              |              |              |              |
| COUNTY-OTHER                               | H   GULF COAST AQUIFER   LIBERTY COUNTY  | 14                                   | 15           | 16           | 17           | 19           | 20           |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>LIBERTY COUNTY</b>                                |  |                                      |               |               |               |               |               |
| <b>NECHES-TRINITY BASIN</b>                          |  |                                      |               |               |               |               |               |
| MINING   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 22                                   | 22            | 22            | 22            | 22            | 22            |
| LIVESTOCK  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 21                                   | 21            | 21            | 21            | 21            | 21            |
| IRRIGATION   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 25                                   | 25            | 25            | 25            | 25            | 25            |
| IRRIGATION   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 5,400                                | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         |
| IRRIGATION   | H   TRINITY RUN-OF-RIVER                         | 1,067                                | 1,067         | 1,067         | 1,067         | 1,067         | 1,067         |
| IRRIGATION   | I   SAM RAYBURN-STEINHAGEN LAKE/RESERVOIR SYSTEM | 23,000                               | 23,000        | 23,000        | 23,000        | 23,000        | 23,000        |
| <b>NECHES-TRINITY BASIN TOTAL EXISTING SUPPLY</b>    |  | <b>29,549</b>                        | <b>29,550</b> | <b>29,551</b> | <b>29,552</b> | <b>29,554</b> | <b>29,555</b> |
| <b>SAN JACINTO BASIN</b>                             |  |                                      |               |               |               |               |               |
| CLEVELAND  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 1,551                                | 1,539         | 1,531         | 1,537         | 1,555         | 1,575         |
| PLUM GROVE   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 81                                   | 87            | 94            | 102           | 110           | 118           |
| TARKINGTON SUD                                       | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 320                                  | 363           | 406           | 452           | 499           | 543           |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 1,641                                | 1,861         | 2,065         | 2,099         | 2,099         | 2,099         |
| MANUFACTURING  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 128                                  | 128           | 128           | 128           | 128           | 128           |
| MINING   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 79                                   | 79            | 79            | 79            | 79            | 79            |
| LIVESTOCK  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 84                                   | 84            | 84            | 84            | 84            | 84            |
| IRRIGATION   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 50                                   | 50            | 50            | 50            | 50            | 50            |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b>       |  | <b>3,934</b>                         | <b>4,191</b>  | <b>4,437</b>  | <b>4,531</b>  | <b>4,604</b>  | <b>4,676</b>  |
| <b>TRINITY BASIN</b>                                 |  |                                      |               |               |               |               |               |
| AMES   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 100                                  | 106           | 112           | 121           | 131           | 140           |
| DAISETTA   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 82                                   | 89            | 95            | 103           | 113           | 119           |
| DAYTON   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 2,266                                | 2,889         | 3,489         | 4,100         | 4,694         | 5,264         |
| HARDIN   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 122                                  | 134           | 146           | 160           | 173           | 187           |
| HARDIN WSC   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 410                                  | 504           | 596           | 692           | 788           | 880           |
| KENEFICK   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 76                                   | 83            | 89            | 97            | 104           | 112           |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 196                                  | 258           | 319           | 380           | 438           | 494           |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 96                                   | 113           | 127           | 140           | 151           | 162           |
| LIBERTY  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 1,543                                | 1,620         | 1,698         | 1,790         | 1,892         | 1,992         |
| OLD RIVER-WINFREE                                    | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 16                                   | 17            | 18            | 20            | 21            | 23            |
| TARKINGTON SUD                                       | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 96                                   | 109           | 122           | 135           | 149           | 163           |
| WOODLAND HILLS WATER COMPANY                         | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 500                                  | 661           | 818           | 980           | 1,138         | 1,290         |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 2,300                                | 2,000         | 1,740         | 1,517         | 1,327         | 1,151         |
| MANUFACTURING  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 62                                   | 62            | 62            | 62            | 62            | 62            |
| MINING   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 94                                   | 94            | 94            | 94            | 94            | 94            |
| LIVESTOCK  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 267                                  | 267           | 267           | 267           | 267           | 267           |
| IRRIGATION   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 353                                  | 353           | 353           | 353           | 353           | 353           |

### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>LIBERTY COUNTY</b>                                  |  |                                      |               |               |               |               |               |
| <b>TRINITY BASIN</b>                                   |  |                                      |               |               |               |               |               |
| IRRIGATION   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 5,601                                | 5,601         | 5,601         | 5,601         | 5,601         | 5,601         |
| IRRIGATION   | H   TRINITY RUN-OF-RIVER                         | 16,292                               | 16,292        | 16,292        | 16,292        | 16,292        | 16,292        |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b>             |  | <b>30,472</b>                        | <b>31,252</b> | <b>32,038</b> | <b>32,904</b> | <b>33,788</b> | <b>34,646</b> |
| <b>TRINITY-SAN JACINTO BASIN</b>                       |  |                                      |               |               |               |               |               |
| DAYTON   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 7                                    | 9             | 11            | 13            | 15            | 16            |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 377                                  | 408           | 436           | 470           | 507           | 545           |
| MINING   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 26                                   | 26            | 26            | 26            | 26            | 26            |
| LIVESTOCK  | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 20                                   | 20            | 20            | 20            | 20            | 20            |
| IRRIGATION   | H   GULF COAST AQUIFER   LIBERTY COUNTY          | 1,363                                | 1,363         | 1,363         | 1,363         | 1,363         | 1,363         |
| IRRIGATION   | H   TRINITY-SAN JACINTO RUN-OF-RIVER             | 1,905                                | 1,905         | 1,905         | 1,905         | 1,905         | 1,905         |
| <b>TRINITY-SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>3,698</b>                         | <b>3,731</b>  | <b>3,761</b>  | <b>3,797</b>  | <b>3,836</b>  | <b>3,875</b>  |
| <b>LIBERTY COUNTY TOTAL EXISTING SUPPLY</b>            |  | <b>68,203</b>                        | <b>69,288</b> | <b>70,367</b> | <b>71,380</b> | <b>72,397</b> | <b>73,384</b> |
| <b>MADISON COUNTY</b>                                  |  |                                      |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                                    |  |                                      |               |               |               |               |               |
| COUNTY-OTHER   | H   SPARTA AQUIFER   MADISON COUNTY              | 207                                  | 216           | 226           | 238           | 250           | 250           |
| MINING   | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 119                                  | 119           | 119           | 108           | 65            | 39            |
| LIVESTOCK  | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 152                                  | 152           | 152           | 152           | 152           | 152           |
| IRRIGATION   | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 2                                    | 2             | 2             | 2             | 2             | 2             |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>              |  | <b>480</b>                           | <b>489</b>    | <b>499</b>    | <b>500</b>    | <b>469</b>    | <b>443</b>    |
| <b>TRINITY BASIN</b>                                   |  |                                      |               |               |               |               |               |
| MADISONVILLE   | H   SPARTA AQUIFER   MADISON COUNTY              | 870                                  | 909           | 947           | 998           | 1,053         | 1,107         |
| NORMANGEE  | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 14                                   | 14            | 15            | 16            | 17            | 17            |
| COUNTY-OTHER   | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 13                                   | 14            | 14            | 15            | 16            | 17            |
| COUNTY-OTHER   | H   QUEEN CITY AQUIFER   MADISON COUNTY          | 59                                   | 92            | 123           | 164           | 208           | 303           |
| COUNTY-OTHER   | H   SPARTA AQUIFER   MADISON COUNTY              | 1,453                                | 1,453         | 1,453         | 1,453         | 1,453         | 1,453         |
| COUNTY-OTHER   | H   YEGUA-JACKSON AQUIFER   MADISON COUNTY       | 76                                   | 117           | 156           | 209           | 265           | 270           |
| MANUFACTURING  | H   SPARTA AQUIFER   MADISON COUNTY              | 226                                  | 226           | 226           | 226           | 226           | 226           |
| MINING   | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 478                                  | 478           | 478           | 430           | 258           | 155           |
| STEAM ELECTRIC POWER                                   |  | 0                                    | 0             | 0             | 0             | 0             | 0             |
| LIVESTOCK  | H   CARRIZO-WILCOX AQUIFER   MADISON COUNTY      | 553                                  | 553           | 553           | 553           | 553           | 553           |
| LIVESTOCK  | H   SPARTA AQUIFER   MADISON COUNTY              | 130                                  | 130           | 130           | 130           | 130           | 130           |
| LIVESTOCK  | H   YEGUA-JACKSON AQUIFER   MADISON COUNTY       | 189                                  | 189           | 189           | 189           | 189           | 189           |
| IRRIGATION   | H   SPARTA AQUIFER   MADISON COUNTY              | 14                                   | 14            | 14            | 14            | 14            | 14            |
| IRRIGATION   | H   TRINITY RUN-OF-RIVER                         | 169                                  | 169           | 169           | 169           | 169           | 169           |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b>             |  | <b>4,244</b>                         | <b>4,358</b>  | <b>4,467</b>  | <b>4,566</b>  | <b>4,551</b>  | <b>4,603</b>  |
| <b>MADISON COUNTY TOTAL EXISTING SUPPLY</b>            |  | <b>4,724</b>                         | <b>4,847</b>  | <b>4,966</b>  | <b>5,066</b>  | <b>5,020</b>  | <b>5,046</b>  |

### EXISTING WATER SUPPLY

| REGION H                     | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |       |       |       |       |       |
|------------------------------|--|--------------------------------------|-------|-------|-------|-------|-------|
|                              |  | 2020                                 | 2030  | 2040  | 2050  | 2060  | 2070  |
| <b>MONTGOMERY COUNTY</b>     |  |                                      |       |       |       |       |       |
| <b>SAN JACINTO BASIN</b>     |  |                                      |       |       |       |       |       |
| BENDERS LANDING WATER SYSTEM | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 1,672                                | 1,672 | 1,672 | 1,672 | 1,672 | 1,672 |
| CLEVELAND                    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 24                                   | 24    | 24    | 24    | 24    | 24    |
| CONROE                       | H   CONROE LAKE/RESERVOIR                        | 8,624                                | 8,624 | 8,624 | 8,624 | 8,624 | 8,624 |
| CONROE                       | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 4,108                                | 4,108 | 4,108 | 4,108 | 4,108 | 4,108 |
| CUT AND SHOOT                | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 180                                  | 180   | 180   | 180   | 180   | 180   |
| DOBBIN-PLANTERSVILLE WSC     | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 157                                  | 157   | 157   | 157   | 157   | 157   |
| EAST PLANTATION UD           | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 181                                  | 181   | 181   | 181   | 181   | 181   |
| HOUSTON                      | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 1,098                                | 1,098 | 1,098 | 1,098 | 1,098 | 1,098 |
| HOUSTON                      | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 0                                    | 277   | 712   | 1,135 | 1,556 | 1,678 |
| INDIGO LAKE WATER SYSTEM     | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 866                                  | 866   | 866   | 866   | 866   | 866   |
| KINGS MANOR MUD              | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 251                                  | 251   | 251   | 251   | 251   | 251   |
| LAKE WINDCREST WATER SYSTEM  | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 700                                  | 700   | 700   | 700   | 700   | 700   |
| MAGNOLIA                     | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 629                                  | 629   | 629   | 629   | 629   | 629   |
| MONTGOMERY                   | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 482                                  | 482   | 482   | 482   | 482   | 482   |
| MONTGOMERY COUNTY MUD #15    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 380                                  | 380   | 380   | 380   | 380   | 380   |
| MONTGOMERY COUNTY MUD #18    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 958                                  | 958   | 958   | 958   | 958   | 958   |
| MONTGOMERY COUNTY MUD #19    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 359                                  | 359   | 359   | 359   | 359   | 359   |
| MONTGOMERY COUNTY MUD #8     | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 545                                  | 545   | 545   | 545   | 545   | 545   |
| MONTGOMERY COUNTY MUD #83    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 329                                  | 329   | 329   | 329   | 329   | 329   |
| MONTGOMERY COUNTY MUD #89    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 587                                  | 587   | 587   | 587   | 587   | 587   |
| MONTGOMERY COUNTY MUD #9     | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 448                                  | 448   | 448   | 448   | 448   | 448   |
| MONTGOMERY COUNTY MUD #94    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 452                                  | 452   | 452   | 452   | 452   | 452   |
| MONTGOMERY COUNTY UD #2      | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 264                                  | 264   | 264   | 264   | 264   | 264   |
| MONTGOMERY COUNTY UD #3      | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 235                                  | 235   | 235   | 235   | 235   | 235   |
| MONTGOMERY COUNTY UD #4      | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 228                                  | 228   | 228   | 228   | 228   | 228   |
| MONTGOMERY COUNTY WCID #1    | H   CONROE LAKE/RESERVOIR                        | 195                                  | 195   | 195   | 195   | 195   | 195   |
| MONTGOMERY COUNTY WCID #1    | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 57                                   | 57    | 57    | 57    | 57    | 57    |
| NEW CANEY MUD                | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 629                                  | 629   | 629   | 629   | 629   | 629   |
| OAK RIDGE NORTH              | H   CONROE LAKE/RESERVOIR                        | 375                                  | 375   | 375   | 375   | 375   | 375   |



### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                |                |                |                |                |
|--|--|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
|  |  | 2020                                 | 2030           | 2040           | 2050           | 2060           | 2070           |
| <b>MONTGOMERY COUNTY</b>                             |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                             |  |                                      |                |                |                |                |                |
| MINING   | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 1,110                                | 1,110          | 1,110          | 1,110          | 1,110          | 1,110          |
| STEAM ELECTRIC POWER                                 | H   CONROE LAKE/RESERVOIR                        | 7,841                                | 7,841          | 7,841          | 7,841          | 7,841          | 7,841          |
| STEAM ELECTRIC POWER                                 | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 6,345                                | 6,345          | 6,345          | 6,345          | 6,345          | 6,345          |
| LIVESTOCK  | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 398                                  | 398            | 398            | 398            | 398            | 398            |
| IRRIGATION   | H   CONROE LAKE/RESERVOIR                        | 1,145                                | 1,145          | 1,145          | 1,145          | 1,145          | 1,145          |
| IRRIGATION   | H   GULF COAST AQUIFER   MONTGOMERY COUNTY       | 479                                  | 479            | 479            | 479            | 479            | 479            |
| IRRIGATION   | H   SAN JACINTO RUN-OF-RIVER                     | 25                                   | 25             | 25             | 25             | 25             | 25             |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b>       |  | <b>100,058</b>                       | <b>100,336</b> | <b>100,802</b> | <b>101,271</b> | <b>101,759</b> | <b>101,970</b> |
| <b>MONTGOMERY COUNTY TOTAL EXISTING SUPPLY</b>       |  | <b>100,058</b>                       | <b>100,336</b> | <b>100,802</b> | <b>101,271</b> | <b>101,759</b> | <b>101,970</b> |
| <b>POLK COUNTY</b>                                   |  |                                      |                |                |                |                |                |
| <b>TRINITY BASIN</b>                                 |  |                                      |                |                |                |                |                |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   GULF COAST AQUIFER   POLK COUNTY             | 1,066                                | 1,178          | 1,275          | 1,357          | 1,425          | 1,479          |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 524                                  | 514            | 508            | 501            | 493            | 484            |
| LIVINGSTON   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 5,600                                | 5,600          | 5,600          | 5,600          | 5,600          | 5,600          |
| ONALASKA   | H   GULF COAST AQUIFER   POLK COUNTY             | 316                                  | 390            | 449            | 501            | 544            | 579            |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   POLK COUNTY             | 1,942                                | 2,047          | 2,131          | 2,218          | 2,305          | 2,381          |
| COUNTY-OTHER   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 30                                   | 30             | 30             | 30             | 30             | 30             |
| MINING   | H   GULF COAST AQUIFER   POLK COUNTY             | 124                                  | 98             | 72             | 46             | 21             | 9              |
| MINING   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 32                                   | 32             | 32             | 32             | 32             | 32             |
| LIVESTOCK  | H   GULF COAST AQUIFER   POLK COUNTY             | 0                                    | 0              | 0              | 0              | 0              | 0              |
| LIVESTOCK  | I   GULF COAST AQUIFER   POLK COUNTY             | 66                                   | 66             | 66             | 66             | 66             | 66             |
| LIVESTOCK  | I   NECHES LIVESTOCK LOCAL SUPPLY                | 114                                  | 114            | 114            | 114            | 114            | 114            |
| LIVESTOCK  | I   OTHER AQUIFER   POLK COUNTY                  | 0                                    | 0              | 0              | 0              | 0              | 0              |
| LIVESTOCK  | I   YEGUA-JACKSON AQUIFER   POLK COUNTY          | 2                                    | 2              | 2              | 2              | 2              | 2              |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b>           |  | <b>9,816</b>                         | <b>10,071</b>  | <b>10,279</b>  | <b>10,467</b>  | <b>10,632</b>  | <b>10,776</b>  |
| <b>POLK COUNTY TOTAL EXISTING SUPPLY</b>             |  | <b>9,816</b>                         | <b>10,071</b>  | <b>10,279</b>  | <b>10,467</b>  | <b>10,632</b>  | <b>10,776</b>  |
| <b>SAN JACINTO COUNTY</b>                            |  |                                      |                |                |                |                |                |
| <b>SAN JACINTO BASIN</b>                             |  |                                      |                |                |                |                |                |
| COLDSRING  | H   GULF COAST AQUIFER   SAN JACINTO COUNTY      | 40                                   | 42             | 45             | 47             | 50             | 52             |
| SAN JACINTO SUD                                      | H   GULF COAST AQUIFER   SAN JACINTO COUNTY      | 68                                   | 70             | 72             | 77             | 81             | 85             |
| SAN JACINTO SUD                                      | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 80                                   | 79             | 79             | 80             | 80             | 80             |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   SAN JACINTO COUNTY      | 1,317                                | 1,413          | 1,490          | 1,586          | 1,672          | 1,752          |
| MANUFACTURING  | H   GULF COAST AQUIFER   SAN JACINTO COUNTY      | 11                                   | 12             | 13             | 14             | 15             | 16             |





### EXISTING WATER SUPPLY

| REGION H   | SOURCE REGION   SOURCE NAME                      | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>TRINITY COUNTY</b>                                |  |                                      |               |               |               |               |               |
| <b>TRINITY BASIN</b>                                 |  |                                      |               |               |               |               |               |
| TRINITY RURAL WSC                                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 348                                  | 347           | 346           | 344           | 344           | 344           |
| TRINITY RURAL WSC                                    | H   YEGUA-JACKSON AQUIFER   TRINITY COUNTY       | 128                                  | 128           | 128           | 128           | 128           | 128           |
| COUNTY-OTHER   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 405                                  | 404           | 404           | 404           | 405           | 404           |
| COUNTY-OTHER   | I   YEGUA-JACKSON AQUIFER   TRINITY COUNTY       | 284                                  | 284           | 284           | 284           | 284           | 284           |
| MINING   | H   YEGUA-JACKSON AQUIFER   TRINITY COUNTY       | 0                                    | 0             | 0             | 0             | 0             | 0             |
| LIVESTOCK  | H   YEGUA-JACKSON AQUIFER   TRINITY COUNTY       | 0                                    | 0             | 0             | 0             | 0             | 0             |
| LIVESTOCK  | I   NECHES LIVESTOCK LOCAL SUPPLY                | 154                                  | 154           | 154           | 154           | 154           | 154           |
| LIVESTOCK  | I   YEGUA-JACKSON AQUIFER   TRINITY COUNTY       | 10                                   | 10            | 10            | 10            | 10            | 10            |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b>           |  | <b>3,035</b>                         | <b>3,034</b>  | <b>3,025</b>  | <b>3,015</b>  | <b>3,019</b>  | <b>3,016</b>  |
| <b>TRINITY COUNTY TOTAL EXISTING SUPPLY</b>          |  | <b>3,035</b>                         | <b>3,034</b>  | <b>3,025</b>  | <b>3,015</b>  | <b>3,019</b>  | <b>3,016</b>  |
| <b>WALKER COUNTY</b>                                 |  |                                      |               |               |               |               |               |
| <b>SAN JACINTO BASIN</b>                             |  |                                      |               |               |               |               |               |
| HUNTSVILLE   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 16,101                               | 16,101        | 16,101        | 16,102        | 16,101        | 16,100        |
| NEW WAVERLY  | H   GULF COAST AQUIFER   WALKER COUNTY           | 181                                  | 184           | 185           | 188           | 192           | 195           |
| WALKER COUNTY SUD                                    | H   GULF COAST AQUIFER   WALKER COUNTY           | 447                                  | 461           | 470           | 483           | 495           | 506           |
| COUNTY-OTHER   | H   GULF COAST AQUIFER   WALKER COUNTY           | 1,727                                | 1,764         | 1,770         | 1,770         | 1,770         | 1,770         |
| COUNTY-OTHER   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 1,603                                | 1,640         | 1,666         | 1,691         | 1,709         | 1,723         |
| MANUFACTURING  | H   GULF COAST AQUIFER   WALKER COUNTY           | 293                                  | 293           | 293           | 293           | 293           | 293           |
| MINING   | H   GULF COAST AQUIFER   WALKER COUNTY           | 5                                    | 5             | 5             | 5             | 5             | 5             |
| LIVESTOCK  | H   GULF COAST AQUIFER   WALKER COUNTY           | 306                                  | 306           | 306           | 306           | 306           | 306           |
| IRRIGATION   | H   GULF COAST AQUIFER   WALKER COUNTY           | 320                                  | 320           | 320           | 320           | 320           | 320           |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b>       |  | <b>20,983</b>                        | <b>21,074</b> | <b>21,116</b> | <b>21,158</b> | <b>21,191</b> | <b>21,218</b> |
| <b>TRINITY BASIN</b>                                 |  |                                      |               |               |               |               |               |
| HUNTSVILLE   | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 3,299                                | 3,299         | 3,299         | 3,298         | 3,299         | 3,300         |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   GULF COAST AQUIFER   WALKER COUNTY           | 27                                   | 28            | 29            | 30            | 30            | 31            |
| LAKE LIVINGSTON WATER SUPPLY & SEWER SERVICE COMPANY | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 13                                   | 12            | 12            | 11            | 10            | 10            |
| RIVERSIDE  | H   GULF COAST AQUIFER   WALKER COUNTY           | 45                                   | 45            | 45            | 45            | 45            | 45            |
| RIVERSIDE  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 10                                   | 10            | 10            | 10            | 10            | 10            |
| RIVERSIDE WSC  | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 67                                   | 67            | 67            | 67            | 67            | 67            |
| RIVERSIDE WSC  | H   YEGUA-JACKSON AQUIFER   WALKER COUNTY        | 350                                  | 386           | 412           | 436           | 455           | 470           |
| THE CONSOLIDATED WSC                                 | I   HOUSTON COUNTY LAKE/RESERVOIR                | 17                                   | 18            | 19            | 20            | 21            | 22            |
| TRINITY RURAL WSC                                    | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM | 27                                   | 28            | 29            | 31            | 31            | 31            |

### EXISTING WATER SUPPLY

| REGION H                                   | SOURCE REGION   SOURCE NAME                                | EXISTING SUPPLY (ACRE-FEET PER YEAR) |               |               |               |               |               |
|--|--|--------------------------------------|---------------|---------------|---------------|---------------|---------------|
|  |  | 2020                                 | 2030          | 2040          | 2050          | 2060          | 2070          |
| <b>WALKER COUNTY</b>                       |  |                                      |               |               |               |               |               |
| <b>TRINITY BASIN</b>                       |  |                                      |               |               |               |               |               |
| WALKER COUNTY SUD                          | H   GULF COAST AQUIFER   WALKER COUNTY                     | 298                                  | 308           | 314           | 322           | 331           | 338           |
| WALKER COUNTY SUD                          | H   YEGUA-JACKSON AQUIFER   WALKER COUNTY                  | 298                                  | 307           | 313           | 321           | 330           | 338           |
| COUNTY-OTHER                               | H   GULF COAST AQUIFER   WALKER COUNTY                     | 1,242                                | 1,207         | 1,181         | 1,162         | 1,155         | 1,151         |
| COUNTY-OTHER                               | H   LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM           | 1,397                                | 1,360         | 1,334         | 1,309         | 1,291         | 1,277         |
| COUNTY-OTHER                               | H   YEGUA-JACKSON AQUIFER   WALKER COUNTY                  | 263                                  | 255           | 249           | 246           | 244           | 243           |
| MANUFACTURING                              | H   GULF COAST AQUIFER   WALKER COUNTY                     | 19                                   | 19            | 19            | 19            | 19            | 19            |
| MANUFACTURING                              | H   TRINITY RUN-OF-RIVER                                   | 337                                  | 337           | 337           | 337           | 337           | 337           |
| MINING                                     | H   GULF COAST AQUIFER   WALKER COUNTY                     | 6                                    | 6             | 6             | 6             | 6             | 6             |
| LIVESTOCK                                  | H   GULF COAST AQUIFER   WALKER COUNTY                     | 137                                  | 137           | 137           | 137           | 137           | 137           |
| LIVESTOCK                                  | H   QUEEN CITY AQUIFER   WALKER COUNTY                     | 62                                   | 62            | 62            | 62            | 62            | 62            |
| LIVESTOCK                                  | H   YEGUA-JACKSON AQUIFER   WALKER COUNTY                  | 147                                  | 147           | 147           | 147           | 147           | 147           |
| IRRIGATION                                 | H   GULF COAST AQUIFER   WALKER COUNTY                     | 50                                   | 50            | 50            | 50            | 50            | 50            |
| IRRIGATION                                 | H   TRINITY RUN-OF-RIVER                                   | 102                                  | 102           | 102           | 102           | 102           | 102           |
| IRRIGATION                                 | H   YEGUA-JACKSON AQUIFER   WALKER COUNTY                  | 203                                  | 203           | 203           | 203           | 203           | 203           |
| <b>TRINITY BASIN TOTAL EXISTING SUPPLY</b> |  | <b>8,416</b>                         | <b>8,393</b>  | <b>8,376</b>  | <b>8,371</b>  | <b>8,382</b>  | <b>8,396</b>  |
| <b>WALKER COUNTY TOTAL EXISTING SUPPLY</b> |  | <b>29,399</b>                        | <b>29,467</b> | <b>29,492</b> | <b>29,529</b> | <b>29,573</b> | <b>29,614</b> |
| <b>WALLER COUNTY</b>                       |  |                                      |               |               |               |               |               |
| <b>BRAZOS BASIN</b>                        |  |                                      |               |               |               |               |               |
| BROOKSHIRE                                 | H   GULF COAST AQUIFER   WALLER COUNTY                     | 663                                  | 782           | 921           | 1,080         | 1,262         | 1,460         |
| G & W WSC                                  | H   GULF COAST AQUIFER   WALLER COUNTY                     | 111                                  | 146           | 187           | 231           | 281           | 335           |
| HEMPSTEAD                                  | H   GULF COAST AQUIFER   WALLER COUNTY                     | 1,304                                | 1,490         | 1,703         | 1,944         | 2,011         | 2,011         |
| PINE ISLAND                                | H   GULF COAST AQUIFER   WALLER COUNTY                     | 144                                  | 144           | 144           | 144           | 144           | 144           |
| PRAIRIE VIEW                               | H   GULF COAST AQUIFER   WALLER COUNTY                     | 1,436                                | 1,669         | 1,934         | 2,232         | 2,567         | 2,933         |
| COUNTY-OTHER                               | H   GULF COAST AQUIFER   WALLER COUNTY                     | 1,470                                | 1,756         | 2,054         | 2,132         | 2,132         | 2,132         |
| MANUFACTURING                              | H   GULF COAST AQUIFER   WALLER COUNTY                     | 115                                  | 115           | 115           | 115           | 115           | 115           |
| MINING                                     | H   GULF COAST AQUIFER   WALLER COUNTY                     | 4                                    | 4             | 4             | 4             | 4             | 4             |
| LIVESTOCK                                  | H   GULF COAST AQUIFER   WALLER COUNTY                     | 824                                  | 824           | 824           | 824           | 824           | 824           |
| IRRIGATION                                 | G   BRAZOS RIVER AUTHORITY MAIN STEM LAKE/RESERVOIR SYSTEM | 50                                   | 50            | 50            | 50            | 50            | 50            |
| IRRIGATION                                 | H   BRAZOS RUN-OF-RIVER                                    | 61                                   | 61            | 61            | 61            | 61            | 61            |
| IRRIGATION                                 | H   GULF COAST AQUIFER   WALLER COUNTY                     | 6,951                                | 6,951         | 6,951         | 6,951         | 6,951         | 6,951         |
| <b>BRAZOS BASIN TOTAL EXISTING SUPPLY</b>  |  | <b>13,133</b>                        | <b>13,992</b> | <b>14,948</b> | <b>15,768</b> | <b>16,402</b> | <b>17,020</b> |
| <b>SAN JACINTO BASIN</b>                   |  |                                      |               |               |               |               |               |
| G & W WSC                                  | H   GULF COAST AQUIFER   WALLER COUNTY                     | 339                                  | 448           | 571           | 709           | 861           | 1,028         |
| KATY                                       | H   GULF COAST AQUIFER   WALLER COUNTY                     | 354                                  | 434           | 527           | 628           | 742           | 866           |
| PRAIRIE VIEW                               | H   GULF COAST AQUIFER   WALLER COUNTY                     | 131                                  | 152           | 176           | 202           | 233           | 266           |
| WALLER                                     | H   GULF COAST AQUIFER   WALLER COUNTY                     | 356                                  | 379           | 407           | 440           | 479           | 523           |
| COUNTY-OTHER                               | H   GULF COAST AQUIFER   WALLER COUNTY                     | 1,575                                | 1,817         | 2,099         | 2,422         | 2,790         | 2,846         |
| MANUFACTURING                              | H   GULF COAST AQUIFER   WALLER COUNTY                     | 19                                   | 21            | 23            | 25            | 27            | 29            |
| MINING                                     | H   GULF COAST AQUIFER   WALLER COUNTY                     | 3                                    | 3             | 3             | 3             | 3             | 3             |

**EXISTING WATER SUPPLY**

| REGION H                                       | SOURCE REGION   SOURCE NAME            | EXISTING SUPPLY (ACRE-FEET PER YEAR) |                  |                  |                  |                  |                  |
|--|--|--------------------------------------|------------------|------------------|------------------|------------------|------------------|
|  |  | 2020                                 | 2030             | 2040             | 2050             | 2060             | 2070             |
| <b>WALLER COUNTY</b>                           |  |                                      |                  |                  |                  |                  |                  |
| <b>SAN JACINTO BASIN</b>                       |  |                                      |                  |                  |                  |                  |                  |
| LIVESTOCK                                      | H   GULF COAST AQUIFER   WALLER COUNTY | 245                                  | 245              | 245              | 245              | 245              | 245              |
| IRRIGATION                                     | H   GULF COAST AQUIFER   WALLER COUNTY | 14,084                               | 14,084           | 14,084           | 14,084           | 14,084           | 14,084           |
| <b>SAN JACINTO BASIN TOTAL EXISTING SUPPLY</b> |  | <b>17,106</b>                        | <b>17,583</b>    | <b>18,135</b>    | <b>18,758</b>    | <b>19,464</b>    | <b>19,890</b>    |
| <b>WALLER COUNTY TOTAL EXISTING SUPPLY</b>     |  | <b>30,239</b>                        | <b>31,575</b>    | <b>33,083</b>    | <b>34,526</b>    | <b>35,866</b>    | <b>36,910</b>    |
| <b>REGION H TOTAL EXISTING SUPPLY</b>          |  | <b>2,568,603</b>                     | <b>2,560,117</b> | <b>2,601,036</b> | <b>2,627,386</b> | <b>2,631,846</b> | <b>2,635,299</b> |

**SOURCE WATER BALANCE (AVAILABILITY - WUG SUPPLY)**

| <b>REGION H</b>               |               |                     |                 |  |             |             |             |             |             |
|-------------------------------|---------------|---------------------|-----------------|--|-------------|-------------|-------------|-------------|-------------|
| <b>GROUNDWATER</b>            | <b>COUNTY</b> | <b>BASIN</b>        | <b>SALINITY</b> | <b>SOURCE WATER BALANCE (ACRE-FEET PER YEAR)</b> |             |             |             |             |             |
|                               |               |                     |                 | <b>2020</b>                                      | <b>2030</b> | <b>2040</b> | <b>2050</b> | <b>2060</b> | <b>2070</b> |
| BRAZOS RIVER ALLUVIUM AQUIFER | AUSTIN        | BRAZOS              | FRESH           | 7,944  | 7,944       | 7,944       | 7,944       | 7,944       | 7,944       |
| BRAZOS RIVER ALLUVIUM AQUIFER | WALLER        | BRAZOS              | FRESH           | 12,027   | 12,027      | 12,027      | 12,027      | 12,027      | 12,027      |
| CARRIZO-WILCOX AQUIFER        | LEON          | BRAZOS              | FRESH           | 2,807  | 2,596       | 2,515       | 2,524       | 2,513       | 2,497       |
| CARRIZO-WILCOX AQUIFER        | LEON          | TRINITY             | FRESH           | 4,931  | 5,214       | 5,797       | 6,471       | 6,915       | 7,144       |
| CARRIZO-WILCOX AQUIFER        | MADISON       | BRAZOS              | FRESH           | 106  | 96          | 77          | 71          | 113         | 139         |
| CARRIZO-WILCOX AQUIFER        | MADISON       | TRINITY             | FRESH           | 1,422  | 1,340       | 1,244       | 1,205       | 1,366       | 1,468       |
| CARRIZO-WILCOX AQUIFER        | TRINITY       | TRINITY             | FRESH           | 1,101  | 1,101       | 1,101       | 1,101       | 1,101       | 1,101       |
| CARRIZO-WILCOX AQUIFER        | WALKER        | TRINITY             | FRESH           | 2,099  | 2,099       | 2,099       | 2,099       | 2,099       | 2,099       |
| CATAHOULA AQUIFER             | MONTGOMERY    | SAN JACINTO         | BRACKISH        | 234  | 233         | 202         | 156         | 89          | 0           |
| GULF COAST AQUIFER            | AUSTIN        | BRAZOS              | FRESH           | 1,057  | 933         | 792         | 615         | 408         | 205         |
| GULF COAST AQUIFER            | AUSTIN        | BRAZOS-COLORADO     | FRESH           | 7,666  | 7,236       | 6,808       | 6,273       | 5,986       | 5,828       |
| GULF COAST AQUIFER            | AUSTIN        | COLORADO            | FRESH           | 57   | 53          | 47          | 41          | 33          | 24          |
| GULF COAST AQUIFER            | BRAZORIA      | BRAZOS              | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | BRAZORIA      | BRAZOS-COLORADO     | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | BRAZORIA      | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0           | 0           | 0           | 0           | 360         |
| GULF COAST AQUIFER            | CHAMBERS      | NECHES-TRINITY      | FRESH           | 5,865  | 5,821       | 5,778       | 5,731       | 5,680       | 5,626       |
| GULF COAST AQUIFER            | CHAMBERS      | TRINITY             | FRESH           | 3,094  | 2,466       | 1,976       | 1,763       | 1,525       | 1,274       |
| GULF COAST AQUIFER            | CHAMBERS      | TRINITY-SAN JACINTO | FRESH           | 370  | 192         | 60          | 9           | 0           | 0           |
| GULF COAST AQUIFER            | FORT BEND     | BRAZOS              | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | FORT BEND     | BRAZOS-COLORADO     | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | FORT BEND     | SAN JACINTO         | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | FORT BEND     | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | GALVESTON     | NECHES-TRINITY      | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | GALVESTON     | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | HARRIS        | SAN JACINTO         | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | HARRIS        | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | HARRIS        | TRINITY-SAN JACINTO | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| GULF COAST AQUIFER            | LIBERTY       | NECHES              | FRESH           | 4,472  | 4,458       | 4,443       | 4,426       | 4,403       | 4,386       |
| GULF COAST AQUIFER            | LIBERTY       | NECHES-TRINITY      | FRESH           | 282  | 281         | 280         | 279         | 277         | 276         |
| GULF COAST AQUIFER            | LIBERTY       | SAN JACINTO         | FRESH           | 1,822  | 1,552       | 1,293       | 1,186       | 1,099       | 1,013       |
| GULF COAST AQUIFER            | LIBERTY       | TRINITY             | FRESH           | 14,545   | 13,793      | 13,031      | 12,190      | 11,333      | 10,499      |
| GULF COAST AQUIFER            | LIBERTY       | TRINITY-SAN JACINTO | FRESH           | 7,070  | 7,039       | 7,011       | 6,977       | 6,940       | 6,902       |

**SOURCE WATER BALANCE (AVAILABILITY - WUG SUPPLY)**

| <b>REGION H</b>                               |               |                    |                 |  |                |                |                |                |                |
|---|---------------|--------------------|-----------------|--|----------------|----------------|----------------|----------------|----------------|
| <b>GROUNDWATER</b>                            | <b>COUNTY</b> | <b>BASIN</b>       | <b>SALINITY</b> | <b>SOURCE WATER BALANCE (ACRE-FEET PER YEAR)</b> |                |                |                |                |                |
|   |               |                    |                 | <b>2020</b>                                      | <b>2030</b>    | <b>2040</b>    | <b>2050</b>    | <b>2060</b>    | <b>2070</b>    |
| GULF COAST AQUIFER                            | MONTGOMERY    | SAN JACINTO        | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| GULF COAST AQUIFER                            | POLK          | TRINITY            | FRESH           | 18,382   | 18,117         | 17,856         | 17,661         | 17,488         | 17,335         |
| GULF COAST AQUIFER                            | SAN JACINTO   | SAN JACINTO        | FRESH           | 8,711  | 8,614          | 8,536          | 8,439          | 8,352          | 8,271          |
| GULF COAST AQUIFER                            | SAN JACINTO   | TRINITY            | FRESH           | 6,725  | 6,599          | 6,499          | 6,365          | 6,245          | 6,135          |
| GULF COAST AQUIFER                            | WALKER        | SAN JACINTO        | FRESH           | 5,831  | 5,777          | 5,761          | 5,745          | 5,729          | 5,715          |
| GULF COAST AQUIFER                            | WALKER        | TRINITY            | FRESH           | 7,055  | 7,079          | 7,022          | 7,032          | 7,030          | 7,026          |
| GULF COAST AQUIFER                            | WALLER        | BRAZOS             | FRESH           | 3,311  | 2,674          | 1,974          | 1,336          | 821            | 333            |
| GULF COAST AQUIFER                            | WALLER        | SAN JACINTO        | FRESH           | 8,188  | 7,489          | 6,681          | 5,876          | 5,051          | 4,495          |
| QUEEN CITY AQUIFER                            | LEON          | BRAZOS             | FRESH           | 122  | 120            | 119            | 112            | 105            | 100            |
| QUEEN CITY AQUIFER                            | LEON          | TRINITY            | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| QUEEN CITY AQUIFER                            | MADISON       | BRAZOS             | FRESH           | 1  | 1              | 1              | 1              | 1              | 1              |
| QUEEN CITY AQUIFER                            | MADISON       | TRINITY            | FRESH           | 320  | 287            | 256            | 215            | 171            | 76             |
| QUEEN CITY AQUIFER                            | TRINITY       | TRINITY            | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| QUEEN CITY AQUIFER                            | WALKER        | TRINITY            | FRESH           | 167  | 167            | 167            | 167            | 167            | 167            |
| SAN BERNARD RIVER ALLUVIUM AQUIFER            | AUSTIN        | BRAZOS-COLORADO    | FRESH           | 520  | 520            | 520            | 520            | 520            | 520            |
| SAN JACINTO RIVER ALLUVIUM AQUIFER            | WALKER        | SAN JACINTO        | FRESH           | 1,450  | 1,450          | 1,450          | 1,450          | 1,450          | 1,450          |
| SPARTA AQUIFER                                | LEON          | BRAZOS             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SPARTA AQUIFER                                | LEON          | TRINITY            | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SPARTA AQUIFER                                | MADISON       | BRAZOS             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SPARTA AQUIFER                                | MADISON       | TRINITY            | FRESH           | 413  | 365            | 317            | 254            | 187            | 133            |
| SPARTA AQUIFER                                | TRINITY       | TRINITY            | FRESH           | 302  | 302            | 302            | 302            | 302            | 302            |
| SPARTA AQUIFER                                | WALKER        | SAN JACINTO        | FRESH           | 266  | 266            | 266            | 266            | 266            | 266            |
| SPARTA AQUIFER                                | WALKER        | TRINITY            | FRESH           | 2,084  | 2,084          | 2,084          | 2,084          | 2,084          | 2,084          |
| TRINITY RIVER ALLUVIUM AQUIFER                | WALKER        | TRINITY            | FRESH           | 3,913  | 3,913          | 3,913          | 3,913          | 3,913          | 3,913          |
| YEGUA-JACKSON AQUIFER                         | LEON          | TRINITY            | FRESH           | 4  | 4              | 4              | 4              | 4              | 4              |
| YEGUA-JACKSON AQUIFER                         | MADISON       | BRAZOS             | FRESH           | 63   | 63             | 63             | 63             | 63             | 63             |
| YEGUA-JACKSON AQUIFER                         | MADISON       | TRINITY            | FRESH           | 790  | 749            | 710            | 657            | 601            | 596            |
| YEGUA-JACKSON AQUIFER                         | POLK          | TRINITY            | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| YEGUA-JACKSON AQUIFER                         | TRINITY       | TRINITY            | FRESH           | 1,999  | 1,997          | 1,999          | 2,001          | 1,999          | 1,996          |
| YEGUA-JACKSON AQUIFER                         | WALKER        | SAN JACINTO        | FRESH           | 351  | 351            | 351            | 351            | 351            | 351            |
| YEGUA-JACKSON AQUIFER                         | WALKER        | TRINITY            | FRESH           | 2,562  | 2,525          | 2,499          | 2,470          | 2,444          | 2,422          |
| <b>GROUNDWATER TOTAL SOURCE WATER BALANCE</b> |               |                    |                 | <b>152,501</b>                                   | <b>147,987</b> | <b>143,875</b> | <b>140,372</b> | <b>137,195</b> | <b>134,566</b> |
| <b>REGION H</b>                               |               |                    |                 |  |                |                |                |                |                |
| <b>REUSE</b>                                  | <b>COUNTY</b> | <b>BASIN</b>       | <b>SALINITY</b> | <b>SOURCE WATER BALANCE (ACRE-FEET PER YEAR)</b> |                |                |                |                |                |
|   |               |                    |                 | <b>2020</b>                                      | <b>2030</b>    | <b>2040</b>    | <b>2050</b>    | <b>2060</b>    | <b>2070</b>    |
| DIRECT REUSE                                  | FORT BEND     | SAN JACINTO-BRAZOS | FRESH           | 808  | 1,891          | 3,289          | 5,200          | 7,170          | 7,170          |

**SOURCE WATER BALANCE (AVAILABILITY - WUG SUPPLY)**

| <b>REGION H</b>                                  |               |                    |                 |  |             |             |             |             |             |
|--|---------------|--------------------|-----------------|--|-------------|-------------|-------------|-------------|-------------|
| <b>REUSE</b>                                     | <b>COUNTY</b> | <b>BASIN</b>       | <b>SALINITY</b> | <b>SOURCE WATER BALANCE (ACRE-FEET PER YEAR)</b> |             |             |             |             |             |
|  |               |                    |                 | <b>2020</b>                                      | <b>2030</b> | <b>2040</b> | <b>2050</b> | <b>2060</b> | <b>2070</b> |
| DIRECT REUSE   ALVIN                             | BRAZORIA      | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   BACLIFF MUD                       | GALVESTON     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   CHIMNEY HILL MUD                  | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   COUNTY-OTHER                      | FORT BEND     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   COUNTY-OTHER                      | GALVESTON     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   COUNTY-OTHER                      | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   COUNTY-OTHER                      | HARRIS        | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   FORT BEND COUNTY MUD #25          | FORT BEND     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   FREEPORT                          | BRAZORIA      | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   GALVESTON                         | GALVESTON     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   HARRIS COUNTY MUD #11             | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   HOUSTON                           | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   LA PORTE                          | HARRIS        | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   LAKE JACKSON                      | BRAZORIA      | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   LEAGUE CITY                       | GALVESTON     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   MANUFACTURING                     | BRAZORIA      | BRAZOS             | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   MANUFACTURING                     | FORT BEND     | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   MANUFACTURING                     | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   MANUFACTURING                     | LEON          | TRINITY            | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   MANVEL                            | BRAZORIA      | SAN JACINTO-BRAZOS | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   PANORAMA VILLAGE                  | MONTGOMERY    | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   RIVER PLANTATION MUD              | MONTGOMERY    | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   ROSENBERG                         | FORT BEND     | BRAZOS             | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   SOUTH HOUSTON                     | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   THE WOODLANDS                     | MONTGOMERY    | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| DIRECT REUSE   TRINITY BAY CONSERVATION DISTRICT | CHAMBERS      | NECHES-TRINITY     | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| INDIRECT REUSE   HOUSTON                         | HARRIS        | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |
| INDIRECT REUSE   SJRA                            | HARRIS        | SAN JACINTO        | FRESH           | 14,944   | 14,944      | 14,944      | 14,944      | 14,944      | 14,944      |
| INDIRECT REUSE   THE WOODLANDS                   | MONTGOMERY    | SAN JACINTO        | FRESH           | 0  | 0           | 0           | 0           | 0           | 0           |

**SOURCE WATER BALANCE (AVAILABILITY - WUG SUPPLY)**

| <b>REUSE TOTAL SOURCE WATER BALANCE</b>         |               |                     |                 | <b>15,752</b>                                    | <b>16,835</b>  | <b>18,233</b>  | <b>20,144</b>  | <b>22,114</b>  | <b>22,114</b>  |
|---|---------------|---------------------|-----------------|--|----------------|----------------|----------------|----------------|----------------|
| <b>REGION H</b>                                 |               |                     |                 |  |                |                |                |                |                |
| <b>SURFACE WATER</b>                            | <b>COUNTY</b> | <b>BASIN</b>        | <b>SALINITY</b> | <b>SOURCE WATER BALANCE (ACRE-FEET PER YEAR)</b> |                |                |                |                |                |
|   |               |                     |                 | <b>2020</b>                                      | <b>2030</b>    | <b>2040</b>    | <b>2050</b>    | <b>2060</b>    | <b>2070</b>    |
| BRAZOS RUN-OF-RIVER                             | BRAZORIA      | BRAZOS              | FRESH           | 9,743  | 10,341         | 10,939         | 11,537         | 12,135         | 12,735         |
| BRAZOS RUN-OF-RIVER                             | FORT BEND     | BRAZOS              | FRESH           | 23,042   | 24,329         | 25,616         | 26,903         | 28,190         | 29,481         |
| BRAZOS RUN-OF-RIVER                             | WALLER        | BRAZOS              | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| BRAZOS-COLORADO RUN-OF-RIVER                    | BRAZORIA      | BRAZOS-COLORADO     | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| CONROE LAKE/RESERVOIR                           | RESERVOIR     | SAN JACINTO         | FRESH           | 43,431   | 42,671         | 41,911         | 41,151         | 40,391         | 39,631         |
| HOUSTON LAKE/RESERVOIR                          | RESERVOIR     | SAN JACINTO         | FRESH           | 66,557   | 24,259         | 0              | 0              | 0              | 0              |
| LIVINGSTON-WALLISVILLE LAKE/RESERVOIR SYSTEM    | RESERVOIR     | TRINITY             | FRESH           | 382,927  | 369,385        | 364,040        | 342,875        | 342,875        | 342,875        |
| NECHES-TRINITY RUN-OF-RIVER                     | CHAMBERS      | NECHES-TRINITY      | FRESH           | 2,663  | 2,663          | 2,663          | 2,663          | 2,663          | 2,663          |
| SAN JACINTO RUN-OF-RIVER                        | HARRIS        | SAN JACINTO         | FRESH           | 5,785  | 5,785          | 0              | 0              | 0              | 0              |
| SAN JACINTO RUN-OF-RIVER                        | MONTGOMERY    | SAN JACINTO         | FRESH           | 116  | 116            | 116            | 116            | 116            | 116            |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                 | BRAZORIA      | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                 | FORT BEND     | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                 | GALVESTON     | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| SAN JACINTO-BRAZOS RUN-OF-RIVER                 | HARRIS        | SAN JACINTO-BRAZOS  | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY RUN-OF-RIVER                            | CHAMBERS      | TRINITY             | FRESH           | 1,199  | 1,199          | 1,199          | 1,199          | 1,199          | 1,199          |
| TRINITY RUN-OF-RIVER                            | LEON          | TRINITY             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY RUN-OF-RIVER                            | LIBERTY       | TRINITY             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY RUN-OF-RIVER                            | MADISON       | TRINITY             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY RUN-OF-RIVER                            | POLK          | TRINITY             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY RUN-OF-RIVER                            | WALKER        | TRINITY             | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY-SAN JACINTO RUN-OF-RIVER                | CHAMBERS      | TRINITY-SAN JACINTO | SALINE          | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY-SAN JACINTO RUN-OF-RIVER                | CHAMBERS      | TRINITY-SAN JACINTO | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY-SAN JACINTO RUN-OF-RIVER                | HARRIS        | TRINITY-SAN JACINTO | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| TRINITY-SAN JACINTO RUN-OF-RIVER                | LIBERTY       | TRINITY-SAN JACINTO | FRESH           | 0  | 0              | 0              | 0              | 0              | 0              |
| <b>SURFACE WATER TOTAL SOURCE WATER BALANCE</b> |               |                     |                 | <b>535,463</b>                                   | <b>480,748</b> | <b>446,484</b> | <b>426,444</b> | <b>427,569</b> | <b>428,700</b> |
| <b>REGION H TOTAL SOURCE WATER BALANCE</b>      |               |                     |                 | <b>703,716</b>                                   | <b>645,570</b> | <b>608,592</b> | <b>586,960</b> | <b>586,878</b> | <b>585,380</b> |



## Agenda Item 13

Receive presentation from the Consultant Team regarding the draft copy of Chapter 1: Description of Region for inclusion in the 2016 Region H Regional Water Plan.



## Chapter 1: Description of Region



- DRAFT document
- Outline
  - Regional Water Planning in Texas
  - Description of Region H
  - Population and Water Demand in Region H
  - Region H Water Supply Sources and Providers
  - Water Quality and Natural Resources
  - Existing Water Planning
- No action today – open for comment





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## LIST OF APPENDICES

Appendix 1A– Selected Bibliography by Topic

## ACRONYMS AND ABBREVIATIONS

|        |  |
|--------|--|
| AWWA   | American Water Works Association                                 |
| BBASC  | Basin and Bay Area Stakeholder Committee                         |
| BBEST  | Basin and Bay Expert Science Team                                |
| BRA    | Brazos River Authority   |
| COH    | City of Houston  |
| CRP    | Clean Rivers Program   |
| DFCs   | Desired Future Conditions  |
| EPA    | Environmental Protection Agency                                  |
| GCD    | Groundwater Conservation Districts                               |
| GMA    | Groundwater Management Areas                                     |
| IWA    | International Water Association                                  |
| MAG    | Modeled Available Groundwater                                    |
| MCL    | Maximum Contaminant Level  |
| RHWPG  | Region H Water Planning Group                                    |
| RWPG   | Regional Water Planning Group                                    |
| SJRA   | San Jacinto River Authority                                      |
| TCEQ   | Texas Commission on Environmental Quality                        |
| TPWD   | Texas Parks and Wildlife Department                              |
| TRA    | Trinity River Authority  |
| TTWP   | Trans-Texas Water Program  |
| TWDB   | Texas Water Development Board                                    |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WAMs   | Water Availability Models  |
| WRAP   | Water Resources Analysis Package                                 |
| WUGs   | Water User Groups  |
| WWP    | Wholesale Water Provider   |

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## **1.0 DESCRIPTION OF REGION**

### **1.1 REGIONAL WATER PLANNING IN TEXAS**

In 1997 the State Legislature, through Senate Bill 1, determined that a Texas State Water Plan for the 2000 - 2050 timeframe would be developed through a regional water planning approach. To accomplish this task, the Texas Water Development Board (TWDB) divided the state into 16 regional water planning areas and appointed representational Regional Water Planning Groups (RWPG) that have guided the development of each region's plan. In 2001, a new set of rules and guidelines were enacted through Senate Bill 2. With the help of the Senate Bill 2, the 2002 State Water Plan received enormous public involvement compared to previous plans. The planning process is cyclic, with updated Regional and State Water Plans produced every five years. The 2011 Region H Water Plan and the 2012 State Water Plan were created during the last planning cycle.

### **1.2 DESCRIPTION OF REGION H**

Region H, located along the upper Texas coast, consists of all or part of 15 counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Leon, Liberty, Madison, Montgomery, Polk, San Jacinto, Trinity, Walker and Waller. The eastern portions of Trinity and Polk counties are included in the Region I planning area. The Region spans three river and four coastal basins in southeast Texas. Region H encompasses the San Jacinto River basin, the lower portions of the Trinity and Brazos River Basins, and includes part or all of the Brazos-Colorado, the San Jacinto-Brazos, the Trinity-San Jacinto and the Neches-Trinity coastal basins. This area includes the Galveston and Trinity Bay estuaries, the urbanized, rapidly growing Houston-Galveston Metropolitan Area encompassing Brazoria-Harris-Galveston-Ft. Bend and Montgomery counties, the coastal port communities of Galveston and Freeport, and agricultural areas in Austin, Chambers, Leon, Liberty, Madison, Polk, San Jacinto, Trinity, Walker and Waller counties. **Figure 1-1** is a map of the Region H area. The Region H Water Planning Group (RHWPG) is a 26 member committee representing the diverse interests of the Region. **Table 1-1** lists the RHWPG membership.



**Table 1-1: Member Information for the Region H Water Planning Group**

| <b>Executive Committee</b>   |   |
|--|---|
| <b>Office</b>  | <b>Incumbent</b>  |
| Chair  | Mark Evans  |
| Vice-Chair   | Ron J. Neighbors  |
| Secretary  | Jace Houston  |
| At-Large   | John R. Bartos  |
| At-Large   | Vacant  |
| <b>Offices</b>   |   |
| <b>Office</b>  | <b>Organization</b>   |
| Administrative   | San Jacinto River Authority<br>P.O. Box 329<br>Conroe, Texas 77305-0329<br>Phone: (936)-588-1111<br>Fax: (936) 588-1114 |
| Political Subdivision  | San Jacinto River Authority<br>P.O. Box 329<br>Conroe, Texas 77305-0329<br>Phone: (936)-588-1111<br>Fax: (936) 588-1114 |
| Notes:<br>Administrative Office manages records.<br>Political Subdivision is the entity eligible to apply for State grant funds. |   |

**Table 1-1. (continued)**

| <b>Voting Membership</b>      |   |                            |                                      |
|-------------------------------|---|----------------------------|--------------------------------------|
| <b>Category</b>               | <b>Member</b>                           | <b>Organization</b>        | <b>County (Location of Interest)</b> |
| Agriculture                   | Robert Bruner<br>03/1998-Present        | Rancher                    | Walker                               |
|                               | Pudge Willcox<br><b>02/2007-Present</b> | CLCND                      | Chambers                             |
| Counties                      | John Blount, P.E.<br>09/2004-Present    | Harris County              | Harris                               |
|                               | Mark Evans<br>03/1998-Present           | Trinity County             | Trinity                              |
|                               | Art Henson<br>11/2009-Present           | Madison County             | Madison                              |
| Electric Generation Utilities | Gene Fisseler<br>11/2013-Present        | NRG Energy                 | Harris                               |
| Environmental                 | John R. Bartos<br>03/1998-Present       | Galveston Bay Foundation   | Harris                               |
| GMA 12                        | David Bailey<br>12/2011-Present         | Mid-East Texas GCD         | GMA 12 Counties                      |
| GMA 14                        | Kathy Jones<br>12/2011-Present          | Lone Star GCD              | GMA 14 Counties                      |
| Industries                    | Gená Leathers<br>09/2009-Present        | Dow Chemicals Company      | Brazoria                             |
|                               |   | Vacant                     |                                      |
| Municipalities                | Robert Istre<br>07/2003-Present         | Gulf Coast Water Authority | Galveston                            |
|                               | Jun Chang<br>11/2008-Present            | City of Houston            | Harris, Fort Bend, Montgomery        |
| Public                        | Carl Masteron<br>12/2011-Present        | General Public             | Harris                               |

| Voting Membership |                                       |  |  |
|-------------------|---------------------------------------|--|--|
| River Authorities | John Hoffmann<br>02/2009-Present      | Brazos River Authority                       | McLennan (service in west and southwest portion of region) |
|                   | Jace Houston<br>09/2011-Present       | San Jacinto River Authority                  | Montgomery (service in central portion of region)          |
|                   | J. Kevin Ward<br>06/2012-Present      | Trinity River Authority                      | Tarrant (service in east and southeast portion of region)  |
| Small Business    | Bob Hebert<br><b>05/2007-Present</b>  | Robert Hebert and Associates                 | Fort Bend  |
|                   | John Howard<br>05/2007-Present        | Howard Farms                                 | Austin   |
|                   | Steve Tyler<br>03/1998-Present        | Steve Tyler Creative Solutions               | Trinity  |
| Water Districts   | Marvin Marcell<br>07/1998-Present     | Fort Bend Subsidence District                | Fort Bend  |
|                   | Ron J. Neighbors<br>03/1998-Present   | Harris-Galveston Subsidence District         | Harris, Galveston  |
|                   | Jimmie Schindewolf<br>11/2005-Present | North Harris County Regional Water Authority | Harris   |
| Water Utilities   | James Morrison<br>03/1998-Present     | Walker County Rural WSC                      | Walker   |
|                   | William Teer, P.E.<br>03/1998-Present | Southeast WSC                                | Leon   |
|                   | Vacant                                |  |  |

| Non-Voting Membership |  |
|-----------------------|--|
| Member                | Organization                                 |
| David Alders          | East Texas Water Planning Group              |
| Wayne Ahrens          | West Harris County Regional Water Authority  |
| Jennifer Bailey       | Texas Dept of Agriculture                    |
| Bill Balboa           | Texas Parks & Wildlife Dept.                 |
| Rick Ganglufft        | Lower Colorado Regional Water Planning Group |
| Scott Hall            | Lower Neches Valley Authority                |
| Larry Jacobs          | Montgomery County Soil and Water Cons Dist.  |
| Temple McKinnon       | Texas Water Development Board                |
| Dave Scholler         | North Fort Bend Water Authority              |
| Wayne Wilson          | Brazos G Water Planning Group                |

### 1.2.1 Governmental Authorities in Region H

While municipal and county governments are the primary governmental entities, there are three regional councils of government represented in the region. The Houston-Galveston Area Council of Governments represents thirteen counties in the central and eastern part of the planning area: Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Wharton, Walker and Waller Counties. The Brazos Valley Council of Governments includes Leon and Madison counties, the two northwestern counties of the region. The Deep East Texas Council of Governments represents Trinity, Polk and San Jacinto counties located in the

northeastern part of Region H.

In addition to these regional councils there are several other entities with regulatory or management authority of importance to long range water planning for the region. The State exercises certain responsibilities over water planning, supply and quality through the TWDB, the Texas Commission on Environmental Quality (TCEQ), and Texas Parks and Wildlife Department (TPWD). Points of contact for these state agencies are listed in **Table 1-2**. Three river authorities manage surface water supply in the region's three river basins: the Brazos River Authority, the San Jacinto River Authority and the Trinity River Authority. There are eleven soil and water conservation districts within Region H. Five groundwater conservation districts (GCD) in Region H have the authority to regulate groundwater withdrawals. The Harris-Galveston Subsidence District and the Fort Bend Subsidence District have existed for some time. Three new districts were formed in 2001: the Lone Star GCD in Montgomery County, the Bluebonnet GCD, which includes Austin, Grimes and Walker Counties, and the Mid-East Texas GCD which includes Leon, Madison and Freestone Counties. In November 2005, the Brazoria County Groundwater Conservation District was confirmed by voters in Brazoria County. Region H also includes five Regional Water Authorities: Central Harris County Regional Water Authority, North Harris County Regional Water Authority, West Harris County Regional Water Authority, North Channel Water Authority, and North Fort Bend Water Authority.

**Table 1-2: State Agencies with Oversight of Water Planning**

|   |
|---|
| <b>Texas Water Development Board</b>  |
| <p><b>Kevin Patteson</b><br/>                 Executive Administrator<br/>                 PO Box 13231, 1700 N. Congress Ave., Austin, TX 78711-3231<br/>                 (512) 463-7847</p>                         |
| <p><b>Jeff Walker</b><br/>                 Deputy Executive Administrator, Office of Planning<br/>                 PO Box 13231, 1700 N. Congress Ave., Austin, TX 78711-3231<br/>                 (512) 475-0933</p> |
| <b>Texas Commission on Environmental Quality (plan review)</b>  |
| <p><b>Richard Hyde</b><br/>                 Executive Director<br/>                 12500 Park 35 Circle, Austin, TX 78753<br/>                 (512) 239-3900</p>  |
| <b>Texas Parks and Wildlife Department (plan review)</b>  |
| <p><b>Carter Smith</b><br/>                 Executive Director<br/>                 4200 Smith School Road, Austin, TX 78744-3291<br/>                 (512) 389-4800</p>   |

## 1.2.2 General Economic Conditions

Two thirds of all U.S. petrochemical production and almost a third of the nation's petroleum industries are located in Region H. The Port of Houston handles over 200 million tons of cargo annually approximately \$178.5 billion to the state economy. In 2014, the Houston area employed 3.1 million people. Region H is generally characterized with urbanized land uses and broad-based economic development. In areas outside of the urban core, agriculture dominates economic activities. The region supports six primary economic sectors: services, manufacturing, transportation, government, agriculture, and fishing.

The service sector employs the greatest number of people in Region H. The most common service industries include: accounting, law, banking, computer software, engineering, healthcare, and telecommunications. Medical specialties are concentrated at the Texas Medical Center in Houston and the University of Texas Medical Branch in Galveston. Tourism is also a major industry for both Galveston and Houston. Galveston alone drew more than 5.7 million tourists a year generating approximately \$900 million dollars in 2012.

The region's manufacturing industry is based on the historically important energy industries. Petroleum refining and chemical production are the largest two industries in the region. Technology and biotechnology firms have contributed to the diversification of the region's economic base. Petro-chemical, chemical and pulp and paper industries are major employers outside of the urban core of the region.

The transportation industry includes the Port of Houston and the Houston Ship Channel, the second largest port in the nation based on total tonnage. A well-developed highway system and rail connections support this activity. The Gulf Intracoastal Waterway connects the ports of Freeport, Galveston, Houston and Texas City.

Government sector jobs are disbursed throughout the region, with the Texas Department of Corrections a major employer at prisons located in the region. The Johnson Space Center has program management responsibility for the International Space Station, ensuring continued economic importance into the next decade. There are numerous colleges in the region, and local school districts continue to grow and expand as population increases.

The agricultural industry, while providing limited numbers of jobs, contributes significantly to the



region's economy. Major agricultural crops in the region include rice, soybeans, vegetables, and hay. Cattle are the principal livestock, followed by horses and hogs.

Fishing, both commercial and sport, within Galveston Bay and other major bodies of surface water including Lake Conroe, Lake Houston, and Lake Livingston are major contributors to the local economic base. One third of the state's commercial fishing income and one half of the state's expenditures for recreation fishing come from Galveston Bay. Oysters, shrimp, and finfish are important commercial species in the bay.

### 1.3 POPULATION AND WATER DEMAND IN REGION H

Based on data from the 2000 Census, the first Regional Water Plan reflected a regional population of approximately 4,898,948. Based on the 2010 census, the population for Region H had grown to approximately 6,093,967 in the year 2010. Approximately 59 percent (3,592,506) of this population resides in 125 cities and towns with populations of over 500 persons; additionally, Regional Water Authorities and water utilities of over 500 persons include approximately 1,792,152 people, or 29 percent of the Region H population. The balance of the population resides in smaller communities or the unincorporated portions of the 15 counties of the region. Seventeen of the cities in the Region have populations in excess of 25,000. **Table 1-3** lists the Water User Groups (WUGs) with over 25,000 persons and their 2010 census population and associated reported municipal use.

**Table 1-3: WUGs with Populations Over 25,000**

| WUG           | 2010 Population | 2010 Reported Municipal Use (ac-ft/yr) |
|---------------|-----------------|--|
| Baytown       | 71,802          | 9,751                                  |
| Conroe        | 56,207          | 9,027                                  |
| Deer Park     | 32,010          | 4,498                                  |
| Friendswood   | 35,805          | 4,473                                  |
| Galveston     | 47,743          | 15,538                                 |
| Houston       | 2,100,263       | 321,436                                |
| Huntsville    | 38,548          | 7,296                                  |
| La Porte      | 33,800          | 3,801                                  |
| League City   | 83,560          | 10,434                                 |
| Missouri City | 67,358          | 8,184                                  |
| Pasadena      | 149,043         | 18,859                                 |
| Pearland      | 91,252          | 10,157                                 |
| Sugar Land    | 78,817          | 17,821                                 |
| Texas City    | 45,099          | 6,127                                  |
| The Woodlands | 92,659          | 17,690                                 |

Source: Texas Water Development Board

The 2010 total county populations and reported 2010 water use is listed in **Table 1-4**. Detailed information on local, county, and regional population estimates and projections for the 50-year planning period are included in the Chapter 2 of this plan. In 2010, municipal uses accounted for 52 percent of the region's total reported water use, an increase from 41 percent in 2000. In addition to municipal water use, year 2000 estimates of other water use types were prepared by the TWDB for use in the planning process.

**Table 1-4: County Population and Municipal Water Demand**

| County                | 2010 Population  | 2010 Reported Municipal Use (ac-ft/yr) |
|-----------------------|------------------|--|
| Austin                | 28,417           | 4,351                                  |
| Brazoria              | 313,166          | 44,286                                 |
| Chambers              | 35,096           | 5,927                                  |
| Fort Bend             | 585,375          | 95,331                                 |
| Galveston             | 291,309          | 47,646                                 |
| Harris                | 4,092,459        | 623,341                                |
| Leon                  | 16,801           | 2,818                                  |
| Liberty               | 75,643           | 10,794                                 |
| Madison               | 13,664           | 3,316                                  |
| Montgomery            | 455,746          | 76,708                                 |
| Polk <sup>2</sup>     | 37,569           | 7,302                                  |
| San Jacinto           | 26,384           | 2,963                                  |
| Trinity <sup>2</sup>  | 11,272           | 2,108                                  |
| Walker                | 67,861           | 12,222                                 |
| Waller                | 43,205           | 5,577                                  |
| <b>Region H Total</b> | <b>6,093,967</b> | <b>944,690</b>                         |

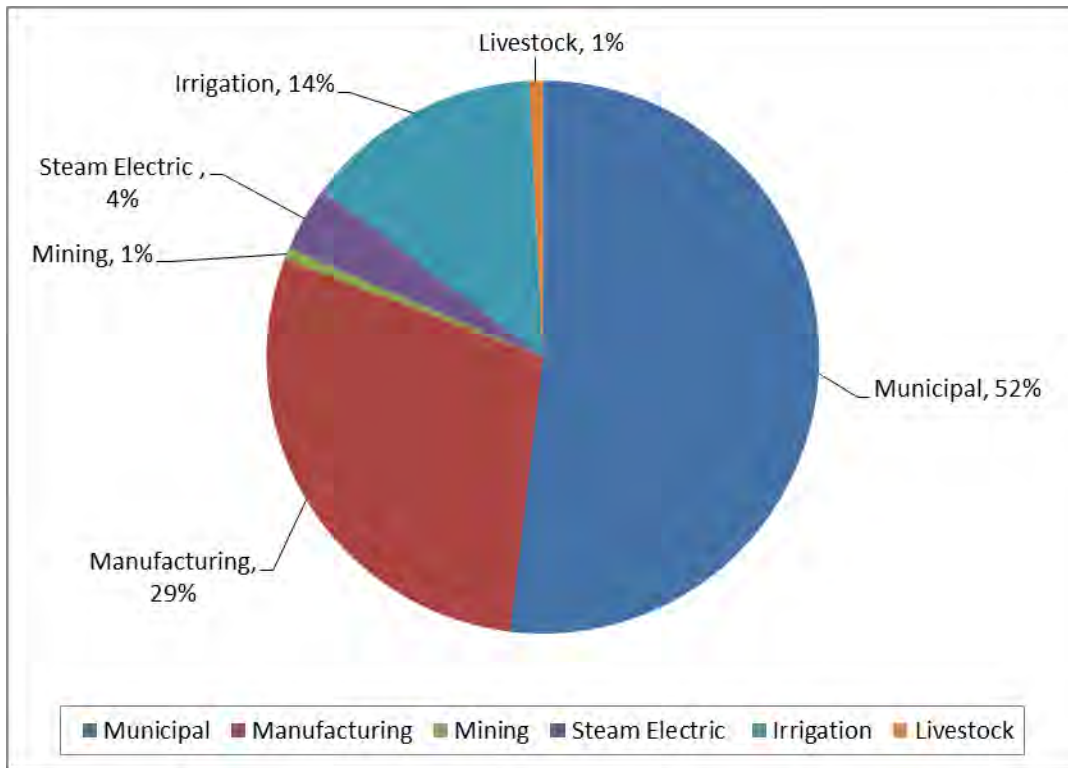
Source: Texas Water Development Board

<sup>2</sup> Includes portion of the county in the Region H area and adjacent Region I.

Manufacturing uses accounted for 29 percent of the region's total use in 2010, compared to 30 percent in 2000. Irrigation uses represented 14 percent of the region's total 2006 reported use, a decline from the 22 percent reported in 2000. **Figure 1-2** illustrates the distribution of 2010 water demand by use type. Total water demands for each county are listed in **Table 1-5**.



**Figure 1-2: Percentage of 2010 Total Water Demand by Use**



**Table 1-5: Reported 2010 Non-Municipal Water Use (acre-feet per year)**

| County                | MFR            | MIN          | POW           | IRR            | STK           | Total          |
|-----------------------|----------------|--------------|---------------|----------------|---------------|----------------|
| Austin                | 106            | 14           | 0             | 3,986          | 1,153         | 106            |
| Brazoria              | 183,733        | 760          | 0             | 77,889         | 1,501         | 183,733        |
| Chambers              | 19,074         | 10           | 607           | 60,300         | 528           | 19,074         |
| Fort Bend             | 3,811          | 781          | 59,057        | 26,940         | 1,036         | 3,811          |
| Galveston             | 20,571         | 524          | 33            | 2,291          | 332           | 20,571         |
| Harris                | 260,334        | 5,099        | 4,652         | 2,874          | 1,594         | 260,334        |
| Leon                  | 544            | 744          | 0             | 31             | 1,729         | 544            |
| Liberty               | 160            | 288          | 0             | 43,200         | 1,056         | 160            |
| Madison               | 0              | 13           | 0             | 10             | 973           | 0              |
| Montgomery            | 1,609          | 811          | 3,258         | 1,050          | 635           | 1,609          |
| Polk <sup>2</sup>     | 238            | 18           | 0             | 595            | 441           | 1,292          |
| San Jacinto           | 5              | 10           | 0             | 148            | 566           | 5              |
| Trinity <sup>2</sup>  | 0              | 11           | 0             | 0              | 467           | 478            |
| Walker                | 246            | 13           | 0             | 570            | 735           | 246            |
| Waller                | 56             | 8            | 0             | 22,044         | 1,463         | 56             |
| <b>Region H Total</b> | <b>490,487</b> | <b>5,099</b> | <b>67,607</b> | <b>241,928</b> | <b>14,209</b> | <b>837,123</b> |

Source: Texas Water Development Board

<sup>2</sup> Includes the portion of the county in Region H.

Categories: Manufacturing (MFR), Irrigation (IRR), Mining (MIN), Steam Electric Power (POW) and Livestock (STK)

### 1.3.1 Major Demand Centers

Major demand centers are locations of water uses that require a significant portion of the region's water supply. As would be expected, major urban areas with large populations and major industrial development are typically major demand centers. In Region H major demand centers are defined for municipal, manufacturing and irrigation uses as having a reported use, by use type, exceeding 25,000 acre-feet for counties and 10,000 acre-feet for cities.

Houston has the greatest overall water demand in the region, as shown in **Table 1-6**, followed closely by remaining demands in Harris County. The next highest demands are Fort Bend, Montgomery, Galveston, and Brazoria Counties. Harris County and the City of Houston dominate municipal water use in Region H. The City of Houston used 321,463 acre-feet in the year 2010 or approximately 34 percent of the total regional municipal use. As shown in **Table 1-6**, Brazoria, Fort Bend, Galveston and Montgomery Counties are major demand centers with reported use in excess of 25,000 acre-feet in both 2000 and 2006. In addition to the City of Houston, municipalities identified as major demand centers (reported municipal demands in excess of 10,000 acre-feet) include the cities of Pasadena, Galveston, Baytown and Sugar Land.

**Table 1-6: Major Municipal Demand Centers**

| County/City                       | 2000 Municipal Use (acre-feet) | 2010 Municipal Use (acre-feet) |
|-----------------------------------|--------------------------------|--------------------------------|
| City of Houston                   | 347,947                        | 321,463                        |
| Harris County (excluding Houston) | 250,649                        | 301,878                        |
| Fort Bend County                  | 67,566                         | 95,331                         |
| Montgomery County                 | 51,193                         | 76,708                         |
| Galveston County                  | 44,544                         | 47,646                         |
| Brazoria County                   | 40,127                         | 44,286                         |
| Pasadena                          | 18,567                         | 18,859                         |
| Sugar Land                        | 5,959                          | 17,821                         |
| The Woodlands                     | *                              | 17,690                         |
| Galveston                         | 16,288                         | 15,538                         |
| League City                       | 6,617                          | 10,434                         |
| Pearland                          | 5,650                          | 10,157                         |

Source: Texas Water Development Board

\* The Woodlands was not reported as a WUG in 2000 survey.

The largest manufacturing demand center is Harris County, which used 260,334 acre-feet of water in 2010 (53 percent of the regional total). Two other major demand centers are identified: Brazoria

County, with reported 2010 manufacturing use of 183,733 acre-feet, and Galveston County with a reported 2010 manufacturing use of 20,571 acre-feet. The principal water using industries in the region are petroleum refining, chemical products and pulp and paper mills. The three largest manufacturing demand centers are shown in **Table 1-7**.

**Table 1-7: Major Manufacturing Demand Centers**

| County    | 2000 Manufacturing Use (acre-feet per year) | 2010 Manufacturing Use (acre-feet per year) |
|-----------|---|---|
| Brazoria  | 221,930                                     | 183,733                                     |
| Galveston | 35,381                                      | 20,571                                      |
| Harris    | 349,420                                     | 260,334                                     |

*Source: Texas Water Development Board*

The four largest irrigation demand centers are Brazoria, Chambers, Liberty and Fort Bend counties. **Table 1-8** highlights each county's reported 2000 and 2010 irrigation use. The major irrigated crops in the region are rice, soybeans, vegetables and cotton.

**Table 1-8: Major Irrigation Demand Centers**

| County    | 2000 Irrigation Use (acre-feet per year) | 2010 Irrigation Use (acre-feet per year) |
|-----------|--|--|
| Brazoria  | 149,188                                  | 77,889                                   |
| Chambers  | 117,777                                  | 60,300                                   |
| Fort Bend | 53,455                                   | 26,940                                   |
| Liberty   | 82,901                                   | 43,200                                   |

*Source: Texas Water Development Board*

Livestock and mining water use represent smaller demands in the Region H area. Mining water demands in Region H are associated primarily with oil and gas production.

### 1.3.2 Water User Group WUG Updates

The 2016 Region H Water Plan was updated to include additional WUGs based on changes in population estimates. WUGs are added when their population increases to 500 or more residents. Forty-three new entities were added to the WUG list based on population estimates for the year 2010, representation of regional systems, or other reasons. These new WUGs are listed below in **Table 1-9**.

**Table 1-9: New WUGs in 2016 Region H Water Plan**

| <b>County</b> | <b>WUG Name</b>                    |
|---------------|------------------------------------|
| Brazoria      | Brazoria County MUD #21            |
| Brazoria      | Brazoria County MUD #6             |
| Chambers      | Cove                               |
| Fort Bend     | Fort Bend County MUD #116          |
| Fort Bend     | Fort Bend County MUD #121          |
| Fort Bend     | Fort Bend County MUD #129          |
| Fort Bend     | Greatwood                          |
| Fort Bend     | Sienna Plantation                  |
| Fort Bend     | Weston Lakes                       |
| Harris        | Greenwood UD                       |
| Harris        | Harris County MUD #106             |
| Harris        | Harris County MUD #119             |
| Harris        | Harris County MUD #148 - Kingslake |
| Harris        | Harris County MUD #221             |
| Harris        | Harris County MUD #278             |
| Harris        | Harris County MUD #290             |
| Harris        | Harris County MUD #400 - West      |
| Harris        | Harris County MUD #49              |
| Harris        | Harris County MUD #96              |
| Harris        | Harris County WCID #74             |
| Harris        | Harris County WCID #96             |
| Harris        | Kings Manor MUD                    |
| Harris        | Kirkmont MUD                       |
| Harris        | Mount Houston Road MUD             |
| Harris        | Newport MUD                        |
| Harris        | North Channel Water Authority      |
| Harris        | Sagemeadow UD                      |
| Harris        | The Commons Water Supply Inc       |
| Leon          | Concord-Robbins WSC                |
| Leon          | Oakwood                            |
| Liberty       | Tarkington SUD                     |
| Liberty       | Woodland Hills Water Company       |
| Montgomery    | Benders Landing Water System       |
| Montgomery    | Dobbin-Plantersville WSC           |
| Montgomery    | Indigo Lake Water System           |
| Montgomery    | Kings Manor MUD                    |
| Montgomery    | Lake Windcrest Water System        |
| Montgomery    | Montgomery County MUD #15          |
| Montgomery    | Montgomery County MUD #83          |

| County     | WUG Name                  |
|------------|---------------------------|
| Montgomery | Montgomery County MUD #89 |
| Montgomery | Montgomery County MUD #94 |
| Montgomery | Westwood North WSC        |
| Waller     | G & W WSC                 |

## 1.4 REGION H WATER SUPPLY SOURCES AND PROVIDERS

Groundwater, surface water captured in reservoirs and run-of-river sources comprise the majority of the water supply within Region H. Reclaimed water and saline sources are additional supply sources utilized in Region H.

### 1.4.1 Groundwater Sources

Two major aquifers supply groundwater within the Region H area. The aquifer that furnishes the most groundwater within the area is the Gulf Coast aquifer. This aquifer is composed of the Evangeline, Chicot and Jasper formations and extends from near the Gulf Coast shoreline to approximately 100 to 120 miles inland, to Walker and Trinity counties. The other major aquifer in the study area is the Carrizo-Wilcox, which begins 115 to 125 miles inland and extends beyond the northern boundary of the region. There are also four minor aquifers in this part of the state: the Sparta and Queen City aquifers occur in Leon County, the southern part of Madison County and northern parts of Walker and Trinity Counties. In Leon and Madison Counties, they lie above the Carrizo-Wilcox Aquifer. The Yegua Formation and the Jackson Group comprise the Yegua-Jackson aquifer, located in parts of Madison, Walker, Trinity, and Polk Counties. The Brazos River alluvium occurs along the main stem of the Brazos as it passes through the region, except in Brazoria County. **Figure 1-3** and **Figure 1-4** illustrate these groundwater sources. Groundwater withdrawals accounted for approximately 34 percent of the total regional water supply in 2000 and approximately 37 percent in 2010.

Groundwater use is regulated in Harris, Galveston, and Fort Bend, and Montgomery Counties due to the potential for over-drafting of the Gulf Coast Aquifer. For these areas, the availability of groundwater is determined by the regulatory plans developed for each county or area in accordance with the goals of each regulating entity; the Harris-Galveston Subsidence District, the Fort Bend Subsidence District, and the Lone Star GCD. In addition, Groundwater Management Plans have been published for Austin, Brazoria, Leon, Madison, Polk, Trinity, Walker, and Waller Counties by the

Bluebonnet, Brazoria County, Mid-East Texas and Lower Trinity GCDs. The active GCDs and Subsidence Districts within Region H are shown on **Figure 1-5**.

Region H is divided into Groundwater Management Areas (GMAs) 11, 12 and 14. Trinity County lies within GMA 11. GMA 12 encompasses the areas of Leon and Madison Counties with all other Region H Counties falling within GMA 14. All three GMAs are currently in the process of updating their Desired Future Conditions (DFCs) for their relevant aquifers which will be used to determine the Modeled Available Groundwater (MAG) for incorporation into planning documents for the GCDs within each GMA.

#### 1.4.2 Surface Water Sources

Surface water sources in Region H are reservoir storage and run-of-river supply for the three rivers in the area: the Trinity, the San Jacinto, and the Brazos. There are no major springs located within Region H, although small springs and seeps supply base flows for some streams. Historically there were numerous small seeps identified throughout the region. Many of these have ceased flowing due to land use changes and groundwater pumping.

**Figure 1-6** illustrates the region's surface water sources. A selected bibliography of related references is included in **Appendix 1A**.



Figure 1-3: Region H Major Groundwater Sources

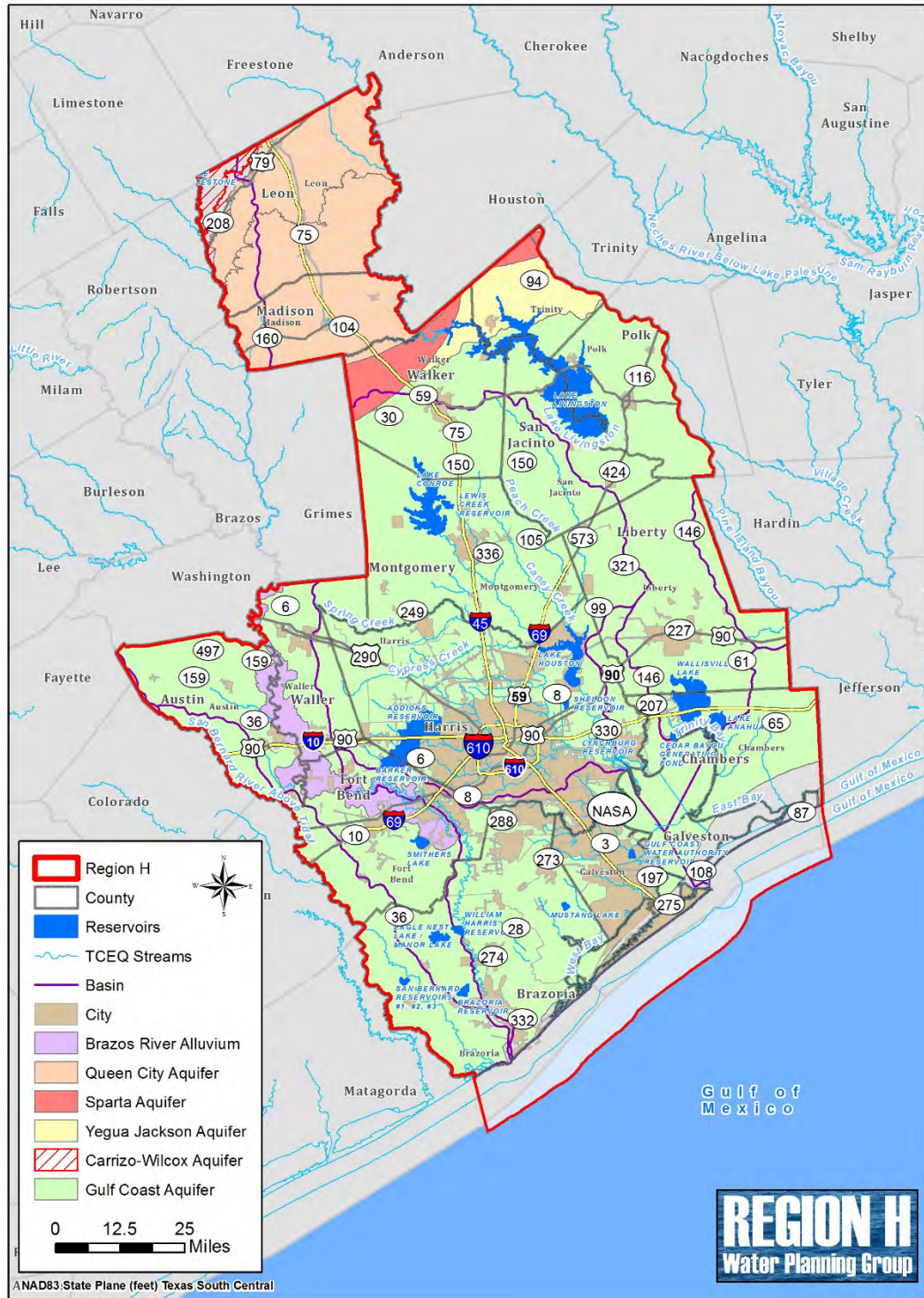
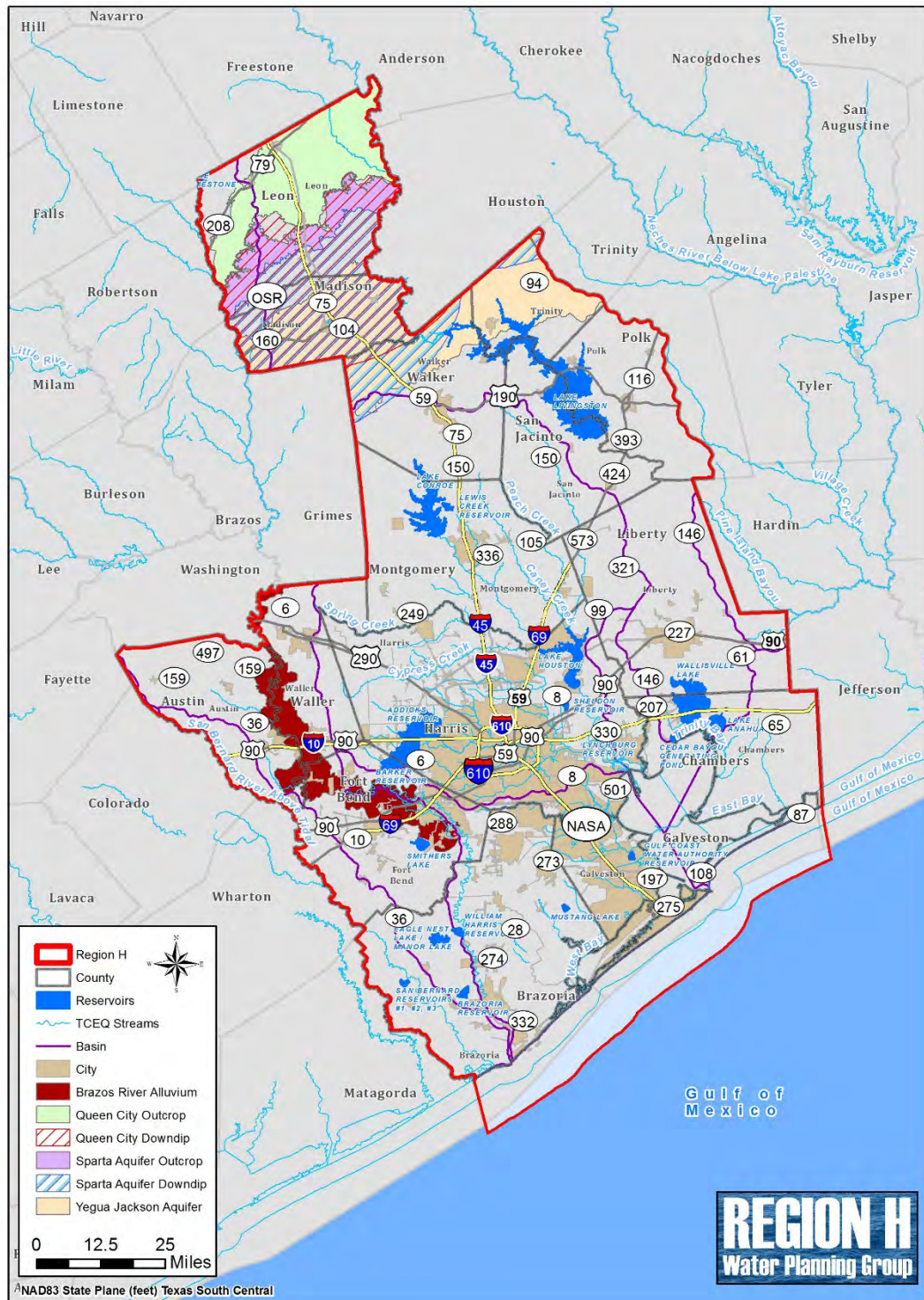




Figure 1-4: Region H Minor Groundwater Sources











### 1.4.3 Trinity River Basin

The Trinity River basin contains two water projects in Region H: Lake Livingston and the Wallisville Salt Water Barrier. The City of Houston and the Trinity River Authority (TRA) sponsored Lake Livingston's construction. It is operated by the TRA to meet the service demands of the City of Houston and other local users in the Trinity Basin and in the Neches-Trinity Coastal Basin. These two projects are operated as a system, using Livingston primarily to store water and Wallisville to control the migration of salt water from Trinity Bay. Lake Livingston and Wallisville permitted yields are 1,255,500 acre-feet/year and 89,700 acre-feet/year respectively. The sum of these permitted yields is the combined yield of the system (1,345,200 acre-feet per year). Additional permitted run-of-the-river water supplies downstream of Lake Livingston total 220,230 acre-feet per year. These supplies are associated with the water rights agreements established at the time of Lake Livingston permitting.

### 1.4.4 San Jacinto River Basin

The San Jacinto River Basin has two major public water supply reservoirs: Lake Houston and Lake Conroe. Lake Houston, with a permitted yield of 168,000 acre-feet/year, is owned and operated by the City of Houston for use in its service area. The City of Houston (COH) and San Jacinto River Authority (SJRA) jointly own Lake Conroe, with the COH holding two-thirds of the permitted rights (66,667 acre-feet/year) and SJRA holding one-third (33,333 acre-feet/year). SJRA manages Lake Conroe, providing supply to Montgomery and Harris County. The SJRA has an additional run-of-river water right of 55,000 acre-feet per year and an indirect reuse water right of 14,944 acre-ft per year that is physically diverted out of Lake Houston. Collectively, COH and SJRA also hold permits for additional yield from Lake Houston as well as an excess flows permit that may be diverted at Lake Houston.

### 1.4.5 Brazos River Basin

The Brazos River Authority (BRA) manages the water supply resources from 11 reservoirs within this basin. Several of these reservoirs are operated by BRA as a System Operation where commitments made to downstream demands can be met from any upstream reservoir using storage available in the system. The U.S. Army COE owns eight of these reservoirs, the City of Lubbock owns one reservoir, and BRA owns three reservoirs within the basin. In addition to the BRA water supply

reservoirs, there are several other reservoirs in the basin. While none of these reservoirs are located within the Region H area, supply from the system is committed in Region H.

The total Brazos Basin supply, including firm supplies from BRA's reservoirs and reliable yield from run-of-river permits in both Region G and H, is estimated at over 1,200,000 acre-feet per year. Approximately 151,907 acre-feet per year of firm supply from the BRA system is contracted for use in the Region H area. The reliable yield of run-of-river permits granted in Region H is estimated at approximately 418,311 acre-feet per year. Suppliers in the Brazos Basin include Dow Chemical with permitted diversions of 305,656 acre-feet per year. Dow diverts surface water from the Brazos River and enhances the reliability of their supplies through off-channel surface reservoirs as well as contracts with BRA for upstream supplies.

#### 1.4.6 San Jacinto – Brazos Coastal Basin

There are several significant water users within the San Jacinto-Brazos Coastal Basin supported by the run-of-river water supplies from the Brazos Basin. Suppliers include the Gulf Coast Water Authority which has historically owned water rights on the Brazos River with permitted diversions of 391,932 acre-feet per year. The estimated reliable yield of all GCWA rights including rights in the San Jacinto-Brazos Coastal Basin is 381,119 acre-feet per year. The GCWA also enhances the reliability of their surface water supplies through the use of off-channel surface reservoirs as well as contracts with BRA for upstream supplies.

#### 1.4.7 Use by Source

TWDB reports that Region H used 1,835,200 acre-feet of water in 2000. Of that, 619,549 acre-feet (34 percent) came from groundwater wells, and 1,215,651 acre-feet (66 percent) came from rivers and other surface sources. Similarly, the most recent water use estimates of groundwater and surface water use available from the TWDB show that in 2010, groundwater use equaled 650,988 acre-feet, approximately 37 percent of the water used in Region H. Surface water use was approximately 1,117,034 acre-feet, approximately 63 percent of the total Region H water use. Galveston and Harris Counties some of the most significant reductions in groundwater use over this period.

**Table 1-10** summarizes the groundwater and surface water usage for each county. **Table 1-11** lists

the estimated year 2070 reliable yields available from existing sources to Region H. Further information regarding the yield of major surface water rights in Region H is available in *Chapter 3 – Analysis of Current Water Supplies*.

**Table 1-10: County Water Use by Source**

| County               | 2000 Groundwater (acre-feet) | 2000 Surface Water (acre-feet) | 2000 Total Use (acre-feet) | 2010 Groundwater (acre-feet) | 2010 Surface Water (acre-feet) | 2010 Total Use (acre-feet) |
|----------------------|------------------------------|--------------------------------|----------------------------|------------------------------|--------------------------------|----------------------------|
| Austin               | 12,651                       | 3,000                          | 15,651                     | 8,797                        | 813                            | 9,610                      |
| Brazoria             | 34,641                       | 236,163                        | 270,804                    | 52,036                       | 256,134                        | 308,170                    |
| Chambers             | 4,219                        | 56,577                         | 60,796                     | 10,289                       | 76,156                         | 86,445                     |
| Fort Bend            | 97,339                       | 62,506                         | 159,845                    | 116,140                      | 70,816                         | 186,956                    |
| Galveston            | 8,631                        | 80,215                         | 88,846                     | 3,687                        | 67,711                         | 71,398                     |
| Harris               | 343,397                      | 731,891                        | 1,075,288                  | 316,456                      | 581,435                        | 897,891                    |
| Leon                 | 4,671                        | 924                            | 5,595                      | 4,196                        | 1,670                          | 5,866                      |
| Liberty              | 13,517                       | 25,159                         | 38,676                     | 11,079                       | 44,419                         | 55,498                     |
| Madison              | 2,814                        | 522                            | 3,336                      | 3,430                        | 882                            | 4,312                      |
| Montgomery           | 54,624                       | 4,581                          | 59,205                     | 79,731                       | 4,340                          | 84,071                     |
| Polk <sup>1</sup>    | 5,188                        | 2,188                          | 7,376                      | 6,029                        | 2,565                          | 8,594                      |
| San Jacinto          | 3,372                        | 922                            | 4,294                      | 2,998                        | 694                            | 3,692                      |
| Trinity <sup>1</sup> | 1,265                        | 1,368                          | 2,633                      | 1,486                        | 1,099                          | 2,585                      |
| Walker               | 4,770                        | 9,259                          | 14,029                     | 6,328                        | 7,458                          | 13,786                     |
| Waller               | 28,450                       | 376                            | 28,826                     | 28,306                       | 842                            | 29,148                     |
| Total                | 619,549                      | 1,215,651                      | 1,835,200                  | 650,988                      | 1,117,034                      | 1,768,022                  |

Source: TWDB Annual Survey of Ground and Surface Water Use

<sup>1</sup> Includes only the portion of the county in the Region H area

**Table 1-11: Projected 2070 Supplies Available for Use in Region H**

| <b>Groundwater</b>                         | <b>Projected Yield (acre-feet/year)</b> |
|--|---|
| Gulf Coast Aquifer                         | 737,415                                 |
| Carrizo-Wilcox Aquifer                     | 20,720                                  |
| Queen City Aquifer                         | 1,203                                   |
| Sparta Aquifer                             | 5,986                                   |
| Yegua-Jackson Aquifer                      | 7,487                                   |
| Brazos River Alluvium                      | 19,971                                  |
| San Bernard River Alluvium                 | 520                                     |
| San Jacinto River Alluvium                 | 1,450                                   |
| Trinity River Alluvium                     | 3,913                                   |
| <b>Subtotal</b>                            | <b>798,665</b>                          |
| <b>Basin/Reservoir/Run-of-River</b>        |   |
| Neches Basin                               |   |
| Sam Rayburn Contract <sup>1</sup>          | 70,518                                  |
| Neches-Trinity Coastal Basin               |   |
| Run-of-River                               | 24,681                                  |
| Trinity Basin                              |   |
| Lake Livingston/Wallisville                | 1,344,000                               |
| Run-of-River, Lower Basin                  | 139,186                                 |
| Trinity-San Jacinto Coastal Basin          |   |
| Run-of-River                               | 35,316                                  |
| San Jacinto Basin                          |   |
| Lake Houston                               | 179,000                                 |
| Lake Conroe                                | 79,300                                  |
| Run-of-River                               | 12,652                                  |
| San Jacinto – Brazos Coastal Basin         |   |
| Run-of-River                               | 38,826                                  |
| Brazos River Basin                         |   |
| Brazos River Authority System <sup>2</sup> | 151,907                                 |
| Run-of-River, Lower Basin                  | 426,160                                 |
| Brazos-Colorado Coastal Basin              |   |
| Run-of-River                               | 3,211                                   |
| <b>Subtotal</b>                            | <b>2,507,757</b>                        |
| <b>Total</b>                               | <b>3,303,422</b>                        |

<sup>1</sup> Values based on input from LNVA and Region I

<sup>2</sup> Values based on long-term contracts from BRA to Region H customers

#### 1.4.8 Wholesale Water Providers

A wholesale water provider (WWP) is an entity with contracts to sell more than 1,000 ac-ft/yr of water wholesale in any one year prior to the published regional water plan. Based on the known sales of water within Region H, the entities in **Table 1-12** have been identified as WWPs for the purpose of the 2016 Region H RWP.

**Table 1-12: Region H Wholesale Water Providers**

| WWP Name                                       | WWP RWPG |
|--|----------|
| Baytown Area Water Authority                   | H        |
| Brazos River Authority                         | G        |
| Brazosport Water Authority                     | H        |
| Central Harris County Regional Water Authority | H        |
| Chambers-Liberty Counties Navigation District  | H        |
| Clear Lake City Water Authority                | H        |
| Dow Chemical USA                               | H        |
| Fort Bend County WCID #2                       | H        |
| Galveston City Of                              | H        |
| Galveston County WCID #1                       | H        |
| Gulf Coast Water Authority                     | H        |
| Houston City Of                                | H        |
| Huntsville City Of                             | H        |
| La Porte Area Water Authority                  | H        |
| Lower Neches Valley Authority                  | I        |
| Missouri City Of                               | H        |
| North Channel Water Authority                  | H        |
| North Fort Bend Water Authority                | H        |
| North Harris County Regional Water Authority   | H        |
| NRG  | H        |
| Pasadena City Of                               | H        |
| Richmond-Rosenberg                             | H        |
| San Jacinto River Authority                    | H        |
| Sugar Land                                     | H        |
| Trinity River Authority                        | C        |
| West Harris County Regional Water Authority    | H        |

## 1.5 WATER QUALITY AND NATURAL RESOURCES

### 1.5.1 Water Quality

The TCEQ 2012 Water Quality Inventory was prepared in compliance with Sections 305(b) and 303(d) of the Federal Clean Water Act. **Figure 1-7** illustrates the impaired stream segments within Region H identified by TCEQ in 2012. The figure was prepared using the 2012 list of impaired segments and GIS data available on the TCEQ website. In addition to water quality data collected by TCEQ, agencies participating in the Texas Clean Rivers Program (CRP) annually compile and publish Regional Water Quality Assessments. In Region H, the Brazos, San Jacinto and Trinity River Authorities participate in the Texas Clean Rivers Program and have each published reports on the water quality conditions within their respective basins. These reports established the condition of

each river and stream segment and identified those segments with water quality concerns for a number of parameters.

Surface water throughout Region H is of sufficient water quality to be treated for municipal use using conventional measures. Contact recreation use is limited in the lower Trinity River due to fecal coliform bacteria levels. Growth in the San Jacinto River Basin has increased nutrient loading and fecal coliform levels in many streams, particularly Buffalo Bayou. Sand mining, in particular, has led to increased nutrient loads in the San Jacinto River which can result in an increase in cyanobacteria levels. Likewise, nutrients, dissolved minerals and elevated fecal coliform levels have been identified in the Lower Brazos River. Also of concern in the lower Brazos River are seasonal low flows, which allow the tidal salt-wedge to reach municipal and industrial freshwater intakes in Freeport.

Groundwater within the region is generally of good quality, with total dissolved solids below 1,000 mg/l. Iron is a concern in some portions of the Carrizo-Wilcox Aquifer, and calcium, magnesium and sulfate cause high total hardness in portions of the Brazos River Alluvium. Some groundwater supplies contain arsenic and radon. The current maximum contaminant level (MCL) for arsenic in water used for public supply is 0.01 mg/l set by the Environmental Protection Agency (EPA) in January of 2006. Currently, most groundwater produced within Region H has an arsenic content below the existing MCL. There is a limited area within the northwest part of Harris County where the concentration of arsenic in some sands of the Gulf Coast aquifer exceeds 0.01 mg/l. Wells are now constructed to not screen these sands. In some instances, consideration is being given to treating the water from older wells to lower the arsenic content below 0.01 mg/l. Shallow aquifer contamination has been reported from refinery spills along the Houston ship channel that affects groundwater quality and may affect surface water quality in Galveston Bay.

Radon is not a regulated constituent as a MCL has not been established for it. There are some areas in the west part of Harris County where isolated sands can contain water with higher concentrations of radon. Through geophysical logging to identify these depth intervals and by the use of well construction techniques that isolate the sands, production wells produce water with low levels of radon.





## 1.5.2 Topography

Region H is located in the Gulf Coastal Plains of Texas. It is primarily made up of two vegetational areas: the Gulf Prairies and the Piney Woods.

The Gulf Prairies make up the majority of the region. They hold marsh and saltwater grasses in tidal areas, and bluestems and tall grasses inland. Oaks, elms and other hardwoods grow in limited amounts. The natural grasses make the region ideal for cattle grazing and the fertile soils support rice, cotton, wheat and hay farming. Wildlife in the area includes alligator, river otter, eastern brown pelican, Eskimo curlew, piping plover and whooping crane. Counties in the Gulf Prairie include Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, and Waller.

The Piney Woods encompass the northeastern portion of Region H, consisting of pine forests interspersed with native and improved grasslands. Longleaf, shortleaf and loblolly pine are the dominant native species harvested, but slash pine and various hardwood species are cultivated as well. Timber production and cattle are the principal agricultural products in that portion of the region. Wildlife in the area includes bobcat, ringtail, river otter, red-cockaded woodpecker, and bald eagle. Counties in the Piney Woods include Leon, Liberty, Madison, Montgomery, Polk, San Jacinto, Trinity, and Walker.

## 1.5.3 Public Lands

The Region contains 325,394 acres of state and national forests, supporting hiking, camping, picnicking, and horseback riding. It also contains 107,138 acres of coastal wildlife refuges for migratory waterfowl, as well as native waterfowl and plant species. It contains a portion of the Big Thicket National Preserve, designated by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as part of the International Biosphere Reserve. Finally, the region holds 12,170 acres of Texas Wildlife Management Areas, preserved for bird watching in coastal areas and seasonal hunting inland. The area names and locations are presented in **Table 1-13**.

**Table 1-13: Public Lands**

| Resource Area                          | Acreage              | County      |
|--|----------------------|-------------|
| <b>State and National Forests</b>      |                      |             |
| W. Goodrich Jones State Forest         | 1,725                | Montgomery  |
| Davey Crockett National Forest         | 162,012 <sup>1</sup> | Total       |
|  | 67,329               | Trinity     |
| Sam Houston National Forest            | 161,657              | Total       |
|  | 47,777               | Montgomery  |
|  | 60,247               | San Jacinto |
|  | 53,633               | Walker      |
| <b>State and National Preserve</b>     |                      |             |
| Big Thicket National Preserve          | 86,000               | Total       |
| <b>National Wildlife Refuges</b>       |                      |             |
| Anahuac NWR                            | 30,000               | Chambers    |
| Brazoria NWR                           | 42,337               | Brazoria    |
| San Bernard NWR                        | 28,000               | Brazoria    |
| Trinity River NWR                      | 6,800                | Liberty     |
| <b>Texas Wildlife Management Areas</b> |                      |             |
| Candy Cain Abshier WMA                 | 207                  | Chambers    |
| Atkinson Island WMA                    | 151                  | Harris      |
| Keechi Creek                           | 1,500                | Leon        |
| Peach Point                            | 10,312               | Brazoria    |

Source: Texas Almanac, Texas Parks & Wildlife Department

<sup>1</sup>Total includes portion of Davey Crockett National Forest located in counties outside of Region H

#### 1.5.4 Navigation

Navigation within Region H rivers is generally limited to the lower reaches of the main stems of the Brazos, San Jacinto, and Trinity Rivers including the Houston Ship Channel and Turning Basin. In addition, the Gulf Intracoastal Waterway, an inland canal system that connects ports in the Gulf of Mexico, traverses the Region H coastline through the ports of Galveston and Freeport. There is significant use of rivers, streams and reservoirs throughout the region by recreational boaters and fishermen. There are no navigation water permits in the Region H area.

#### 1.5.5 Agricultural and Natural Resources

Agricultural interests in Region H are impacted by threats to water supply during drought of record conditions. As in other parts of the state, agricultural interests in water resources are often the first ones limited in times of shortage. Traditionally, Region H has been immune to these pressures due

to its relatively plentiful supply of water. However, in recent years of drought and with the increased utilization of water for other purposes, water supply has become a critical driver in agricultural operations. Most surface water is provided through annual contracts that do not provide certainty in planning long-term water supplies. Additionally, water rights that are held by agricultural interests are often not reliable without storage to provide backup during drought. Because of these issues, many farmers have turned to use of groundwater, where allowable through local regulation, to augment the unpredictable surface water supplies. However, the prospect of developing wells is only a viable alternative for growers who farm land that they own. Growers who lease land are not able to make long-term commitments to developing groundwater resources or other fixed assets on the property they farm.

Galveston Bay estuary is the most significant natural resource in Region H. The estuary is dependent upon freshwater inflows to maintain seasonal salinity ranges for wildlife habitat and fisheries productivity. The estuary is capable of withstanding natural flood and drought cycles, but the amplified effects of water diversions during a drought may pose a threat to this resource.

Other natural resources within the region also require minimum in-stream flows. As with Galveston Bay, peak diversions during drought periods may reduce flows to the point that detrimental effects are felt by the environment. Senate Bill 3, passed in 2007 by the 80<sup>th</sup> Texas Legislature developed a framework for evaluation and determination of environmental flows throughout the state including Region H. Region H is home to two separate SB3 process: the Trinity-San Jacinto Basin working groups in the eastern basins of the region and the Brazos Basin working groups in the western basins. The Trinity-San Jacinto Basin and Bay Expert Science Team (BBEST) submitted their report in November, 2009 and the Trinity-San Jacinto Basin and Bay Area Stakeholder Committee (BBASC) concluded its findings in two series of recommendations transmitted in May, 2010. TCEQ adopted standards in April 2011 based on these recommendations. In the Brazos River Basin, evaluations were completed by the BBEST and BBASC in March and September 2012, respectively. In turn, final rules for the Trinity-San Jacinto and Brazos systems were formerly adopted on May 15, 2011 and March 6, 2014, respectively

The number of additional threatened and endangered species added to each county by the Texas Department of Parks and Wildlife is presented in **Table 1-15**. Threatened and endangered species are further discussed in Chapter 7.

**Table 1-14: Threatened and Endangered Species**

| County             | Current County Total |
|--------------------|----------------------|
| Austin County      | 19                   |
| Brazoria County    | 26                   |
| Chambers County    | 23                   |
| Fort Bend County   | 19                   |
| Galveston County   | 23                   |
| Harris County      | 24                   |
| Leon County        | 20                   |
| Liberty County     | 25                   |
| Madison County     | 19                   |
| Montgomery County  | 20                   |
| Polk County        | 23                   |
| San Jacinto County | 21                   |
| Trinity County     | 24                   |
| Walker County      | 22                   |
| Waller County      | 19                   |

## 1.6 EXISTING WATER PLANNING

### 1.6.1 Existing Regional and Local Water Management Plans

The first Region H Water Plan was published in 2001 and was incorporated into the State Water Plan in 2002. The last update to the Region H Water Plan was performed in 2011. The 2011 Region H Water Plan recommended several water management strategies to ensure that all water demands in the Region were met. First, water conservation was recommended for all municipalities with projected shortages. Next, supplies that were identified as surplus in one area were recommended for contract or sale to water users in other areas. These transfers included moving TRA water supply from Lake Livingston to Harris County, moving SJRA supplies from the Trinity Basin to Montgomery County, additional yield from system operation of the BRA system and future reservoir projects.

The 2011 Region H Plan proposed a series of projects in the eastern basins (Trinity and San Jacinto Basins) to maximize the use of existing supplies through transfer (TRW to COH and TRA to SJRA transfers, Luce Bayou, etc.) and by maximizing the efficiency of water use (conservation, COH reuse permit, NHCRWA reuse permit, etc.). The western portion of Region H (Brazos Basin) relied upon a series of raw water projects intended to maximize storage and create firm yield from interruptible flow conditions in the river. In all, five off-channel projects were recommended in the plan for storage enhancement.

The Region H area was formerly part of The Trans-Texas Water Program (TTWP): Southeast Area, a comprehensive water resource planning program created to evaluate a full range of water management strategies for a 32 county area of East Texas. This area encompassed all of Region H, plus the lower Sabine River Basin and portions of the middle Brazos River Basin. The Phase II Report (1998) identified a regional long-term shortage by the year 2035. To meet that need, several management techniques were studied further: water conservation, wastewater reclamation, use of existing reservoir surplus supply, coordinated reservoir system operation, interbasin transfers and contractual transfers.

Technical studies of these management techniques were completed in Phase II of the TTWP. The Phase II Report (1998) determined that the Southeast Area could develop adequate supplies to meet expected regional demands, and export water to Central Texas (Regional Planning Regions L and N). Various management strategies would need to be implemented to accommodate growth in the different geographic areas across the fifty-year planning period. Water conservation, wastewater reclamation and coordinated systems operations strategies would extend the period of adequate supply, allowing additional time to plan and develop new water sources. The Allen's Creek Reservoir in the Brazos River Basin, with an estimated yield at the time of approximately 70,000 acre-feet per year, was reported as a potentially feasible project. Contractual transfers were identified that would align surface water rights with the owner's service areas, shortening conveyance systems. Finally, sustained interbasin transfers from the Toledo Bend Reservoir in the Sabine River Basin to the Trinity and San Jacinto River Basins were also reported as feasible strategies to meet the growing needs of the region and areas of central Texas.

Other previously completed regional water supply plans include the City of Houston Master Plan, Brazos Valley Long-Range Resource Plan, the San Jacinto River Authority Water Resources Development Plan, and the Trinity River Basin Master Plan. Within Region H, the BRA plan also recommended development of the Allen's Creek Reservoir. The TRA recommended the development of thirteen potential reservoirs, six of which are located in Region H. The largest, Bedias Reservoir, could provide a formerly estimated 109,000 acre-feet per year, and is located to allow use in the Trinity, San Jacinto or Brazos River Basins.

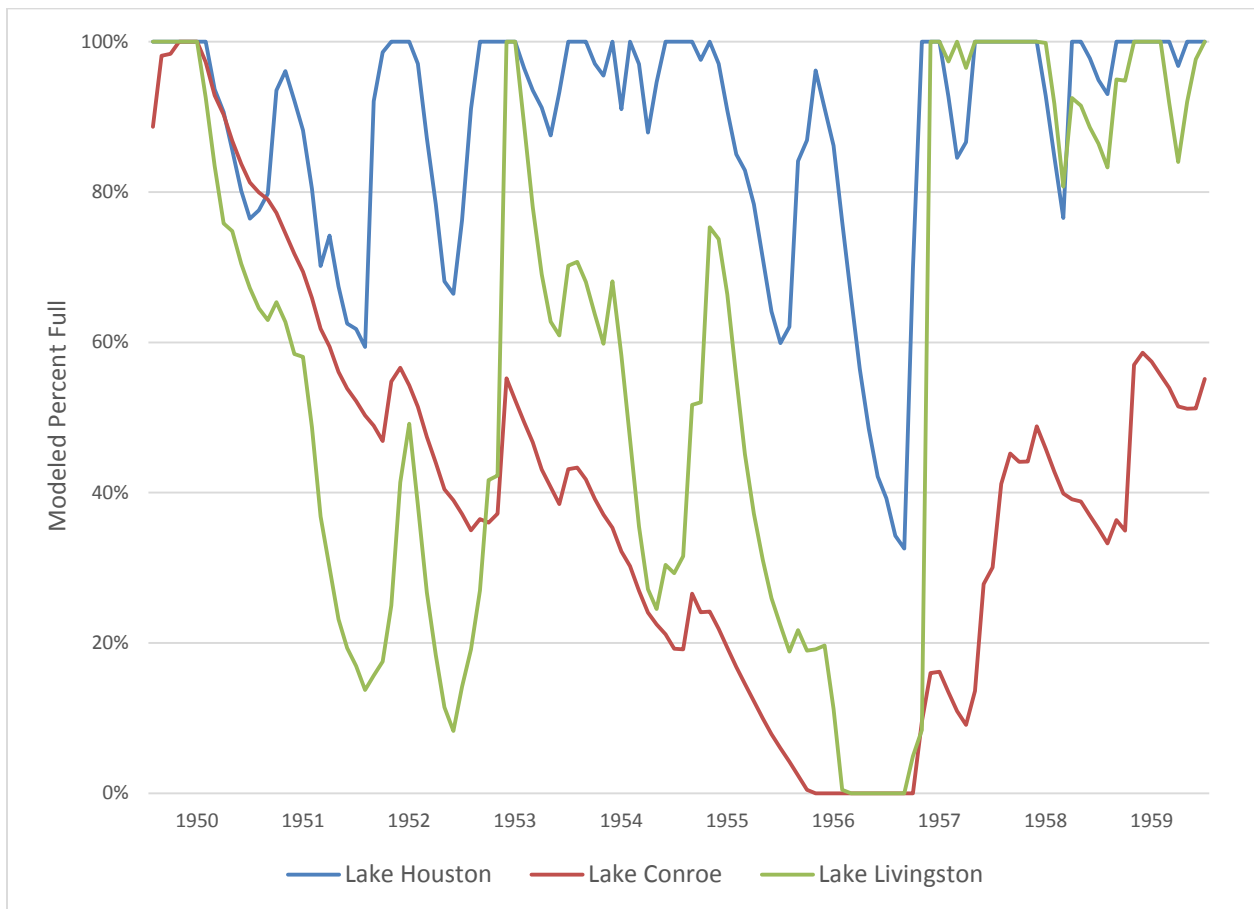
The Harris-Galveston Subsidence District and Fort Bend Subsidence District developed Groundwater Management Plans to address subsidence through reduced groundwater extraction within their respective regulatory areas. These districts adopted their most recent regulatory plans in 2013 and

2003, respectively, setting limits on groundwater use as a percentage of total water demand. The Long Star GCD has developed a regulatory plan that similarly includes a plan for groundwater reduction in order to maintain pumpage within sustainable limits. In addition, the Bluebonnet, Brazoria County, Lower Trinity, and Mid-East Texas GCDs, have published regulatory plans although these districts have not proposed limitations on groundwater withdrawals in order to maintain groundwater resources.

Additional plans are noted in the Region H Bibliography, included as **Appendix 1A**.

### 1.6.2 Drought of Record

Water supplies included in the 2016 Region H Water Plan are based on drought of record conditions. Specifically, the drought of record condition used in Region H is the drought of the 1950s as recreated in simulation by the Water Resources Analysis Package (WRAP) for the Trinity, San Jacinto, and Brazos River Basin Water Availability Models (WAMs). **Figure 1-8** below represents the percentage full for the three major reservoirs in Region H during the drought of record. Note that this analysis does not include any revisions to yield in order to maintain firm yield and assumes no return flows as modeled in the Run 3 WAM for each basin.

**Figure 1-8: Drought of Record Effects on Region H Reservoirs**

### 1.6.3 Current Preparations for Drought

The amended Title 30, Texas Administrative Code, Chapter 288 became effective on December 6, 2012. The next revision of the drought contingency plans for retail public water suppliers serving 3,300 or more connections, wholesale public water suppliers, and irrigation districts must be submitted no later than May 1, 2014, and every five years thereafter to coincide with the regional water planning group process. Any new or revised plans must be submitted to the TCEQ within 90 days of adoption by the governing body of the entity. For entities serving fewer than 3,300 connections, the plans must be developed and made available upon request by TCEQ.

In the completed drought plans, the predominant response activities are first a public information effort to alert the public to drought conditions and encourage water conservation. If drought conditions persist, many plans impose mandatory water conservation measures, including restrictions on landscape watering and car washing. Water Conservation and Drought Response are



discussed in Chapters 5 and 7 of this report.

#### 1.6.4 Water Loss Audits

An important part of a municipal conservation plan is minimizing the amount of water loss in their distribution system. Retail entities that have an active financial obligation with TWDB or have more than 3,300 connections are required to submit water loss audits annually. All retail public water suppliers are required to submit a water loss audit every five years. The next upcoming audits for the five-year cycle will be submitted by May 1, 2016.

The water loss reporting followed a methodology recommended by the International Water Association (IWA) and the American Water Works Association (AWWA) Water Loss Control Committee. The methodology relies on defined water use categories as shown below:

- Apparent Losses represent water that was used but not paid for, resulting in lost revenue. Apparent losses include:
  - Unauthorized Consumption
  - Customer Meter Under-registering
  - Billing Adjustment and Waivers
- Real Losses represent water that is physically lost from the water system prior to use, resulting in lost revenue. Real Losses include:
  - Main Breaks and Leaks
  - Storage Overflows
  - Customer Service Line Breaks and Leaks

The results of the 2010 Water Loss Audit Study found a high level of inaccuracy suggesting that utilities in the regions should refine their water accounting procedures. Within Region H, the study utilized information provided by 665 utilities. An aggregate of the region showed overall real losses of 15.5 percent or the second highest of any region. This data represents a real potential for the reduction of water demand through leak detection and other practices aimed at increasing accountability.

**Table 1-15: Water Loss by Type (acre-feet per year)**

|                                  |  |   |   |  |   |   |
|----------------------------------|--|---|---|--|---|---|
| Region H<br>665 Audits Submitted | System Input Volume<br>702,498,747,696 | Authorized Consumption<br>570,527,434,739<br>81.2%          | Billed Consumption<br>555,838,304,896<br>79.1%      | Billed Metered<br>555,609,659,853<br>79.1% | Revenue Water<br>555,838,304,896<br>79.1% |   |
|                                  |  |   | Unbilled Consumption<br>14,689,129,843<br>2.1%      | Billed Unmetered<br>228,645,043<br>0.0%    |   |   |
|                                  |  |   |   | Water Loss<br>132,372,265,647<br>18.8%     | Apparent Loss<br>23,989,517,923<br>3.4%   | Unbilled Metered<br>7,758,976,293<br>1.1% |
|                                  |  |   | Unbilled Unmetered<br>6,930,153,550<br>1.0%         |  |   |   |
|                                  |  | Unauthorized Consumption<br>1,679,121,648<br>0.2%           |   |  |   |   |
|                                  |  | Customer Meter Accuracy Loss<br>22,006,209,101<br>3.1%      |   |  |   |   |
|                                  |  | Systematic Data Handling Discrepancy<br>304,187,174<br>0.0% |   |  |   |   |
|                                  |  | Real Loss<br>109,059,675,934<br>15.5%                       | Reported Breaks and Leaks<br>11,712,207,418<br>1.7% |  |   |   |
|                                  |  |   | Unreported Loss<br>99,795,102,209<br>14.2%          |  |   |   |

**APPENDIX 1A**  
**SELECTED BIBLIOGRAPHY BY TOPIC**

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## Agenda Item 14

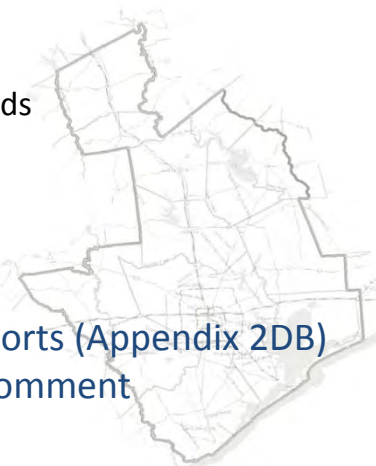
Receive presentation from the Consultant Team regarding the draft copy of Chapter 2: Projected Population and Water Demands for inclusion in the 2016 Region H Regional Water Plan.



## Chapter 2: Population and Water Demand



- DRAFT document
- Outline
  - Introduction
  - Non-Population Water Demands
    - Review methodology
  - Population Water Demands
    - Regional study methodology
    - Baseline conservation savings
  - WWP Demands and Contracts
- Detailed content in DB17 reports (Appendix 2DB)
- No action today – open for comment





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## ACRONYMS AND ABBREVIATIONS

|       |  |
|-------|--|
| BEG   | Bureau of Economic Geology                     |
| CRUs  | Collective Reporting Units                     |
| FBSD  | Fort Bend Subsidence District                  |
| FSA   | Farm Service Agency                            |
| GCWA  | Gulf Coast Water Authority                     |
| HGSD  | Harris-Galveston Subsidence District           |
| LSGCD | Lone Star Groundwater Conservation District    |
| PWS   | Public Water Supply                            |
| RHWPG | Region H Water Planning Group                  |
| RWP   | Regional Water Plan                            |
| RWPA  | Regional Water Planning Areas                  |
| RWPG  | Regional Water Planning Group                  |
| SDC   | State Data Center                              |
| TASS  | Texas Agricultural Statistics Service          |
| TWDB  | Texas Water Development Board                  |
| UHCPP | University of Houston Center for Public Policy |
| WUGs  | Water User Groups                              |
| WWP   | Wholesale Water Provider                       |

## 2.0 PROJECTED POPULATION AND WATER DEMANDS

### 2.1 INTRODUCTION

Statewide estimates indicate that the population of Texas will almost double from 2010 to 2070, growing from almost 26.5-million people to over 51-million. Region H is anticipated to make up approximately 23 percent of this population or roughly 11.7-million. With this growth in population comes a corresponding growth in demands for manufacturing, steam electric, and other sectors. Additionally, irrigated agriculture, which has reduced considerably over the past several decades, continues to be a center for substantial demands within Region, particularly in Brazoria, Chambers, Fort Bend, and Liberty Counties.

This chapter summarizes the long-term projections for Region H as well as the methodology employed to generate these estimates for development of the 2016 Regional Water Plan (RWP). In this effort, the Region H Water Planning Group (RHWP) was assisted by the members of the Region H Population and Non-Population Water Demand Committees. Members of these committees are listed below in Table 2-1: Region H Committee Members **Table 2-1**. The results of the analyses described below can be found in detail within the Texas Water Development Board's (TWDB's) DB17 and attached to this document in **Appendix 2DB**.

**Table 2-1: Region H Committee Members**

| Non-Population Demands Committee |   |
|----------------------------------|---|
| Member                           | Organization                                  |
| Gená Leathers (Chair)            | Dow Chemical Company                          |
| Gene Fisseler                    | NRG Energy                                    |
| John Howard                      |   |
| Robert Istre                     |   |
| Glynn Leiper                     | ExxonMobil                                    |
| Ted Long                         | NRG Energy                                    |
| Pudge Willcox                    | Chambers-Liberty Counties Navigation District |
| Population Demands Committee     |   |
| Member                           | Organization                                  |
| Marvin Marcell (Chair)           | Fort Bend Subsidence District                 |
| John Blount                      | Harris County                                 |
| Art Henson                       | Madison County                                |
| Jace Houston                     | River Authorities                             |
| Robert Istre                     |   |
| Carl Masterson                   |   |
| Ron Neighbors                    | Harris-Galveston Subsidence District          |
| Steve Tyler                      |   |
| Harold Wallace                   |   |

## 2.2 NON-POPULATION WATER DEMANDS

Non-population water demands include water use for Water User Groups (WUGs) that are not associated with domestic purposes. These include irrigation, livestock, manufacturing, mining, and steam electric use and are distributed throughout the Regional Water Planning Areas (RWPAs) by county and river basin.

### 2.2.1 Methodology

Information regarding non-population water use was compiled from a number of sources based on the type of demand considered. In each category, projections were initially presented by TWDB and reviewed and amended by the RHWPG as required. The demands, as prepared by TWDB and revised by the RHWPG were formally adopted by TWDB on October 17, 2013.

#### 2.2.1.1 Irrigation

TWDB developed draft irrigation demand projections by applying an evapotranspiration-based estimated crop water need to Farm Service Agency (FSA) acreage to generate water need estimates by county, crop, and year. The RHWPG conducted an assessment of available information and concluded that the maximum level of irrigation identified within recent years for crop acreage be used to develop the long-term projections in order to achieve a worst-case demand scenario. Demands were held constant out to 2070 in absence of any additional data representing long-term trends in agricultural production.

#### 2.2.1.2 Livestock

Draft livestock water demands were developed by TWDB by applying per-head water use estimates by species or category to livestock count estimates from the Texas Agricultural Statistics Service (TASS). Upon review, the RHWPG recognized that the projections were within reasonable levels based on available information and the projections were retained for use in the RWP.

#### 2.2.1.3 Manufacturing

TWDB developed draft manufacturing water demand projections using 2004-2008 Water Use Survey. Results were adjusted for response rate and reported employment, which significantly impacted estimates for some counties. Decadal rates of change from the 2011 RWP (the slope of projected trends) were then applied to these revised baseline demands.

Following review, the RHWPG recommended retaining the TWDB projections for all counties with



the exception of Brazoria, Galveston, and Walker Counties. Brazoria County projections have historically been difficult to address based on experience in previous RWP development. Water use survey data from 2001 to 2009 were used to project future growth which results in a slighter shallower rate of increase to 2070. Galveston County projections were developed with the assistance of data and input from the Gulf Coast Water Authority (GCWA) which provides raw water to the county for industrial purposes. In Walker County, the RHWPG corresponded with an industrial entity and identified a potential error in the water use survey data used to generate the projections. The resulting projection demonstrated a reduced level of demand for the county.

#### 2.2.1.4 Mining

TWDB draft mining water demand projections were derived through a 2011 TWDB-contracted study performed by the Bureau of Economic Geology (BEG), which examined a number of factors and mining industry sectors in development of water demand projections. This study was embarked upon due to the heightened level of oil and gas activity in the state due to shale gas exploration. Although this phenomenon is less relevant to mining demands in Region H than other regions, some Region H counties are anticipated to be impacted by this activity. Upon review, the RHWPG elected to retain the projections as presented by TWDB from the BEG study with the exception of Chambers County where more recent estimates of mining water use were found to be well below the estimates of earlier years. Rather than retain the maximum level of demand demonstrated by these use estimates, the RHWPG chose to use an average value for Chambers County, reducing the projected demand to a level commensurate to the recent level of use.

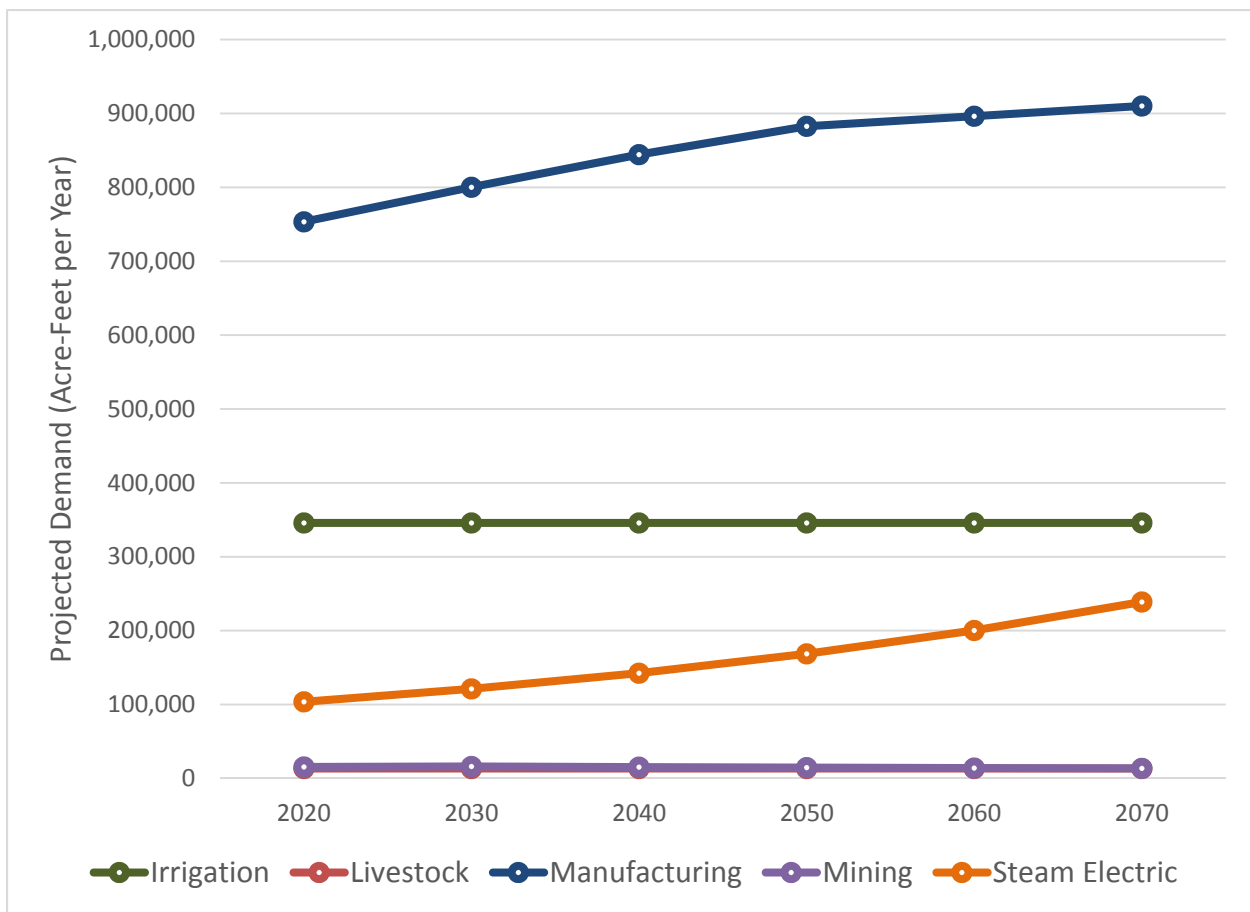
#### 2.2.1.5 Steam Electric

Water demands for steam electric use were developed in the course of creating the 2011 RWP by TWDB through contract with BEG. This study was completed in 2008 and serves as the most recent review on the subject. Projections from this study were compared with past projections alongside local representatives for steam electric power generation facilities. The RHWPG proposed the use of the TWDB projections with the exception of Brazoria, Galveston, and Liberty Counties where the demands were understood to be associated with industrial cogeneration, retired, or an air-cooled facilities that do not have associated water demands that should be represented in this demand sector.

### 2.2.2 Demand Projections

The resulting projections demonstrate growth of non-population demands from approximately 1.23-million acre-feet per year in 2020 to 1.52-million acre-feet of demand in 2070. Manufacturing and municipal represent the significant growth in demand sectors over that time, although higher levels of efficiency are anticipated over that period that help to attenuate those demands in the long-term. These patterns are demonstrated below in **Figure 2-1**. Detailed non-population demand information can be found in **Appendix 2DB**.

**Figure 2-1: Projected Non-Population Demand Growth**



### 2.3 POPULATION WATER DEMANDS

Population water demands are associated with domestic use and other demands that may be served from a Public Water Supply (PWS). Unlike non-population demands that are allocated at the county and basin levels only, population demands may be divided into WUGs if the following criteria apply:

- A city with a population of 500 or more, per the Texas State Demographer’s July 2005 population estimate,
- Individual utilities providing more than 280 AFY of water for municipal use in 2005 (for counties having four or less of these utilities), or
- Collective Reporting Units (CRUs) consisting of grouped utilities having a common association.

All smaller communities and rural/incorporated areas of municipal water use, aggregated at the county level, are considered a WUG and are referred to as “County Other” for each county.

### 2.3.1 Methodology

For the fourth round of regional water planning, 2010 U.S. Census data was made available for use in assessing current population and forecasting long-term trends. This information was used by the Texas State Data Center (SDC) and TWDB to generate WUG-level projections for all Regional Water Planning Groups (RWPGs).

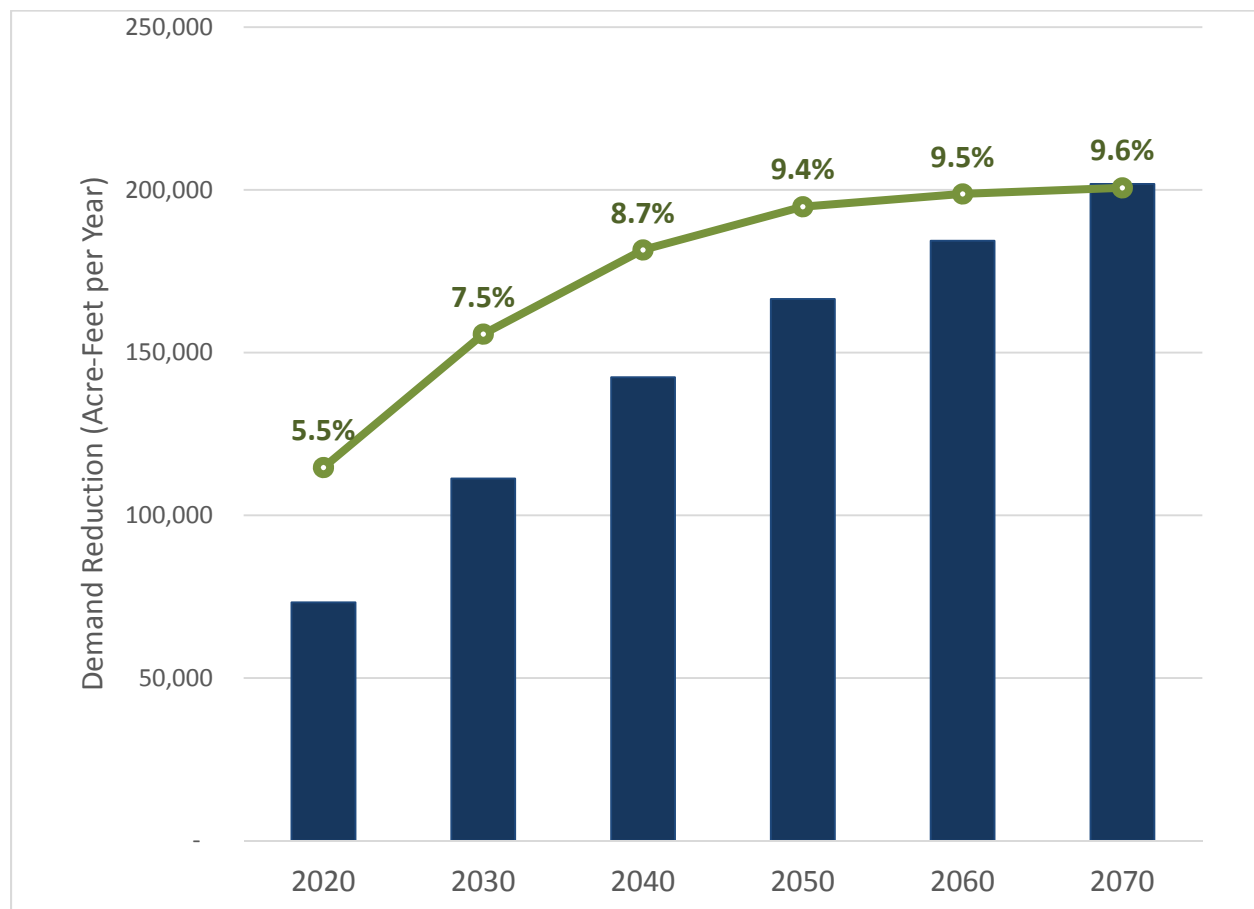
The RHWPG opted to request an exception from these state-generated projections and, instead, utilize information developed for a parallel project to evaluate groundwater use within the region for the Harris-Galveston Subsidence District (HGSD), Fort Bend Subsidence District (FBSD), and Lone Star Groundwater Conservation District (LSGCD). This study was designed to fit with the regional planning process and coordination with TWDB was performed in order to ensure uniformity between the groundwater study and the projection development conducted by TWDB. The result was a detailed depiction of population growth in Brazoria, Fort Bend, Galveston, Harris, and Montgomery Counties for use in both the groundwater study and Region H planning.

Short-term projections were provided by Metrostudy through a methodology that examines development trends and housing starts throughout the study area. These estimates were interwoven with long-term projections from the University of Houston Center for Public Policy (UHCPP) that uses the Small Area Model Houston (SAM-Houston) to predict how population and employment will be allocated throughout the region and incorporates a land use model to consider the extent of area favorable for development. The projections developed from this combined methodology were compared against county total projections from the SDC and it was found that

they compared favorably. Populations were then allocated to WUGs geographically to develop the final Region H population projections.

Water demands were calculated for the WUG populations by TWDB using data from the water use survey. Per capita demands from 2011 were applied for WUGs within Region H in order to provide a dry-year representation of demand. The effective per capita for each decade was adjusted from this baseline according to anticipated conservation savings due to plumbing code enforcement and the proliferation of water-efficient appliances. This reduction on overall demands resulted in a reduction of year 2070 water demands of 201,807 acre-feet annually, or approximately 9.6 percent. The increase in baseline conservation savings factored into the demand projections are shown below in **Figure 2-2**.

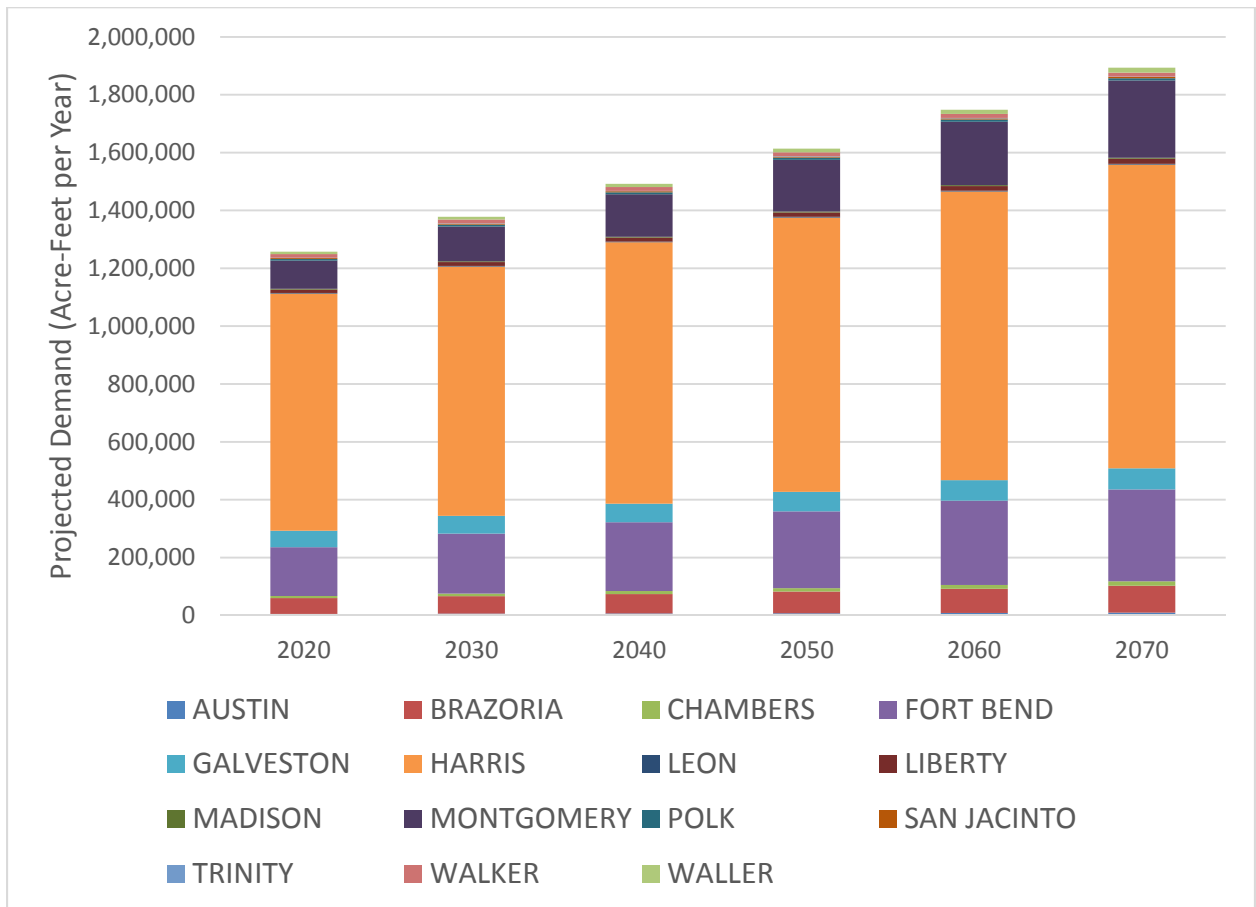
**Figure 2-2: Demand Reduction through Baseline Conservation**



### 2.3.2 Demand Projections

The resulting projections demonstrate growth of population demands from approximately 1.25-million acre-feet per year in 2020 to 1.89-million acre-feet of demand in 2070. Over this time, Montgomery County demonstrates the single largest level of growth of 175 percent during the planning period. These patterns are demonstrated below in **Figure 2-3**. Detailed population demand information can be found in **Appendix 2DB**.

**Figure 2-3: Projected Population Demand Growth**



### 2.4 WHOLESALE WATER PROVIDER DEMANDS AND CONTRACTUAL OBLIGATIONS

TWDB rules require the determination of demands associated with each of the Wholesale Water Providers (WWPs) designated by the RHWPG. Region H defines wholesale water providers as any persons or entities (including river authorities and irrigation districts) that have contracts to sell more than 1,000 acre-feet of wholesale water in any one year during the five years immediately

preceding the adoption of the last RWP. The RHWPG will also include other persons and entities that enter or that the Planning Group expects or recommends to enter into contracts to sell more than 1,000 acre-feet of wholesale water during the period covered by the plan. Region H recognizes the WWPs identified in **Table 2-2** as active within the region. Note that several WWPs sell water to entities within Region H but are located outside of the region.

**Table 2-2: Wholesale Water Providers in Region H**

| WWP Name                                       | WWP RWPG |
|--|----------|
| Baytown Area Water Authority                   | H        |
| Brazos River Authority                         | G        |
| Brazosport Water Authority                     | H        |
| Central Harris County Regional Water Authority | H        |
| Chambers-Liberty Counties Navigation District  | H        |
| Clear Lake City Water Authority                | H        |
| Dow Chemical USA                               | H        |
| Fort Bend County WCID #2                       | H        |
| Galveston City Of                              | H        |
| Galveston County WCID #1                       | H        |
| Gulf Coast Water Authority                     | H        |
| Houston City Of                                | H        |
| Huntsville City Of                             | H        |
| La Porte Area Water Authority                  | H        |
| Lower Neches Valley Authority                  | I        |
| Missouri City Of                               | H        |
| North Channel Water Authority                  | H        |
| North Fort Bend Water Authority                | H        |
| North Harris County Regional Water Authority   | H        |
| NRG  | H        |
| Pasadena City Of                               | H        |
| Richmond-Rosenberg                             | H        |
| San Jacinto River Authority                    | H        |
| Sugar Land                                     | H        |
| Trinity River Authority                        | C        |
| West Harris County Regional Water Authority    | H        |

**SUMMARY OF WWP SUPPLIES PENDING AVAILABLE OUTPUT FROM DB17.**

## Agenda Item 15

Receive presentation from the Consultant Team regarding the draft copy of Chapter 3: Analysis of Current Water Supplies for inclusion in the 2016 Region H Regional Water Plan.

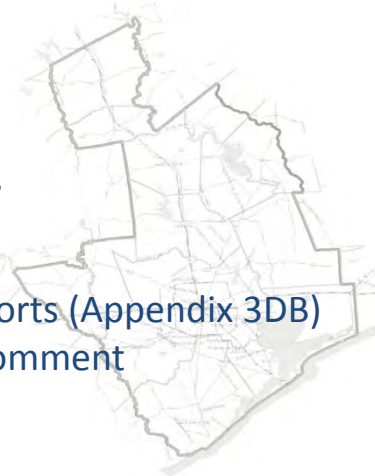




## Chapter 3: Current Water Supplies



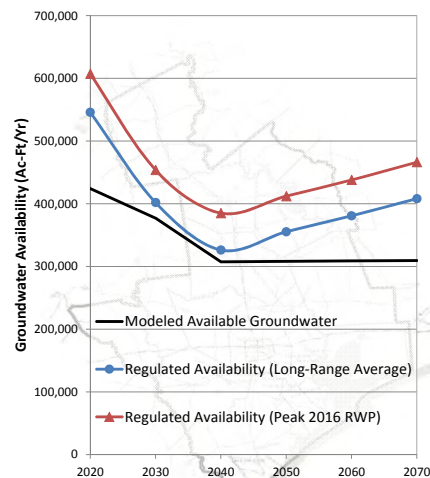
- DRAFT, working document
- Outline
  - Introduction
  - Groundwater Sources
  - Surface Water Sources
  - Identification of Reuse Sources
  - Wholesale Water Providers
  - Assignment of Sources
- Detailed content in DB17 reports (Appendix 3DB)
- No action today – open for comment



## Chapter 3: Current Water Supplies



- Groundwater Supply Issues
  - Actual availability based on regulation
    - Can vary based on demand
    - Varies annually
    - Subject to short-term peaks
  - RWP availability specified by Modeled Available Groundwater (MAG)
    - Set availability for all years
    - Long-term average
    - Developed through GMA process





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## ACRONYMS AND ABBREVIATIONS

|        |  |
|--------|--|
| BAWA   | Baytown Area Water Authority                   |
| BRA    | Brazos River Authority                         |
| BWA    | Brazosport Water Authority                     |
| CHCRWA | Central Harris County Regional Water Authority |
| CLCND  | Chambers-Liberty Counties Navigation District  |
| CLCWA  | Clear Lake City Water Authority                |
| COA    | Certificate of Adjudication                    |
| COH    | City of Houston                                |
| DFC    | Desired Future Condition                       |
| DOR    | Drought of Record                              |
| FBSD   | Fort Bend Subsidence District                  |
| FWSD   | Fresh Water Supply Districts                   |
| GAM    | Groundwater Availability Model                 |
| GCD    | Groundwater Conservation District              |
| GCWA   | Gulf Coast Water Authority                     |
| GMA    | Groundwater Management Area                    |
| GRP    | Groundwater Reduction Plans                    |
| HGSD   | Harris-Galveston Subsidence District           |
| LAWA   | La Porte Area Water Authority                  |
| LNVA   | Lower Neches Valley Authority                  |
| LSGCD  | Lone Star Groundwater Conservation District    |
| LVGU   | Large Volume Groundwater User                  |
| MAG    | Modeled Available Groundwater                  |
| MUD    | Municipal Utility District                     |
| NCWA   | North Channel Water Authority                  |
| NFBWA  | North Fort Bend Water Authority                |
| NHCRWA | North Harris County Regional Water Authority   |
| RWP    | Regional Water Plan                            |
| RWPA   | Regional Water Planning Areas                  |
| RHWPG  | Region H Water Planning Group                  |
| SJRA   | San Jacinto River Authority                    |
| TAC    | Texas Administrative Code                      |
| TCEQ   | Texas Commission on Environmental Quality      |
| TQD    | Total Qualifying Demand                        |
| TRA    | Trinity River Authority                        |
| TWC    | Texas Water Code                               |
| TWDB   | Texas Water Development Board                  |
| WAM    | Water Availability Model                       |
| WHCRWA | West Harris County Regional Water Authority    |
| WMS    | Water Management Strategy                      |
| WRAP   | Water Rights Analysis Package                  |
| WUG    | Water User Group                               |
| WWP    | Wholesale Water Provider                       |

## 3.0 ANALYSIS OF CURRENT WATER SUPPLIES

### 3.1 INTRODUCTION

Region H occupies a location on the Texas Gulf Coast which provides a wealth of water resources, with many aquifer formations capable of rapid recharge and with a number of surface water catchments with generally large flows. However, the Region is also home to approximately a quarter of the State's population and is projected to experience significant growth over the next 50 years. This large population, and the Region's status as a major industrial area, generates extremely large water demands.

A key component in addressing these growing demands is understanding the reliability and ownership of existing water supplies. This chapter summarizes the results of Task 3, and describes the resources available to the region and their allocation to Water User Groups (WUGs) throughout Region H. In this effort, the Region H Water Planning Group (RHWP) was assisted by the members of the Region H Groundwater Supply Committee and Surface Water Supply Committee. Members of these committees are listed below in Table 3-1: Region H Committee Members **Table 3-1**.

**Table 3-1: Region H Committee Members**

| Groundwater Supply Committee |   |
|------------------------------|---|
| Member                       | Organization                                  |
| Ron Neighbors (Chair)        | Harris-Galveston Subsidence District          |
| David Bailey                 | Mid-East Texas GCD                            |
| Kathy Jones                  | Lone Star GCD                                 |
| James Morrison               | Walker County Rural WSC                       |
| Bill Teer                    | Southeast WSC                                 |
| Population Demands Committee |   |
| Member                       | Organization                                  |
| Jace Houston(Chair)          | San Jacinto River Authority                   |
| Jun Chang                    | City of Houston                               |
| Kevin Ward                   | Trinity River Authority                       |
| Pudge Willcox                | Chambers-Liberty Counties Navigation District |

Also, to provide consistency and facilitate the compilation of the different regional plans, the Texas Water Development Board (TWDB) required the incorporation of this data into a standardized online database referred to as DB17. The results of the analyses described below can be found in detail within DB17 and attached to this document in **Appendix 3DB**. The following sections describe water resources available to the Region, procedures for estimating reliable availability, description

of major water providers, and procedures for assigning available water supplies to users in the Plan.

## **3.2 GROUNDWATER SOURCES**

### **3.2.1 Groundwater Aquifer Overview**

Groundwater resources in Region H consist of two major aquifers and four minor aquifers. The two major aquifers are the Gulf Coast aquifer and the Carrizo-Wilcox aquifer (**Figure 3-1**). The four minor aquifers present are the Sparta, Queen City, Yegua-Jackson, and Brazos River alluvium (**Figure 3-2**). The Carrizo-Wilcox is used primarily in Leon and Madison Counties, the Sparta aquifer system in Madison, Walker and Trinity Counties, and the Gulf Coast aquifer system in the central and southern sections of the region. Smaller amounts of water are provided by the Queen City, Sparta, Yegua Jackson, and Brazos River alluvium aquifers. Individual aquifers are described in greater detail in the following subsections.

### **3.2.2 Major Aquifers**

#### **3.2.2.1 Carrizo-Wilcox Aquifer**

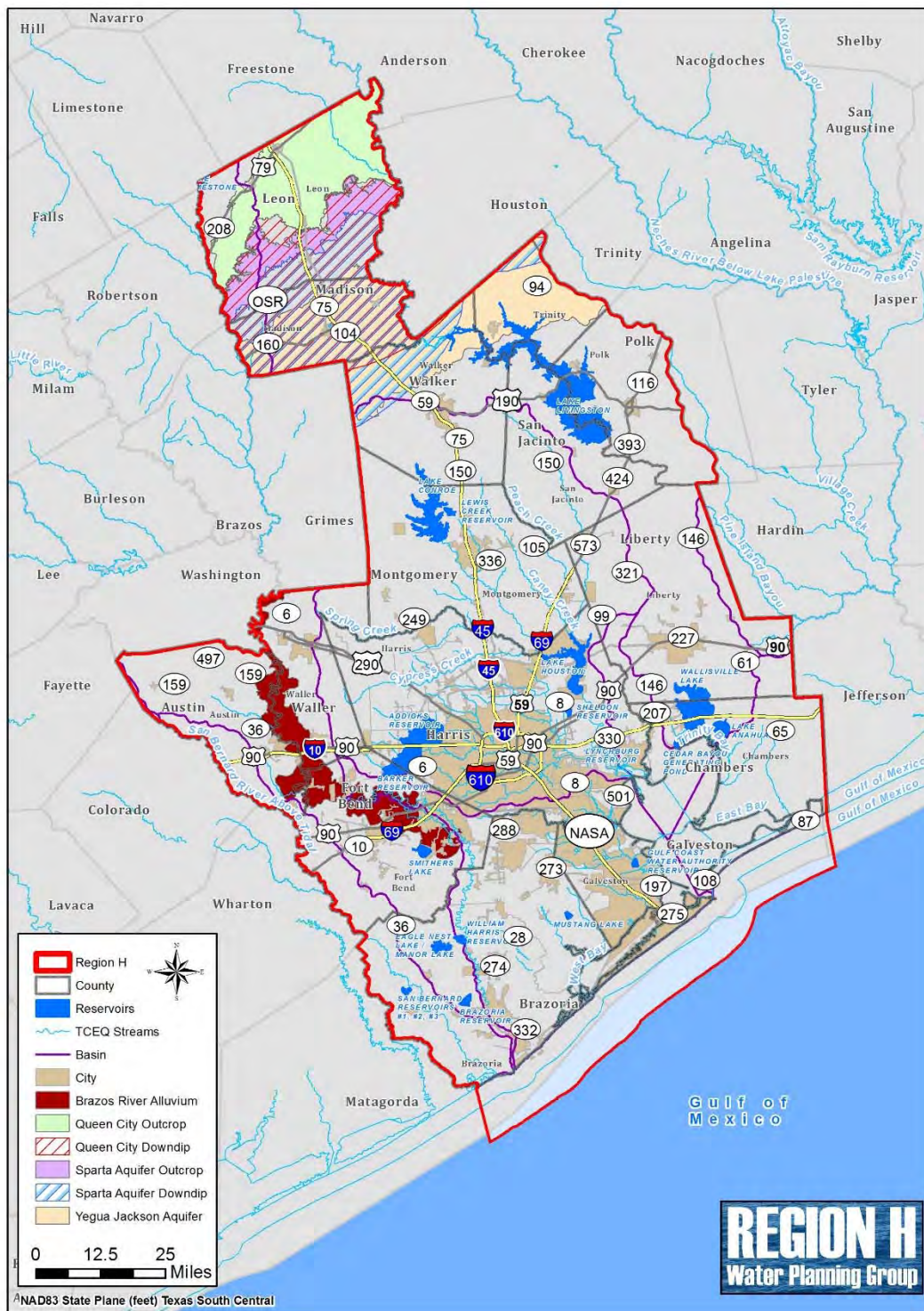
The Carrizo-Wilcox is the main aquifer in the northern part of Region H in Leon County and the northern portion of Madison County. The Carrizo-Wilcox aquifer was deposited in a manner that resulted in a sequence of geologic formations of interbedded sand, silt, clay and shale having a thickness of about 2,000 feet in the northern part of the region. The Carrizo Sand is one of two principal water-producing units of the Carrizo-Wilcox aquifer and it is about 100 to 200 feet thick. It is a generally uniform, well sorted sand that contains a few very thin beds of clay; the aquifer dips downward to the southeast at about 70 to 100 feet per mile. The Wilcox Group is composed of alternating beds of sand, sandy clay, and clay with locally interbedded gravel, silt, clay, and lignite. The Simsboro Sand is the major water-producing unit in the Wilcox and is about 200 to 400 feet thick. The Carrizo and Wilcox formations are weakly connected hydraulically and are generally described as one major aquifer. Water from the aquifer contains less than 1,000 milligrams per liter (mg/l) of total dissolved solids, but water from the Carrizo Sand can contain elevated levels of iron that require sequestering or treatment for removal for water used for most municipal and industrial purposes.







Figure 3-2: Region H Minor Groundwater Sources



### 3.2.2.2 Gulf Coast Aquifer

The Gulf Coast aquifer extends from the Gulf Coast to approximately 100 to 120 miles inland in Walker and Trinity Counties. The Gulf Coast aquifer consists of four general water-producing units. The geologically youngest unit is the Chicot aquifer, followed by the Evangeline aquifer, the Jasper aquifer, and the Catahoula Formation. The Chicot and Evangeline aquifers are the more prolific water-producing units in the Gulf Coast aquifer followed by the Jasper aquifer and the Catahoula Formation. The units are composed of alternating beds of sand, silt, and clay; shale can occur at deeper depths at and below the base of the Evangeline aquifer. The Gulf Coast aquifer has sand thicknesses ranging from about 200 to 500 feet in the central and southern parts of the region with the sands containing freshwater decreasing in thickness as the aquifers approach within about 30 to 40 miles of the Gulf Coast. Formation beds vary in thickness and composition and the areal extent of individual beds normally cannot be traced over extended distances. Total aquifer sand thickness varies and can be as great as several hundred feet. The lower unit of the aquifer, the Catahoula Sandstone, is screened by wells for the City of Huntsville and other wells in Walker County. To the south, in Galveston County, the Chicot unit is screened in wells used by the City of Galveston. The aquifer is capable of yielding larger quantities of water in the central and southern parts of Region H and has been utilized over the past 100 years to provide part of the water supply, although heavy usage has also resulted in land surface subsidence.

## 3.2.3 Minor Aquifers

### 3.2.3.1 Queen City Formation

The Queen City Formation is a minor aquifer that occurs in central and southeastern Leon County and in the northern part of Madison County. The Queen City Formation is composed of sand and loosely cemented sandstone with interbedded shale layers occurring throughout. The Queen City Formation ranges in thickness from 250 to 400 feet with approximately 60 to 70 percent of the total thickness being sand according to Texas Water Commission Bulletin 6513 (1965), "Availability and Quality of Ground Water in Leon County, Texas." Groundwater in small to moderate quantities is provided by the Queen City Formation for domestic, municipal, industrial, and agricultural uses in Leon and Madison Counties.

### 3.2.3.2 Sparta Formation

The Sparta Formation or Sparta Sand occurs in southeastern Leon County, all of Madison County, northwestern Walker County, and northeastern Trinity County. The Sparta Formation consists of

sand and interbedded clay, with the lower portion of the aquifer containing massive unconsolidated sands with a few layers of shale. The Sparta Formation ranges in thickness from 150 to 300 feet in Leon County and Madison County (Texas Workforce Commission Bulletin 6513). Groundwater from the aquifer is provided for domestic, municipal, and agricultural uses in Leon County and for domestic, municipal, manufacturing, and agricultural uses in Madison County. The Sparta Formation is the groundwater source for the Town of Madisonville and for some water supply corporations in the area.

### 3.2.3.3 Yegua-Jackson Aquifer

The Yegua Formation and Jackson Group make up a minor aquifer, designated as the Yegua-Jackson aquifer, which occurs within the region in parts of Madison, Walker, Trinity and Polk Counties. The Yegua Formation consists of sand, interbedded clay, and scattered lignite. The Jackson Group includes all strata between the Yegua Formation and the Catahoula Sandstone and consists of sand, clay, sandstone, and siltstone. The Yegua Formation ranges in thickness from 1,000 to 1,500 feet; the Jackson Group is approximately 1,100 feet thick, according to Texas Board of Water Engineers Bulletin 5003 (1950), "Geology and Ground-Water Resources of Walker County, Texas." Small to moderate quantities of groundwater are provided by the Yegua-Jackson aquifer for domestic, municipal, industrial, and agricultural uses.

### 3.2.3.4 Brazos River Alluvium

The Brazos River alluvium occurs in the floodplain and terrace deposits of the Brazos River in Austin, Fort Bend and Waller Counties. The Quaternary alluvial sediments consist of clay, silt, sand, and gravel according to TWDB Report 345 (1995), Aquifers of Texas, with the more permeable sand and gravel present in the lower part of the aquifer. The saturated thickness of the sediments is as much as 85 feet and the width of the alluvium ranges from less than 1 mile to approximately 7 miles, with the Brazos River located within the width of the alluvial deposits. The Brazos River alluvium supplies groundwater for domestic and agricultural purposes in Fort Bend and Waller Counties. In Austin County, it supplies groundwater for domestic, manufacturing, and agricultural uses. The aquifer may contain water with total dissolved solids that approach 1,000 mg/l and have a high total hardness due to the amounts of calcium, magnesium, and sulfate in the aquifer water.

## 3.2.4 Groundwater Availability

Region H relies on a significant portion of supply from groundwater-based sources. Historically, the

coastal counties within the region have been significant users of groundwater, such that initiatives to assess the reliable yield from groundwater supplies and offset excess groundwater demand to alternative sources began long before these initiatives began in other parts of the State. For this reason, the issue of groundwater reliability is a mature topic within the study area and of vital importance to overall water supply planning.

#### 3.2.4.1 Groundwater Availability in Region H

Region H contains the entirety or portions of seven entities that have authority over groundwater resources. Of these seven, two are subsidence districts with the balance being made up of groundwater conservation districts (GCDs) governed under Chapter 36 of the Texas Water Code (TWC). Of the seven entities of various types, three of these are actively engaged in regulatory plans that involve the restriction of groundwater pumpage for the sake of preserving groundwater resources or preventing undue harm to other natural resources as a result of excess groundwater withdrawal. In effect, these plans and regulations represent the availability of groundwater in these counties for practical purposes.

The Harris-Galveston Subsidence District (HGSD) was created in 1975 to “end subsidence” in those counties at the threat of impacts resulting from excess use of groundwater. Prior to that time, it was observed that subsidence had increased the risk from coastal flooding in those counties and threatened to further increase the potential for inundation along the coast and in inland areas. Through a series of regulatory plans, HGSD has curtailed impacts from Subsidence since its inception. In 2013, HGSD adopted a District Regulatory Plan that maintained existing limits on groundwater production in its three Regulatory Areas and set future reductions for Regulatory Area 3 located in north and west Harris County. These reductions are applied to water users on a basis of a percentage of their total water demand. These percentages are developed based on detailed study of long-range population and water demand projections and groundwater modeling for the region. In addition, entities are allowed to enter into Groundwater Reduction Plans (GRPs) that allow for regional compliance with groundwater regulation to maximize efficiency in goal attainment. Limits to the maximum annual percentage of groundwater use must be achieved on an annual basis to prevent dewatering of clay layers which causes subsidence and the incurring of disincentive fees on the part of groundwater users.

The Fort Bend Subsidence District (FBSD) was created in 1989 to address similar issues of subsidence that posed a risk to flood-prone areas within the county. In 2013, FBSD approved a District

Regulatory Plan that maintained groundwater reductions for areas in the northern and eastern portions of the county. Like the limitations placed on pumping by HGSD, these restrictions are applied as a percentage of total water demand and allow for compliance through GRPs.

The Lone Star Groundwater Conservation District (LSGCD) was created in 2001 to help Montgomery County continue its growth in a responsible manner without overpumping of the Gulf Coast Aquifer which has historically been its primary source of water for all purposes, including municipal use. Through a series of regulatory plan developments, LSGCD has set a sustainable supply for the Gulf Coast Aquifer in Montgomery County at 64,000 acre-feet per year. In response to pumping identified outside of the limits of this supply, LSGCD took action to call on large-volume groundwater users in the county to identify and develop alternative water supplies in order to reduce pumping to sustainable levels. These limitations, which must be met in 2016 and adhered to on a long-term average in subsequent years, are based on a firm cap specified for each large-volume groundwater user based on historical use. In this way, groundwater regulation in LSGCD differs from the percentage reduction used in the HGSD and FBSD regulatory plans.

For all other counties, Region H has historically recognized existing studies of groundwater availability in these counties as the source of information for planning purposes.

#### 3.2.4.2 Groundwater Availability in the 2016 Regional Water Plan

In 2010, the Groundwater Management Areas (GMAs) across Texas submitted their first round of Desired Future Conditions (DFCs) to the TWDB for the purpose of developing estimates of Modeled Available Groundwater (MAG) as described under Section 36.108 of the TWC. The GCDs adopting DFCs are required to develop management plans that include goals that are consistent with achieving the DFCs, per Section 36.1085 of the TWC.

Whereas past Regional Water Plans (RWPs) have allowed for discretion of the Regional Water Planning Groups (RWPGs) in assigning groundwater availability, the 2016 round of RWP development takes a different approach. Per Section 16.053(e)(2-a) of the TWC, regional plans must be “consistent with the desired future conditions...” as developed by the GMAs. Going a step further, the Title 31 of the Texas Administrative Code (TAC) Section 357.32 (d) dictates that, for regional planning, RWPG “shall use Modeled Available Groundwater volumes for groundwater availability” unless there is no MAG volume. Therefore, for the development of the 2016 RWP, Region H groundwater supplies for traditional formations are set at the MAG as developed by TWDB

from DFCs submitted by the various GMAs in 2010. Availability of existing water supplies is summarized in **Appendix 3DB**.

### 3.2.4.3 Issues in Applying Modeled Available Groundwater to Availability

This approach to groundwater supplies in the regional planning process presents several issues to the Region H RWPG as well as other RWPGs in other regions of the State. Several of these potential issues are described below for consideration by TWDB in guiding future implementation of the guidelines for RWP development.

Although GCDs are bound to the DFCs adopted by GMAs, they are not required to use the MAG as a means of achieving that goal. Section 36.1132 of the TWC states that “a district, to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition.” Several considerations are also provided in this section including the MAG. This guides GCDs toward regulating to the DFC with consideration of the MAG in addition to other factors but does not necessarily limit GCDs to strict adherence to the MAG. This suggests there may be means to achieve the DFC outside of the MAG. The requirement of Title 31 of the TAC, Section 357.32(d) goes beyond the language in the TWC and requires that regions plan to the MAG although it is not necessarily a binding limit for the GCDs. In effect, projects that may be developed within a GCD while still attaining the long-term goals of the DFC may be permitted but not included for the purposes of regional water planning.

The objectives of the GMA and RWP processes are inherently different. Regional plans are intended to be built around “dry-year” demands for various water uses to create a worst case scenario for planning purposes. For this reason, year 2011 per capita demands have been selected for development of the 2016 RWPs for much of the State. This approach is conservative and reasonable for the identification of potential water needs and projects that may be required under a drought-of-record scenario. However, this approach is inadequate for the study of groundwater resources which must be evaluated over long-term averages. To model peak, dry-year demands for the entire period considered in the Groundwater Availability Models (GAMs) used in developing DFCs would result in a gross and unrealistic over-estimation of drawdown in formations and not provide useful information to the groundwater stakeholders involved in the GMA process. The de facto result is that GMAs are fundamentally required to plan in ways that produce average-year MAGs while RWPGs require peak groundwater supplies to be consistent with the peak demands they are

obligated to meet. The difference between these two values produces a shortage in the RWP that is not expected to occur in reality and, therefore, requires the application of an unnecessary water management strategy (WMS) to make the plan whole.

The requirement that RWPs be developed using the MAGs as the sole source of groundwater supply information may create an undue burden to the GMA process. While the majority of entities that regulate groundwater in the State target a set volume of water for their pumpage limits, that is not the case for the largest of those entities in Region H: HGSD and FBSD. These districts regulate allowable groundwater withdrawals to a percentage of the total demand within their jurisdictions. In effect, when demands change, the availability of groundwater changes within their boundaries. As these demands typically change with each RWP development cycle, GMA 14, which includes Fort Bend, Galveston, and Harris Counties, must reevaluate the pumpage related to their DFCs each round in order to maintain consistency between the GMA-developed supplies used in RWP development and the regulation of those districts. Furthermore, there is typically a narrow window of time between the finalization of water demands and the submittal of the RWPs during which time, the GMA is required to compress its planning efforts in order to close the gap in supply. This approach is burdensome on a regional stakeholder process that has a number of their own considerations to address in addition to the issue of RWP consistency.

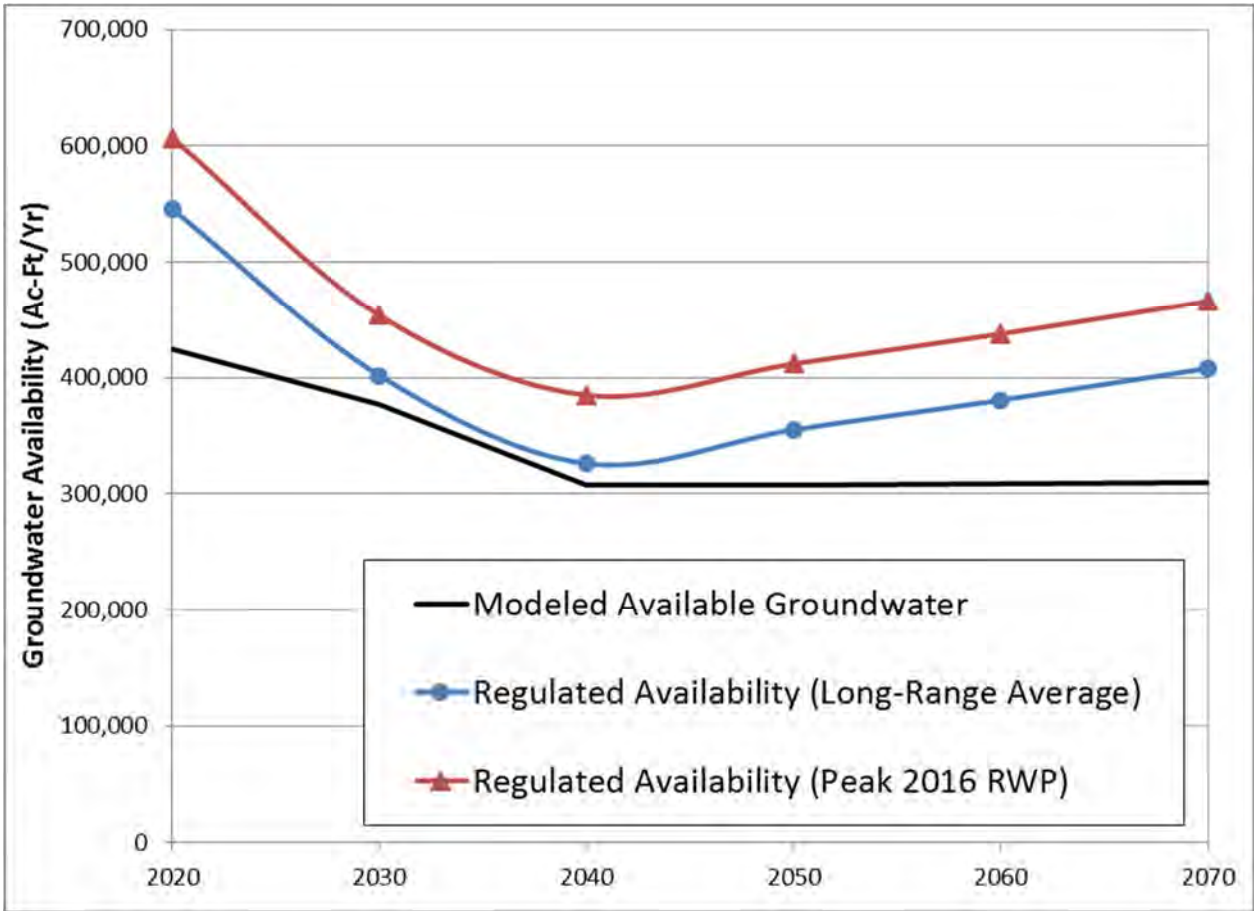
#### 3.2.4.4 Case Study: Harris-Galveston and Fort Bend Subsidence Districts

As an example of the issues identified above, consider the case of the two subsidence districts in Region H. Collectively, these two districts encompass over 81 percent of the county's population and groundwater has typically served a crucial role in supplying the overall need of this area.

**Figure 3-3** below demonstrates three representations of demand for the three counties. The most recent MAGs for these counties were developed for the 2010 DFCs submitted by GMA 14 and, therefore, these supplies do not have the benefit of population and demand updates developed since that time and without the HGSD's updated regulator plan adopted in 2013. In addition, another dataset demonstrates the pumpage that was factored into the long-range simulations for the analysis of the HGSD and FBSD regulatory plans. These are average-year demands, appropriate for long-range study. Finally, the last dataset demonstrates the water that would be allocated to Region H WUGs in the three counties based on demands from the 2016 RWP and the regulatory plans of the two districts. This pumpage is associated with the peak, dry-year demands from the RWPs.



**Figure 3-3: HGSD and FBSD Groundwater Availability Scenarios**



The difference in the three perspectives of availability represent a combination of the issues described above. First, the delta between the MAG and the long-range average regulated availability is an artifact of the disconnection between the development of projections for the RWPG and the evaluation of new pumpage scenarios by GMA 14. As demands are updated by the RWPG, supplies, represented by the MAG, lag behind as the GMA must readdress the supplies for these three counties in context of the updated demands. Unless GMA 14 can accomplish this and other activities associated with their DFC review in a very narrow window during the course of RWPG development, Region H will experience inconsistencies associated with this issue indefinitely as each planning cycle is forced to rely upon MAGs based on pumpage and demands from the previous round of planning. Addressing this issue in the current joint planning process of the RWPGs and GMAs places strain on both processes. This issue primarily impacts counties regulated in the manner of the HGSD and FBSD where availability is subject to change based on total demand.

Second, the difference is also due, in significant part, to the difference in definition of peak and long-

range average demands used for groundwater planning. The MAG presented here and the one that would be considered in the future by GMA 14 will not provide adequate supply for peak demand conditions as is it not realistic to model such a condition over 50 or more years. Doing such would over-state water-level declines and other undesired impacts. This issue is inherent to the very different objectives of the GMA and RWP processes and not readily solved, even if GMAs are given adequate opportunity to address changing demands developed for the RWP process. Furthermore, this issues potentially persists in all counties where current supplies equal or approach the MAG. Where actual pumpage may occasionally, under extreme conditions, exceed the MAG but otherwise maintain a long-term average level below that limit, the RWPG is unnecessarily limited in ability to incorporate groundwater-based strategies. This is particularly true for conjunctive use strategies that rely on excess groundwater only during the most extreme drought conditions.

Combined, these issues represent a significant detriment to the RWP process. In the three counties described above, the end result is that the shortages expressed in the RWP are artificially elevated by approximately 157,000 acre-feet per year in 2070. In turn, this means that 157,000 acre-feet of additional, unneeded strategies have been incorporated into the RWP in order to meet needs that are not expected to occur in a real world scenario. This approach inflates the cost of water projects to meet unrealistic shortages and demonstrates environmental impacts from projects that are not actually required. Finally, viable projects with adequate supply when considered outside of the RWP's one-year snapshots may be precluded from the RWP because of this problem. These side effects reduce the credibility of the overall plan and its usefulness as a tool to chart out future strategies to meet water needs.

### **3.3 SURFACE WATER SOURCES**

#### **3.3.1 Surface Water Overview**

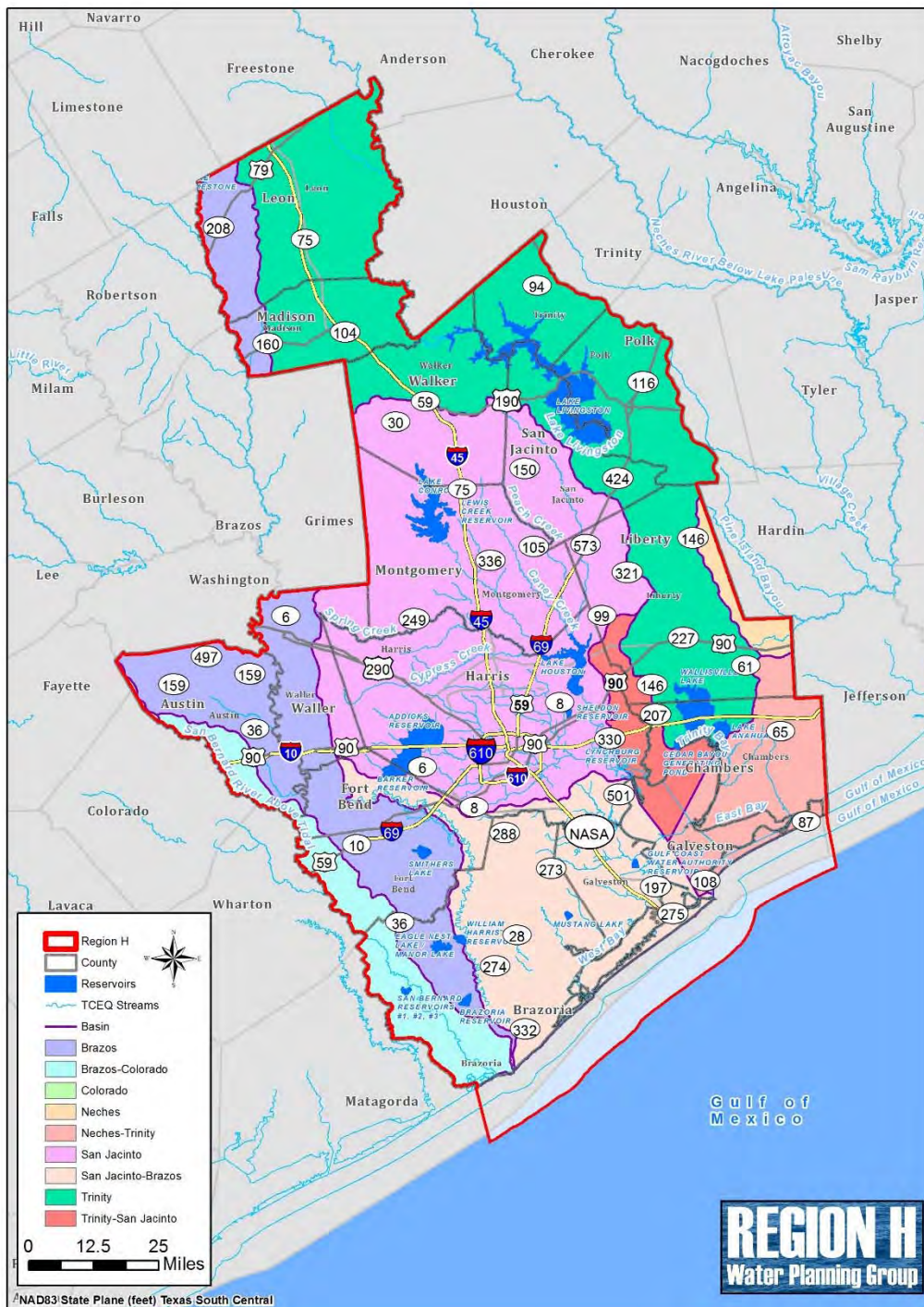
Surface water in Texas is based on a prior appropriation water right system, wherein individuals or entities are granted rights to use surface water, with more senior rights having priority over junior rights. Senior rights are allowed the opportunity to fully satisfy their allowable diversion volume each month before more junior rights can divert. In practice these priorities are of limited concern in many basins for most years, due to an abundance of available surface water adequate to meet surface water demands. However, in drier portions of the State or during times of drought, priorities play an important role in determining ownership of limited surface water supplies. Water rights in the State

are administered through a system of water right permits, or Certificates of Adjudication, issued by Texas Commission on Environmental Quality (TCEQ). These permits specify water right ownership, the allowable amounts of water which can be diverted, the locations of diversion, the allowable uses and basins of use, any special conditions or limitations on the permit, and a priority date establishing the right's seniority.

Surface water supply planning in Texas, and with limited exceptions the State's surface water rights permitting system, is based on the concept of "firm yield." The firm yield of a particular surface water source is defined as the amount of water that can be provided each year during drought-of-record hydrologic conditions, assuming full utilization and consumption of existing water rights and assuming that any environmental flow requirements are fully satisfied (e.g., instream flows, bay and estuary inflow). The concept of firm yield, as applied in water supply planning and water rights permitting, represents a very conservative approach to surface water availability and allocation that is intended to provide a high degree of water supply reliability.

Region H encompasses parts of three major river basins, four adjoining coastal basins, and three major water supply reservoirs as shown in **Figure 3-4**. The following sections discuss the surface water available to Region H from these sources, other surface water sources used in the Region, and determination of supply reliability.

Figure 3-4: Region H Surface Water



### **3.3.2 Major Region H Reservoir Supplies**

#### **3.3.2.1 Lake Livingston / Wallisville Saltwater Barrier**

Lake Livingston, which was completed in 1971, is located on the Trinity River in Polk, San Jacinto, and Trinity Counties; the dam is located approximately seven miles southwest of the City of Livingston. The reservoir is impounded by a concrete dam and earthen spillway and has a drainage area of over 16,000 square miles. At the conservation pool elevation of 131 feet, the reservoir has a volume of 1,791,709 acre-feet and a water surface area of 82,583 acres (approximately 129 square miles). The reservoir and dam are owned and operated by the Trinity River Authority (TRA). The Wallisville Saltwater Barrier, is located on the Trinity River downstream of Lake Livingston near the town of Wallisville. While this smaller impoundment does not generate firm water supplies directly, it prevents saltwater from Trinity Bay from moving upstream in the river. This reduces the need for releases from Lake Livingston to counteract saltwater intrusion and thus results in a greater usable yield from Lake Livingston.

Storage and diversions from Lake Livingston/Wallisville system are authorized under Certificate of Adjudication (COA) 08-4248 and COA 08-4261. Total permitted yield from the system is 1,344,000 ac-ft/yr. TRA is authorized to divert 403,200 ac-ft/yr for multiple uses. It should be noted that physical diversions are not made from Lake Wallisville, but the combined yield of Lake Livingston is increased when operated in conjunction with the Wallisville Saltwater Barrier. The remaining yield is owned by the City of Houston (COH). A portion of this supply is currently conveyed westward to the COH service area.

#### **3.3.2.2 Lake Conroe**

Lake Conroe is located in on the West Fork of the San Jacinto River in Montgomery County, approximately seven miles west of the City of Conroe. The reservoir, which was completed in 1973, is impounded by an earthen dam and concrete spillway and has a drainage area of 445 square miles. At the conservation pool elevation of 201 feet above MSL, the reservoir has a volume of 411,022 acre-feet and a water surface area of 19,640 acres (approximately 30.7 square miles). Lake Conroe is operated by the San Jacinto River Authority (SJRA). COA 10-4963 authorizes 100,000 ac-ft/yr in permitted water rights from the Lake, with one third (33,333 ac-ft/yr) owned by SJRA and the remaining two thirds owned by the COH. SJRA holds an option contract to purchase water from the COH's portion of the yield of Lake Conroe. The reservoir is permitted for municipal, industrial, irrigation, mining, and recreation uses.

### 3.3.2.3 Lake Houston

Lake Houston, which was completed in 1954, is located on the San Jacinto River in northeastern Harris County, approximately 15 miles from downtown Houston. The lake, which is impounded by an earthen dam and concrete spillway, has a drainage area of 2,828 square miles. At the conservation pool elevation of 41.73 feet above mean sea level, the reservoir has a volume of 124,661 acre-feet and a water surface area of 10,160 acres (approximately 15.9 square miles).

COA 10-4965, held by the COH, authorizes storage in the lake as well as 168,000 ac-ft/year of permitted diversions. Priority dates for the right are May 7, 1940 for the first 112,000 ac-ft/yr and February 26, 1944 for the remaining 56,000 ac-ft/yr. Authorized uses include municipal, industrial, irrigation, and recreation purposes. COA 10-4965 also authorizes storage of water diverted from the Trinity River Basin in Lake Houston for subsequent diversion and use. COA 10-5807 authorizes diversion of an additional 28,000 ac-ft/yr from Lake Houston for municipal and industrial purposes. The permitted amount is divided evenly between the COH and SJRA. Water diverted under COA 10-5807 may be used in Harris, Fort Bend, Galveston, and Montgomery Counties within the San Jacinto River Basin, and in portions of Brazoria and Chambers Counties within the Trinity-San Jacinto Coastal Basin, Trinity River Basin, and San Jacinto-Brazos Coastal Basin.

## 3.3.3 Run-of-River and Contractual Surface Water Supplies

### 3.3.3.1 Brazos-Colorado Coastal Basin

Region H includes the Brazos-Colorado Coastal Basin in Brazoria and Fort Bend Counties, including Jones Creek and the lower reach of the San Bernard River. Fourteen water rights are associated with the Region H portion of the basin, with total permitted run-of-river diversions of 65,655 ac-ft/yr. Permitted uses include irrigation, industry, mining, and habitat maintenance.

### 3.3.3.2 Brazos River Basin

The Brazos River Authority (BRA) stores water in 11 water supply and flood control reservoirs in the middle and upper portions of the Brazos River Basin. BRA owns Possum Kingdom, Granbury, and Limestone Reservoirs, with the remainder owned by the U.S. Army Corps of Engineers. While BRA does not currently own or operate any major reservoirs within Region H, these upstream reservoirs provide water to entities in Region H through multiple water supply contracts. BRA currently has long term supply agreements with eight entities in Region H, totaling 163,450 ac-ft/yr. BRA also holds COA 12-5166 and COA 12-5177, which authorize the diversion of 850,000 ac-ft/yr of

interruptible excess flows in Fort Bend County. Because these are non-priority water rights and are therefore not firm, their associated supplies are not included as reliable existing supplies in DB17.

Several entities located in Region H hold large water rights in the basin. Dow Chemical Company holds COA 12-5328, which authorizes 305,656 ac-ft/yr of diversions from the Brazos River, Oyster Creek, and Buffalo Camp Bayou for municipal, industrial, irrigation, and recreation purposes. The permit also authorizes storage in Dow's Harris Reservoir and Brazoria Reservoir.

Gulf Coast Water Authority (GCWA) holds multiple water rights in the basin. COA 12-5168 authorizes 99,932 ac-ft/yr in diversions from the Brazos River for municipal, industrial, and irrigation use, as well as 7,373 ac-ft of storage in two small reservoirs. COA 12-5171 authorizes the diversion of 125,000 ac-ft/yr from the Brazos River for municipal, industrial, irrigation, and mining purposes. GCWA also holds COA 12-5322, which authorizes 864 ac-ft of storage and the diversion of 155,000 ac-ft/yr from the Brazos River for municipal, industrial, and irrigation use.

COA 12-5325, held by NRG, authorizes storage in Smithers Lake and industrial use of 28,711 ac-ft/yr of flows from the Dry Creek tributary of Big Creek. NRG is also granted 40,000 ac-ft/yr of water rights from the Brazos River by COA 12-5320 for industrial and irrigation use.

Brazosport Water Authority (BWA) holds COA 12-5366, which authorizes the diversion of 45,000 ac-ft/yr from the Brazos River in Brazoria County for municipal use.

### 3.3.3.3 San Jacinto-Brazos Coastal Basin

The San Jacinto-Brazos Coastal Basin includes a combination of dense urban development, irrigated agriculture, and industry in Brazoria, Fort Bend, Harris, and Galveston Counties. Total run-of-river water rights in the basin total approximately 288,407 ac-ft/yr, excluding an authorization for Dow Chemical Company to divert 4,209,000 ac-ft/yr of saline water from the Freeport Harbor Channel. There are several major run-of-river water rights within the basin. The City of Sugar Land holds COA 11-5170, which authorizes diversion of 18,159 ac-ft/yr from Jones and Oyster Creeks for municipal, industrial, irrigation, and recreation uses. GCWA holds COA 11-5169, which authorizes 12,000 ac-ft/yr of diversion and approximately 8,925 ac-ft of storage. COA 11-5357, also held by GCWA, authorizes 57,500 ac-ft of diversion from Chocolate, Mustang, and Halls Bayous in Brazoria County. Both of these rights include provision for municipal, industrial, irrigation, and recreational uses.

#### 3.3.3.4 San Jacinto River Basin

The San Jacinto River Basin includes a number of run-of-river water rights in addition to the rights associated with the storage and yield of Lakes Conroe and Houston. While the majority of these rights authorize diversions of 1,000 ac-ft/yr or less, there are seventeen rights for authorizations exceeding this amount. The largest of these is COA 10-3994 held by OxyVinyls LP, which authorizes diversion of 140,000 ac-ft/yr for industrial use. The COH holds COA 10-5826, (the Houston Bayous Permit), which authorizes the diversion of 130,000 ac-ft/yr of run-of-river supplies from Sims, Brays, Buffalo, and White Oak Bayous for municipal and industrial purposes. The Excess Flows Permit (COA 10-5808) authorizes diversion of 80,000 ac-ft/yr of run-of-river flows at Lake Houston for municipal and industrial purposes; the permitted diversion amount is divided evenly between the COH and SJRA. COA 10-4964, also held by SJRA, authorizes diversion of 55,000 ac-ft/yr of run-of-river supply at Lake Houston for municipal, industrial, and irrigation use. This water right serves as the primary supply for the SJRA Highlands Canal System, which serves industrial users in eastern Harris County.

#### 3.3.3.5 Trinity-San Jacinto Coastal Basin

The Trinity-San Jacinto Coastal Basin includes run-of-river water rights totaling approximately 44,578 ac-ft/yr for industrial and irrigation uses. The largest of these authorizations, COA 09-3926, is for 30,000 ac-ft/yr and is associated primarily with NRG's Cedar Bayou power generation facility.

#### 3.3.3.6 Trinity River Basin

In addition to the yield of Lake Livingston, several entities within the Region H portion of the basin hold large water rights. COA 10-4261 grants the COH 45,000 ac-ft/yr of run-of-river rights from the Trinity River and the Old River tributary for municipal, industrial, and power generation use. COH also holds COA 10-4277 authorizing 38,000 ac-ft/yr of diversions for municipal, industrial, irrigation, and mining use. The Chambers-Liberty Counties Navigation District (CLCND) is authorized under COA 08-4279 to divert up to 112,947 ac-ft/yr from Turtle Bayou (Lake Anahuac) for municipal, industrial, irrigation, and mining uses. The right additionally authorizes 30,000 ac-ft/yr of diversion by SJRA. SJRA also holds 56,000 ac-ft/yr in water rights through partial ownership of COA 08-5271. The remaining 2,500 ac-ft/yr from COA 08-5271 is permitted to LNVA.

#### 3.3.3.7 Neches-Trinity Coastal Basin

The portion of the Neches-Trinity Coastal Basin located within Region H includes run-of-river water right permits totaling 70,175 ac-ft/yr in permitted diversions. The largest individual right included (COA 07-4296) is the U.S. Fish and Wildlife Service water right for the Anahuac National Wildlife



Refuge, which has a right for 21,000 ac-ft/yr. The remaining permits are authorized for irrigation, recreation, and wetland habitat uses.

#### 3.3.3.8 Neches River Basin

Lake Sam Rayburn is located on the Neches River approximately 11 miles northwest of the City of Jasper in Region I. The lake is owned by the U.S. Army Corps of Engineers and operated by the Lower Neches Valley Authority (LNVA). Several entities in Region H receive supplies from the lake through contracts with LNVA, including the Trinity Bay Conservation District, Bolivar Peninsula SUD, and irrigators in Chambers and Liberty Counties. Region H does not receive run-of-river surface water from the Neches River Basin.

### 3.3.4 Local Supplies

Local supplies (stock ponds, small catchments, etc.) are currently used in Region H to meet a portion of livestock and mining demands. The TCEQ allows a landowner to impound up to 200 acre-feet of water without obtaining a water right, and therefore these supplies cannot be tied to specific COAs. Because these individual sources are generally undocumented and are typically unreliable under drought-of-record conditions, the Region H water plan does not include these local supplies in its analysis of existing surface water supplies.

### 3.3.5 Surface Water Availability

#### 3.3.5.1 Surface Water Availability Modeling

Surface water availability was estimated using the TCEQ Water Availability Models (WAMs) for the river basins within Region H. The WAMs use the Water Rights Analysis Package (WRAP), developed at Texas A&M University, to simulate water right diversions using historical rainfall and evaporation data. The WAMs are not intended to serve as predictive tools but rather simulate the behavior of included water rights under a repeat of a certain period of historical hydrology. The model simulates a set of monthly diversion targets attempted annually against a historical inflow dataset, which is typically 50 years long and varies each year. The drought of record (DOR) for most of Texas occurred in the 1950s and is reflected in the historic dataset for each basin. Water diversions are modeled according to the parameters of each particular water right and are taken in priority order, such that the most senior water rights are satisfied before junior rights are allowed to divert water. It is important to note that the TCEQ WAMs are based on historic hydrologic data to account for rainfall and evaporation losses. While the model provides an approximation of water right

availability during the DOR, the model does not predict water right availability in future droughts which may have different hydrologic conditions. The models generally do not include return flows that often increase the reliability of downstream water rights. The reliability of water rights that rely on reservoir storage is also based on assumed sedimentation rates that are projected through the planning period. While this assumption is good for planning purposes, it may not reflect current sedimentation rates. The models also contain assumptions in the internal modeling routines that affect the accuracy of results. Currently, the models are also not able to simulate the interaction between groundwater and surface water supplies.

There were originally eight WAM scenarios (referred to as model runs) simulated under the TCEQ program. TWDB's First Amended General Guidelines for Regional Water Plan Development requires the use of WAM Run 3, reflecting full authorized diversion of current water rights with no return flows, when determining the supply available to the region. Run 3 represents a conservative approach, since not all rightholders attempt to divert their full permit amount every year and diversions for municipal and manufacturing users typically return a portion of diverted water to streams as treated wastewater effluent. However, the majority of water rights do not address return flows to source streams, implying a right to full consumptive use. For this reason, and because the planning period extends 50 years into the future, use of a model reflecting full consumptive diversion by all rights is appropriate for long-term planning.

Output files are compared by reviewing the statistical frequency of meeting diversion amounts or target instream flow levels. For purposes of regional water planning, supplies availability for a water right is limited to its firm yield, the amount of water that can be diverted every year of the WAM simulation period without shortage. Regional planning groups may elect to constrain availability of a water right to a value lower than the firm yield based on stakeholder / rightholder input, to maintain an added margin of safety for reservoir supplies, or for other considerations relevant to the supply.

While availability of surface water rights is determined on a right-by-right basis, the method of representing surface water supplies in DB17 is dependent on the nature of the right. Multiple reservoirs operated as a system are treated as a single source in the database, with supplemental information showing the contribution of firm yield associated with each component reservoir. Non-system reservoirs are listed individually. Run-of river rights are typically aggregated into a single source for each county and river or coastal basin.

Specific information on modeling procedures and availability results for each basin in Region H are described in greater detail in the following subsections. Availability of existing water supplies is summarized in **Appendix 3DB**. Additional reference information the models executed for surface water availability estimation is available in **Appendix 3A**.

#### 3.3.5.2 Brazos-Colorado Coastal Basin

Surface water supplies for the Brazos-Colorado Coastal Basin were analyzed using the TCEQ Run 3 WAM for the Colorado and Brazos-Colorado basins (08/01/2007 version). Of the 65,905 ac-ft permitted within the Region H portion of the basin, 3,211 ac-ft were determined to be firm for regional planning purposes. An additional 136 ac-ft of firm yield held by the US Fish and Wildlife Service was not included as the wetlands maintenance use specified for the permit is likely outside of the demand projected for Region H.

#### 3.3.5.3 Brazos River Basin

Surface water supplies for the Brazos River Basin were analyzed using a modified version of the TCEQ Run 3 WAM for the Brazos and San Jacinto Brazos basins developed by the Brazos G Regional Water Planning Group (Region G). Brazos G developed models for year 2020 and year 2070 conditions, which include projected return flows, adjustments for reservoir sedimentation, and addition of recently-granted water rights. Revision of the TCEQ WAM by Brazos G was approved by the TWDB Executive Administrator. Supplies were assessed for years 2020 and 2070 conditions, with results used to linearly interpolate availabilities for years 2030 through 2060. The firm portion of run-of-river diversions was found to be 474,802 ac-ft/yr for year 2020 conditions and 497,369 ac-ft/yr for year 2070 conditions. Subsequent to model analysis, GCWA requested that DB17 firm yield for its water rights in the 2016 RWP be limited to the portions of those rights with a priority date senior to 1942 based on observations of water availability during drought conditions. This results in total run-of-river firm availability of 426,160 ac-ft/yr for year 2020 conditions and 448,727 ac-ft/yr for year 2070 conditions.

As noted earlier, eight entities in Region H receive supplies through water supply contracts with BRA. These contracts, which are derived from the reliable portion of BRA's upstream yield, constitute 163,450 ac-ft/yr of available supplies in Region H.

#### 3.3.5.4 San Jacinto-Brazos Coastal Basin

Surface water supplies for the San Jacinto-Brazos Coastal Basin were analyzed using a modified

version of the TCEQ Run 3 WAM for the Brazos and San Jacinto Brazos basins developed by Region G. Supplies were assessed for years 2020 and 2070 conditions, with results used to linearly interpolate availabilities for years 2030 through 2060. 38,826 ac-ft/yr of run-of-river supply was found to be firm for year 2020 through year 2070 conditions. Of this yield, 21,568 ac-ft/yr is associated with multi-use permits held by GCWA and the City of Sugar Land, with the rest of the firm yield coming from a number of irrigation water rights.

#### 3.3.5.5 San Jacinto River Basin

Surface water supplies for the San Jacinto River Basin were analyzed using the most recent version of the TCEQ Run 3 WAM for the basin (11/23/2009 version). The model files were adjusted to incorporate the COH's COA 10-5826, which was granted after the most recent available Run 3 WAM for the basin was released. A total of 12,652 ac-ft/yr of run-of-river supply was found to be firm.

Reservoirs reduce the velocity of the streams they impound, causing suspended soil particles to settle; over time, storage volume is lost due to this accumulation. Therefore, sedimentation rates were determined and applied to Lake Houston and Lake Conroe to calculate the year 2020 and year 2070 storage volumes. For both sedimentation conditions, the target diversion for each reservoir was iteratively reduced until a firm yield was determined, with the diversion target for other reservoir modeled at its permitted amount. The available yield of Lake Houston is determined from two permitted diversions. The original permitted diversion of Lake Houston, 168,000 acre-feet per year, is firm throughout the planning period. This is due to the downstream location of Lake Houston on the San Jacinto River and its seniority relative to other major water rights in the basin. The firm yield of the second and less senior diversion (COA 10-5826) was 11,000 ac-ft/yr for year 2020 conditions, decreasing to 1,300 ac-ft/yr for year 2070 conditions due to sedimentation. The modeled firm yield of Lake Conroe was 79,300 ac-ft/yr for year 2020 sedimentation, decreasing slightly to 75,500 ac-ft/yr for year 2070 conditions.

#### 3.3.5.6 Trinity-San Jacinto Coastal Basin

Surface water supplies for the Trinity-San Jacinto Coastal Basin were analyzed using the TCEQ Run 3 WAM for the basin (11/23/2009 version). Of the 14,474 ac-ft/yr in permitted run-of-river rights included in the WAM, 5,316 ac-ft/yr were found to be firm under DOR conditions. An additional 30,000 ac-ft/yr permitted by COA 09-3926 is excluded from the WAM as the diversion point is subject to salinity impacts due to tidal influence. Because the diversion is not dependent on water quality, the permit was considered to be fully firm.

### 3.3.5.7 Trinity River Basin

Modeling of run-of-river supplies in the Trinity River Basin utilized the TCEQ WAM Run 3 for the basin (9/19/2011 version). A total of 139,186 ac-ft/yr in run-of-river water was determined to be firm under DOR conditions. A small portion of this yield (1,054 ac-ft/yr) is held by irrigators and state agencies in Leon, Liberty, Madison, and Walker Counties. The remainder is associated with large water rights owned by the COH, SJRA, and CLCND. A modified version of the WAM authorized by TWDB and incorporating upstream return flows was used to model Lake Livingston. The full permitted amount of 1,344,000 ac-ft/yr was found to be firm.

### 3.3.5.8 Neches-Trinity Coastal Basin

Surface supplies in the Neches-Trinity Coastal River Basin were modeled using the TCEQ WAM Run 3 model for the basin (11/23/2009 version). Of the water right permits totaling 70,175 ac-ft/yr from the Neches-Trinity coastal basin in Region H, 37,700 ac-ft/yr were reliable during the DOR. Approximately one-third of this firm total is the U.S. Fish and Wildlife Service water right for the Anahuac National Wildlife Refuge.

### 3.3.5.9 Neches River Basin

Surface water availability for the Neches River Basin and the Lake Sam Rayburn / B.A. Steinhagen Reservoir System was determined by the East Texas Water Planning Group (Region I). Applicable supplies utilized by entities in Region H are reflected in DB17 as the contract amounts between LNVA and individual WUGs.

## 3.4 REUSE SOURCES

### 3.4.1 Reuse Overview

The reuse of existing water sources allows entities to increase their available supply portfolio and in some cases replace or defer more expensive projects to develop new supplies. Reuse, or reclaimed supply, is typically classified as either direct or indirect. Direct reuse infrastructure diverts return flows from a wastewater treatment facility at some point in the treatment train and conveys the water to points of use. The required infrastructure and level of treatment are dependent upon the intended use. Indirect reuse typically involves discharge of treated wastewater from one facility into a receiving body, with the bed and banks of the receiving stream used to convey the treated water to for subsequent diversion at a downstream point.

The permitting process and regulatory requirements for reuse in the State are dependent on

whether the water is for municipal or industrial purposes, the intended use, and if the supply is direct or indirect. Permitting of reclaimed supplies is administered by TCEQ. All types of reuse are subject to the requirements of 30 TAC 210. If an indirect reuse supply is to be discharged into a State watercourse, it will also require a water right authorization similar to other surface water sources and will be subject to water rights restrictions and subject to the prior appropriation system.

### 3.4.2 Reuse Availability

Determination of the reliable availability of reclaimed supplies presents several challenges. Permitted reuse amounts cannot be assumed to be fully reliable as existing supplies, as permitted volumes may exceed current return flow levels and permitted indirect reuse is subject to curtailment during times of drought. Even in communities or industries with longstanding direct reuse programs, the amount of reclaimed water utilized can vary considerably from year to year based on hydrologic conditions, patterns of indoor vs. outdoor water use, or industrial facility production. Reuse potential also changes over time with population. In order to estimate appropriate reliable reuse supplies, the following procedure was applied:

1. Data was extracted from the TWDB water use survey for entities in Region H with reclaimed supplies, and each entity was associated with the appropriate WUG.
2. For each WUG, volumes of self-supplied reuse were calculated by year for direct and indirect reuse sources.
3. For WUGs with a year 2012 reuse volume of zero, reuse supplies were assumed to not be firm.
4. If reuse for a WUG began in year 2012, the 2012 reuse volume was assigned as the estimated reliable supply.
5. For WUGs with a longer history of reuse, the year 2011 reuse volume was assigned as the estimated reliable supply. Because of the severe drought conditions experienced during 2011, this usage is the most reasonable representation of what reuse supply the WUG would be able to expect during drought conditions.

Availability of existing water supplies is summarized in **Appendix 3DB**.

### **3.5 WHOLESALE WATER PROVIDERS AND MAJOR SUPPLY CONTRACTS**

Region H depends on water supply contracts from the 26 wholesale water providers (WWPs) serving the Region to meet demands of both municipal and non-municipal users. Twenty-three of these WWPs mainly serve users within the Region, while the other three (BRA, LNVA, and TRA) provide supplies to Region H from their primary region. Approximately half of the WWPs in Region H are also WUGs, including cities and regional water authorities which serve their own needs as well as those of their contract customers. The WWPs supplying Region H are discussed in greater detail in the following subsections.

#### **3.5.1 Baytown Area Water Authority**

The Baytown Area Water Authority (BAWA) provides treated surface water to the City of Baytown as well as a number of surrounding municipal utility districts (MUDs), fresh water supply districts (FWSDs), and other communities. BAWA purchases Trinity River supplies from the COH, which are conveyed through the CWA Industrial Canal to the BAWA raw water lift station and treated at BAWA's surface water treatment plant. BAWA provides treated surface water to the following WUGs:

- City of Baytown
- Harris County WCID #1
- County-Other in Harris County (San Jacinto and Trinity-San Jacinto Basins)

#### **3.5.2 Brazosport Water Authority**

BWA service area includes treated water customers in the southern portion of Brazoria County, including seven municipalities, Dow Chemical, and two state prison units. BWA is supplied by its own water right through the Harris and Brazoria Reservoirs. BWA provides raw surface water to the following WUG and WWP entities:

- City of Angleton
- City of Brazoria
- City of Clute
- City of Freeport
- City of Lake Jackson
- City of Oyster Creek
- City of Richwood
- County-Other in Brazoria County (San Jacinto-Brazos Basin)

- Dow Chemical USA

### **3.5.3 Brazos River Authority**

BRA operates multiple reservoirs and holds a substantial portion of the water rights in the Brazos River Basin. BRA provides raw surface water to the following WUG and WWP entities:

- Dow Chemical USA
- GCWA
- NRG Texas, LLC
- Pecan Grove MUD
- City of Richmond
- City of Rosenberg
- City of Sugar Land
- Irrigation in Waller County (Brazos River Basin)

### **3.5.4 Central Harris County Regional Water Authority**

Central Harris County Regional Water Authority (CHCRWA) provides water supply to communities in central Harris County north of the COH. Districts within NHCRWA's boundaries include Fallbrook UD, Rankin Road West MUD, Harris County UD 16, and Harris County MUDs 33, 150, 200, 205, 215, 217, 304, and 399. Member districts of CHCRWA are partially supplied through their own groundwater production. CHCRWA also purchases water from the COH to meet demands within its service area.

### **3.5.5 Chambers-Liberty Counties Navigation District**

The CLCND provides raw water through its canal system to the City of Anahuac, the Trinity Bay Conservation District, and irrigators in Chambers County. CLCND is supplied through its own water rights from the Trinity River and Lake Anahuac. CLCND supplies the following WUGs:

- City of Anahuac
- Trinity Bay Conservation District
- Irrigation in Chambers County (Neches-Trinity Basin)

### **3.5.6 City of Galveston**

The City of Galveston purchases wholesale treated water from GCWA, which is conveyed from GCWA's Thomas Mackey Water Treatment Plant to Galveston Island via pipeline. This water is used



to meet needs for the city. Galveston also sells a portion of the water to Galveston County MUD #1 and the City of Jamaica Beach.

### **3.5.7 City of Houston**

The COH is the most populous WUG in Region H and also the largest WWP in terms of overall water supply. Major surface water supplies held by the City include majority ownership of the firm yield of Lakes Conroe, Houston, and Livingston. The City also owns run-of-river water rights. In the Trinity River Basin, COH holds two major water rights permitted for industrial, irrigation and other uses. The City also holds water rights authorizing withdrawals from several bayous in the San Jacinto Basin and diversion of excess run-of-river flows at Lake Houston (shared permit with SJRA). Additional permitted sources include both direct and indirect reuse. COH also produces groundwater which is primarily used to meet its own demands but also makes up a small portion of the supply to other customers through either direct supply of groundwater or blending with other supply sources.

COH's WUG and WWP customers include:

- BAWA
- City of Bellaire
- City of Bunker Hill Village
- CHCRWA
- Chimney Hill MUD
- Clear Brook City MUD
- Clear Lake City Water Authority
- County-Other in Harris County (multiple utility districts)
- County-Other in Montgomery County
- City of Deer Park
- City of Friendswood
- City of Galena Park
- Greenwood Utility District
- Harris County MUDs #8, 49, 55, 96, and 158
- City of Hedwig Village
- City of Hilshire Village
- City of Humble
- City of Hunters Creek Village

- Irrigation in Liberty County
- City of Jacinto City
- City of Jersey Village
- La Porte Area Water Authority
- City of League City
- Manufacturing in Chambers County (Trinity-San Jacinto Basin)
- Manufacturing in Harris County
- North Channel Water Authority
- North Fort Bend Water Authority
- North Harris County Regional Water Authority
- NRG
- City of Pasadena
- City of Pearland
- City of Piney Point Village
- SJRA
- City of South Houston
- City of Southside Place
- Steam-Electric Power in Harris County
- Sunbelt FWSD
- West Harris County Regional Water Authority
- City of West University Place
- Windfern Forest Utility District.

### **3.5.8 City of Huntsville**

The City of Huntsville provides water to its own municipal service area as well as surrounding communities in the County-Other WUG in Walker County. The City's water demands are met partially with self-supplied groundwater. Huntsville also receives surface water from a contract with TRA through the Huntsville Regional Water Supply System, of which a portion are conveyed to manufacturing demands outside of Region H.

### **3.5.9 City of Missouri City**

The City of Missouri City supplies users within its service area primarily with self-supplied

groundwater and surface water supplies purchased on a wholesale basis from GCWA and diverted from GCWA's raw water canal system. The City also receives supplies from Fort Bend County WCID #2. Customers currently served or anticipated to be served surface water by the City include Sienna Plantation and Fort Bend County MUD #129.

### **3.5.10 City of Pasadena**

The City of Pasadena supplies water to customers within its own boundaries as well as to the City of Seabrook (which in turn provides some of this water to the City of El Lago) and manufacturing located in Harris County. Pasadena utilizes self-supplied groundwater as well as water purchased from the COH and the Clear Lake City Water Authority (CLCWA).

### **3.5.11 Cities of Richmond and Rosenberg**

The Cities of Richmond and Rosenberg each meet their demands and those of their customers through self-supplied groundwater. Both entities also have contracts with BRA for raw surface water supplies. In addition to their own needs, the Cities serve:

- County-Other in Fort Bend County (Brazos Basin)
- Fort Bend County MUD #116 (Richmond customer)
- Fort Bend County MUD #121 (Richmond Customer)

### **3.5.12 City of Sugar Land**

The City of Sugar Land supplies water to customers within its own boundaries as well as to users in its extra-territorial jurisdiction including the Riverstone development (County-Other in Fort Bend County). In addition to self-supplied groundwater, the City has contracts with both GCWA and BRA for surface water supply.

### **3.5.13 Clear Lake City Water Authority**

CLCWA obtains its water supplies through a contract with the COH. CLCWA provides water supply to WUGs in southeast Harris County, including:

- City of Houston (retail service in the Clear Lake area)
- City of Nassau Bay,
- City of Pasadena,
- Taylor Lake Village,
- Manufacturing in Harris County (San Jacinto-Brazos Basin).

### **3.5.14 Dow Chemical USA**

Dow Chemical is supplied primarily by its own water rights on the lower Brazos River, with the ability to receive a smaller amount of water through a contract with BRA. Dow supplies manufacturing demands in Brazoria County, including its own facilities.

### **3.5.15 Fort Bend County WCID #2**

Fort Bend County WCID #2 receives raw surface water through a contract with GCWA and provides this supply to customers primarily in northeastern Fort Bend County. WUGs are served directly through retail water supply to individual customers within the Fort Bend WCID #2 service area.

WUGs served include:

- City of Meadows Place
- City of Missouri City (limited to portions of City of Missouri City)
- City of Stafford (groundwater and surface water)

### **3.5.16 Galveston County WCID #1**

Galveston County WCID #1 purchases treated water supplies on wholesale basis from GCWA.

Supplies are provided to the following WUGs:

- City of Dickinson
- City of League City (retail service to small number of connections)
- City of Texas City (retail service to small number of connections)

### **3.5.17 Gulf Coast Water Authority**

GCWA is a major water provider to municipal, manufacturing, and irrigation users in the San Jacinto-Brazos and lower Brazos Basins. GCWA provides raw water to users in Fort Bend, Brazoria, and Galveston Counties through an extensive canal network. Treated water is also supplied through a pipeline system to a number of users in Galveston County. GCWA is primarily supplied by its own rights on the Brazos River, with additional supplies purchased through a contract with BRA. WUGs with supply contracts from GCWA include:

- Bacliff MUD
- County-Other in Galveston County
- City of Galveston
- Fort Bend County WCID #2 (raw)

- Galveston County WCID #1
- City of Hitchcock
- Irrigation in Fort Bend, Brazoria, and Galveston Counties (raw)
- City of Kemah
- Clear Lake Shores
- City of La Marque
- City of League City
- Manufacturing in Brazoria and Galveston Counties (raw)
- City of Missouri City (raw)
- NRG
- City of Pearland (raw)
- Pecan Grove MUD #1 (raw)
- San Leon MUD
- City of Santa Fe
- City of Sugar Land (raw)
- City of Texas City
- Tiki Island

### **3.5.18 La Porte Area Water Authority**

The La Porte Area Water Authority (LAWA) purchases water on a wholesale basis from the COH. This water is supplied to entities in Harris County, including:

- City of La Porte
- City of Shoreacres
- County-Other in Harris County (San Jacinto-Brazos Basin)

### **3.5.19 Lower Neches Valley Authority**

LNVA holds rights to both reservoir yield and run-of-river supplies in the Neches River Basin and serves customers through an extensive canal system in Jefferson, Chambers, and Liberty County. LNVA also owns a portion of the water rights from the former Devers Canal Company. LNVA customers in Region H include:

- Irrigation in Chambers County (Neches-Trinity Basin)
- Irrigation in Liberty County (Neches-Trinity Basin)

- Trinity Bay Conservation District
- Bolivar Peninsula SUD

### **3.5.20 North Channel Water Authority**

North Channel Water Authority (NCWA) receives water under contract from COH which it provides to its constituent water districts as well as to a small number of manufacturing customers in Harris County. Supplies listed under NCWA also include self-supplied groundwater produced by constituent water districts.

### **3.5.21 North Fort Bend Water Authority**

North Fort Bend Water Authority (NFBWA) provides water supply to communities in northern Fort Bend County and a small portion of western Harris County. Member districts of NFBWA are partially supplied through their own groundwater production. NFBWA also purchases water from the COH to meet demands within its service area.

### **3.5.22 North Harris County Regional Water Authority**

North Harris County Regional Water Authority (NHCRWA) provides water supply to communities in northern and northwestern Harris County north of the COH. Member districts of NHCRWA are partially supplied through their own groundwater production. NHCRWA also purchases water from the COH to meet demands within its service area.

### **3.5.23 NRG**

NRG operates several steam-electric power generation facilities within Region H, as well as providing water supply to other power generation and irrigation water users. In the eastern portion of the Region, NRG is supplied largely by its own water right in the Trinity-San Jacinto Basin, as well as through contract with COH. In Fort Bend County, NRG is supplied through a combination of its own Brazos River Basin rights and a contract with BRA. WUGs served by NRG include:

- Irrigation in Fort Bend County (Brazos Basin)
- Steam-Electric Power in Chambers County (Trinity-San Jacinto Basin)
- Steam-Electric Power in Fort Bend County (Brazos Basin)
- Steam-Electric Power in Harris County (San Jacinto Basin)

### **3.5.24 San Jacinto River Authority**

SJRA acts as a major water provider in Harris and Montgomery Counties. SJRA holds partial ownership of the Lake Conroe water right, which it uses to serve irrigation and power generation customers as well as participants in the SJRA Joint GRP in Montgomery County. SJRA also serves as the water provider to The Woodlands, supplying the community's demands through a combination of groundwater and surface water. SJRA also holds run-of-river rights in the San Jacinto and Trinity Basins and a portion of Lake Houston reservoir supply, which are used to meet municipal, manufacturing, and irrigation demands in Harris County through SJRA's Highlands Canal system.

SJRA's customers include:

- City of Conroe
- County-Other in Montgomery County
- Crosby MUD
- Harris County MUD #50
- Irrigation in Harris County (San Jacinto Basin)
- Irrigation in Montgomery County (San Jacinto Basin)
- Manufacturing in Harris County (Trinity-San Jacinto Basin)
- Montgomery County WCID #1
- Newport MUD
- City of Oak Ridge North
- Rayford Road MUD
- Southern Montgomery County MUD
- Steam-Electric Power in Montgomery County
- The Woodlands

### **3.5.25 Trinity River Authority**

TRA holds a number of water rights in the Trinity River Basin and provides supply to several planning areas, including Region H. Contracts from TRA to entities in Region H are associated exclusively with TRA's share of the Lake Livingston permit. Supplied entities in Region H include:

- County-Other in Polk County (Trinity Basin)
- County-Other in San Jacinto County (Trinity Basin)
- County-Other in Trinity County (Trinity Basin)

- City of Groveton
- City of Huntsville
- Irrigation in Chambers County (Neches-Trinity Basin)
- Irrigation in Liberty County (Trinity and Neches-Trinity Basins)
- Irrigation in San Jacinto County (Trinity Basin)
- Lake Livingston Water Supply & Sewer Service Company
- City of Livingston
- Mining in Polk County (Trinity Basin)
- Town of Riverside
- Riverside WSC
- San Jacinto SUD
- City of Trinity
- Trinity Rural WSC

### **3.5.26 West Harris County Regional Water Authority**

West Harris County Regional Water Authority (WHCRWA) provides water supply to communities in western and northwestern Harris County. Member districts of WHCRWA are partially supplied through their own groundwater production. WHCRWA also purchases water from the COH to meet demands within its service area.

## **3.6 ASSIGNMENT OF SOURCES**

The assignment of existing available water supplies to WWPs and WUGs within Region H requires consideration of many potential sources of information and the application of multiple supply allocation processes to account for differences in physical, contractual, and regulatory constraints across the Region. The processes associated with allocation of reuse supplies and assignment of water right yield to owning entities can be applied in a simple and consistent manor across the Region. Contractual supply arrangements vary in complexity from simple, single-source agreements with a defined volume to more complex arrangements with open-ended commitments, potential for source blending, indirect rearrangement of supplies, or contracts limited by source availability. Assignment of groundwater resources is particularly complex as groundwater available to individual WUG is not driven by a set of water rights but rather can be influenced by local groundwater regulation, WUG pumping capacity, and overall availability of groundwater in an area relative to the



demand for the resource. The procedures applied in assigning existing water supplies, along with the information considered in each process, are discussed in greater detail in the following subsections. Existing water supplies assigned to each WUG and WWP are summarized in **Appendix 3DB**.

### **3.6.1 Groundwater**

Due to the complexity of groundwater supplies in Region H, including the use of several groundwater formations and the presence of multiple entities with regulatory authority, assignment of groundwater resources in the Regional Plan cannot follow a single rigid methodology for all counties. While some counties have the ability to meet much or all of their projected demand with groundwater, others are limited by hydrogeological conditions or regulatory factors. As such, the process of assignment of existing groundwater supplies to individual WUGs was performed on a county-by-county basis and included consideration of a broad variety of factors, including TWDB-supplied MAG values, historical water use, groundwater production capacity, projected water demand, regulatory requirements of GCDs or subsidence districts, and ongoing implementation of GRPs. Groundwater allocation strategies are discussed in greater detail in the following subsections.

#### **3.6.1.1 Counties with Adequate Groundwater Resources**

Based on MAG values and projected demands, groundwater supplies were determined to be adequate through year 2070 for Austin, Leon, Madison, Polk, San Jacinto, Trinity, Walker, and Waller Counties. These counties, which are located in the northern portion of the region, are less urbanized and less heavily industrialized than the densely-populated coastal counties within the region. These northern counties also have limited access to firm surface water rights and contracts and primarily utilize groundwater supplies. Due to these factors, a majority of the WUGs in these counties are not projected to have needs through year 2070; where needs are projected in these counties, estimated shortages are a factor of infrastructure limitations. The following procedure was applied in the allocation process:

1. Identification of the source groundwater formation or formations for each WUG within the county was determined using data from TWDB's Historical Groundwater Use records. In cases where source formation was listed as unknown or information on the WUG was unavailable, source formation was estimated from WUG location.
2. Maximum existing groundwater production capacity for each WUG was estimated.

Available sources of information on production capacity varied by WUG, with the least restrictive (highest estimated groundwater production capability) applied as the WUG limit. Primary references included Region H WUG survey responses, listed production capacities from TCEQ's Water Utility Database (WUD), or maximum historical pumpage for years 2000-2011 calculated from TWDB's Historical Groundwater Use records.

3. In the event that adequate data was not available from the preferred data sources, groundwater production capacity was assumed to be equal to estimated year 2010 demands under drought conditions. For municipal WUGs, this demand was approximated as year 2010 population multiplied by the WUG's baseline per-capita demand as developed for the RWP. For non-municipal demands, year 2010 drought condition demands were estimated to match projected year 2020 demand, as non-municipal demands in the northern counties are projected to remain level or change relatively slowly.
4. For WUGs with both surface and groundwater supplies, available surface water was deducted from the portion of projected demand assigned to groundwater.
5. Groundwater from the appropriate source formation was allocated to each WUG in an amount not to exceed the lesser of the projected demand for each decade and the estimated groundwater production capacity.

### 3.6.1.2 Counties with Inadequate Groundwater Resources

Brazoria, Chambers, and Liberty counties were determined to have inadequate groundwater availability to meet demands due to the size of demands relative to the MAG. These counties, which are located in the eastern and southern portion of the Region, include both rural and heavily urbanized / industrialized areas and rely upon both groundwater and surface water. In some cases the groundwater available to these counties is adequate to meet near-term demand not otherwise served by surface water, but for all three growing demands exceed groundwater supply by year 2070. Any available groundwater in these counties not assigned as an existing supply is solely a result of estimated infrastructure limitations. The following procedure was applied in the allocation process:

1. Procedures 1 through 5 as described in the section regarding counties with adequate groundwater were applied to determine a preliminary allowable supply for municipal WUGS, which typically have high-capacity wells of greater deepness than non-municipal use.
2. If availability could support other WUGs up to their demand or production capacity,

assignment was also made to non-municipal WUGs on a case-by-case basis. Priority was given to WUGs with non-agricultural uses due to an assumption of deeper well infrastructure, and to WUGs without access to alternate surface water supplies.

3. If MAG supply remained after steps 1 and 2 above, WUGs which were not yet assigned groundwater supply were allocated remaining available groundwater in an amount proportional to their demand or estimated production capacity.

### 3.6.1.3 Counties within Subsidence Districts

As noted in the section on groundwater availability, allowable groundwater pumpage in Fort Bend, Harris, and Galveston Counties is determined by the regulatory requirements established by the FBSD and the HGSD. These Districts have established several regulatory sub-areas, with allowable groundwater pumpage within these sub-areas limited to a certain percentage of an entity's overall water use. For certain sub-areas, these percentages also reduce over time. Entities are allowed to enter into GRPs that allow for regional compliance with groundwater regulation to maximize efficiency in goal attainment. Multiple entities may participate together in a joint GRP, with some converting wholly or partially to alternative water sources and allowing others to continue growth on groundwater so long as the composite use by participating entities meets regulatory restrictions. These regulations served as the primary driver of the following groundwater allocation procedure:

1. A geospatial analysis was performed to determine the sub-area(s) associated with each WUG. Each WUG county-basin split was assigned the sub-area in which it had the greatest coverage. The majority of WUGs were in a single regulatory sub-area.
2. Certain large WUG county-basin splits were determined to be of such size that assignment of a single sub-area was inadequate to capture regulatory availability correctly. In these cases, a further spatial analysis of the projected census block level population within each regulatory sub-area was performed, with population used to develop ratios of demand for subsets of the WUG county-basin split. This methodology was applied for the COH in Harris County, County-Other in Harris County, and County-Other within the Brazos Basin for Fort Bend County.
3. Projected water demands for each WUG county-basin split were multiplied by the percentage of allowable groundwater for the appropriate regulatory sub-area to calculate a preliminary value of allowable groundwater pumpage.
4. For WUGs which do not produce their own groundwater but rather purchase groundwater

supplies from another entity, allowable groundwater pumpage volumes were reassigned from the purchasing WUG to the supplying WUG.

5. Allowable groundwater pumpage amounts were reassigned among joint GRP participants. If specific volumes of conversion or allowed groundwater expansion for currently-implemented GRP stages were known, these values were used. Otherwise, for participants continuing growth on groundwater sources, the difference between projected demand and allowable pumpage was calculated and then deducted from allowable pumpage for entities converting to alternative water supplies.
6. Allowable groundwater pumpage amounts were further constrained by existing groundwater production capacities. Because of the historical reliance of the coastal counties in Region H on groundwater and a longer history of urbanization, this impacted a limited number of WUGs, primarily in Fort Bend and Galveston counties. These WUGs tended to be either non-municipal uses with limited historical use of groundwater and younger or smaller municipal developments anticipated to experience substantial growth in demand in the future.
7. Because groundwater availability for the Regional Plan is limited to the MAG rather than regulatory availability, each WUG's share of the MAG was calculated by dividing its allowable pumpage as calculated in steps 1 through 6 above by the total allowable pumpage calculated for all WUGs in the county and multiplying the resultant percentage by the MAG.

#### 3.6.1.4 Montgomery County

Allowable groundwater production in Montgomery County is determined by the regulatory requirements established by the LSGCD. The LSGCD District Regulatory Plan requires large volume groundwater users (LVGUs), defined as entities producing 10,000,000 gallons or more of groundwater, to reduce their groundwater production to not more than 70 percent of their Total Qualifying Demand (TQD, equivalent to permitted Year 2009 groundwater pumpage). Because this regulatory approach is based on a reference value rather than a demand percentage, estimates of existing allowable pumpage in Montgomery County remain level over time. LSGCD has provided flexibility in methods for achieving the mandated groundwater reduction, including granting early conversion credits to entities converting before specific dates and allowing entities to meet their reduction goals in composite form through joint GRPs. Additionally, LVGUs may produce groundwater in excess of 70 percent of their TQD in some years, provided that their average production from year 2016 through year 2045 meets the conversion requirement. These

regulations served as the primary driver of the following groundwater allocation procedure:

1. The WUG associated with each LVGU was identified through a geospatial analysis. Certain WUGs, particularly County-Other and non-municipal WUGs, were typically associated with multiple LVGUs.
2. A preliminary estimate of allowable groundwater pumpage was calculated for each LVGU by multiplying its TQD by 70 percent.
3. After preliminary calculations, portions of allowable groundwater pumpage for some LVGUs were reassigned in accordance with relevant GRPs.
  - a. No changes were made for GRPs relying solely on conservation or allowing shortages.
  - b. For small joint GRPs with a strategy of basic underconversion and overconversion of constituent LVGUs, excess pumpage from underconverting participants was deducted from allowable pumpage by overconverting participants.
  - c. For entities relying upon self-generated or purchased early conversion credits, allowable groundwater pumpage was increased under the assumption that such credits would be depleted at a constant rate between 2016 and 2045. After 2045, availabilities for these entities reverted to the preliminary estimate.
  - d. The SJRA Joint GRP involved several steps based on participant type and base allowable pumpage. Allowable pumpage for participants converting partially to surface water were assigned based on their Year 2016 target conversion percentage. For participants remaining on groundwater with base allowable pumpage sufficient to meet Year 2020 projected demands, no changes were made. For participants remaining on groundwater with base allowable pumpage below Year 2020 projected demands, allowable pumpage was increased to 2020 demands and confirmation was made that composite allowable groundwater use across joint GRP participants did not exceed 70 percent of the composite TQD.
4. LVGU allowable pumpage as determined in steps 1 through 3 was rolled up to the WUG level. Because some WUGs include both LVGU and non-LVGU entities, total allowable pumpage for these entities was set equal to the sum of LVGU allowable pumpage and Year 2020 projected WUG demand less the TQD of LVGUs within the WUG to prevent double-counting. This impacted non-municipal WUGs and County-Other.
5. Availability of named WUGs which are not currently LVGUs was set to 31 ac-ft/yr for each

WUG, reflecting the maximum amount of groundwater such WUGs can produce without converting to LVGU status.

6. Because groundwater availability for the Regional Plan is limited to the MAG rather than regulatory availability, each WUG's share of the MAG was calculated by dividing its allowable pumpage as calculated in steps 1 through 5 above by the total allowable pumpage calculating for all WUGs in the county and multiplying the resultant percentage by the MAG.

### **3.6.2 Surface Water**

Surface water sources included as existing supplies in the Regional Plan are associated with permanent water rights granted by the TCEQ. As such, reliable (firm) supplies from both reservoir and run-of-river sources were allocated to specific rightholders in accordance to the terms of each water right. Large water rights in the Region are typically held by WWPs or named WUGs; smaller rights are generally held by non-municipal entities (irrigation, manufacturing, etc.) and were allocated to the appropriate non-municipal WUG based on use type and location of demand. For purposes of the Regional Planning process, run-of-river water rights are also grouped in the Plan by basin and county of origin.

### **3.6.3 Reuse**

The existing reliable yield of reuse sources in Region H were determined in accordance with the procedures previously described in the section regarding reuse availability. The majority of existing reuse supplies in the region are direct reuse systems and were therefore allocated to their originating WUG. Indirect reuse sources currently in place were also assumed to be used to meet demands within the originating WUGs or its customers.

### **3.6.4 Contracts**

Contractual supplies were assigned in accordance with the most recent available information regarding contractual relationships, contract volume or maximum, limitations on existing conveyance infrastructure, and source. Sources of information included the 2016 Region H survey, stakeholder correspondence, available information on service area boundaries, and the 2011 Region H Water Plan. The majority of contracts reflected in the Plan consist of the WWP-to-WWP and WWP-to-WUG as discussed in Section 3.5. While contractual supply agreements among utility districts and similar entities are common in Region H, only a relatively small number are reflected in the Plan as the majority of these transfers occur internal to either a regional water authority WUG or County-Other WUG and therefore do not need to be reflected separately in the plan.

## Agenda Item 16

Receive update from Consultant Team and Water Management Strategies Committee regarding the prioritization of water plan projects for use by the Texas Water Development Board in administering loan funding to implement water projects.





## Prioritization of 2011 RWP Projects

- Draft Scoring Submitted
- Comments Received from TWDB June 6<sup>th</sup>
  - General comments
  - Application of IFR information
  - Grouping of WMS
  - Online decade
  - Percentage of WUG needs met
  - Calculation of mean project cost
- Applicability subject to HB4 Stakeholder Committee

## Prioritization of 2011 RWP Projects

- No further review by HB4 Stakeholder Committee
- Clarification on application in overall, State scoring:

| Percent Regional Ranking | Points |
|--------------------------|--------|
| Top 80%                  | 3      |
| Top 60%                  | 6      |
| Top 40%                  | 9      |
| Top 2%                   | 12     |
| Top 10%                  | 15     |
| Less than 80%            | 0      |





**REGION H WATER PLANNING GROUP**  
**Senate Bill 1 - Texas Water Development Board**

c/o San Jacinto River Authority  
P. O. Box 329, Conroe, Texas 77305  
Telephone 936-588-1111 Facsimile 936-588-3043

May 22, 2014

**Agricultural**

Robert Bruner  
Pudge Wilcox

**Counties**

John Blount  
Mark Evans, Chair  
Judge Art Henson

**Electric Generating Utilities**

Gene Fisseler

**Environmental**

John R. Bartos,  
Executive Committee

**Groundwater Management Areas**

David Bailey  
Kathy Jones

**Industries**

Gená Leathers

**Municipalities**

Jun Chang  
Robert Istre

**Public**

Carl Masterson

**River Authorities**

David Collinsworth  
Jace Houston, Secretary  
Kevin Ward

**Small Businesses**

Judge Bob Hebert  
John Howard  
Steve Tyler

**Water Districts**

Marvin Marcell  
Ron Neighbors, Vice-Chair  
Jimmy Schindewolf

**Water Utilities**

James Morrison  
William Teer

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**TWDB Liaison**

Lann Bookout

Mr. Kevin Patteson  
Executive Administrator  
Texas Water Development Board  
1700 North Congress Avenue  
Austin, TX 78701

**Re: Prioritized Projects from the 2011 Region H Regional Water Plan**

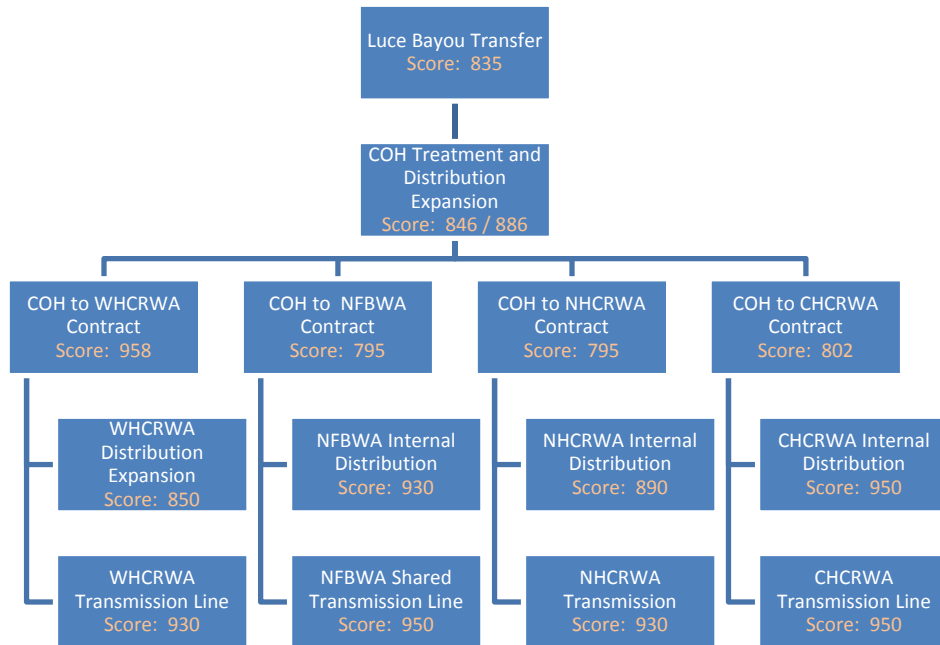
Dear Mr. Patteson:

The Region H Water Planning Group (RHWPG) is transmitting its list of prioritized projects from the 2011 Region H Regional Water Plan (RWP) as prepared according to the direction of the Texas Water Development Board (TWDB) and the uniform standards proposed by the HB 4 Stakeholder Committee (SHC). This process has been carried as a collaborative effort by the RWP and the Water Management Strategies (WMS) Committee chaired by Fort Bend County Judge Bob Hebert. As a region demonstrating an advanced level of growth and, in turn, water need over the upcoming 50 years, Region H is committed to the mission of HB 4 and the procedures in development by TWDB to commit funds to critical infrastructure projects in Texas.

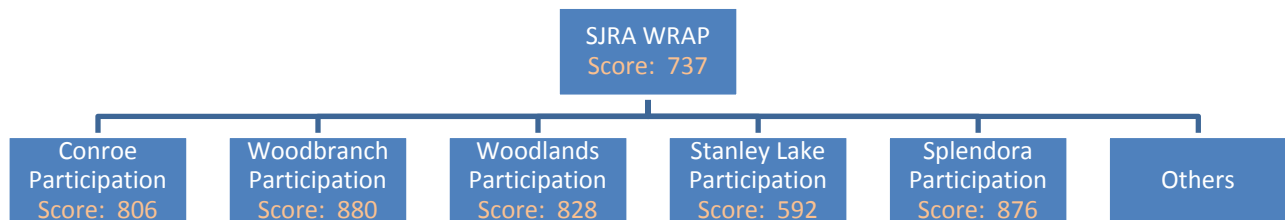
The RHWPG recognizes that this submittal is a draft prioritization of 2011 RWP projects and that changes to the process may be enacted before the final submittal in order to more uniformly apply the given standards and to identify critical funding needs. However, the RHWPG wishes to comment on the methodology as currently presented and share observations made during the prioritization process. The RHWPG's experience in working with the uniform standards demonstrated that the methodology was fairly objective in application, as was the goal of the SHC. However, the RHWPG also noted that the approach does not adequately account for some factors that make some projects more significant to the region than others. This and other identified concerns are demonstrated below with examples from Region H.

- There is concern that the definition of what constitutes a project for purposes of the RWP prioritization process and the list of projects provided to the Region H RWP do not realistically reflect the future supply needs of the Region; in many cases the template is more reflective of the planning database than anticipated project development.
- There is no mechanism in the template to screen out projects which have already been implemented, such as City of Houston to WHCRWA contract, NHCRWA transmission 2010, etc.

- The template does not include provisions for key supply relationships among projects. In a number of cases, large supply or infrastructure projects (some of which are actively in development) receive low scores, while other projects which are wholly or partially dependent on them score much higher.
  - Example 1:** Water from the Luce Bayou transfer will, with other supplies, be treated and distributed through future City of Houston (COH) infrastructure expansions. A portion of this supply is contracted to regional water authorities and will be conveyed through future expansions of authority treatment and distribution infrastructure to the area to meet needs in those service areas.



- Example 2:** The San Jacinto River Authority (SJRA) Water Resources Assessment Plan (WRAP) reflects SJRA's Groundwater Reduction Plan (GRP), which will allow a large number of entities in Montgomery County to meet regulations designed to reduce dependence on groundwater. The first phase of infrastructure for this GRP is being constructed and will be operational by 2016. However, a number of projects reflecting WUG participation in the GRP outscore the GRP (WRAP) itself. An example is shown below.



- The template requires the scoring of many projects which are unlikely to need or apply for funding. There is a concern that this unnecessarily pushes more critical projects in need of funding lower on the list.
  - Example 1:** The zero-cost listing which exists only to transfer water from the Missouri City WWP to the Missouri City WUG in DB12 is ranked above the SJRA's WRAP; infrastructure to implement the WRAP is already under construction.
  - Example 2:** The City of Houston has indicated that many of its GRP participants would simply be allowed to take more water. However, a number of Houston's GRP participants outscore the City of Houston infrastructure expansions key to GRP function.
- The template creates challenges in consistently and realistically scoring phased infrastructure projects. This is particularly important because many of the key strategies in the 2011 Region H RWP involve multiple phases of

infrastructure development, including treatment and distribution expansions for the City of Houston and the Regional Water Authorities, as well as some GRPs.

- **Example 1:** During the 2011 planning cycle, most phased infrastructure projects were listed as a single project in DB12. However, due to the availability of detailed decadal cost estimates, the treatment and distribution expansion for North Harris County Regional Water Authority were each represented in DB12 as three separate phases. In order to score fairly, these phases were combined and scored together.
- **Example 2:** Because the phased infrastructure expansions are listed as one project each, several of the criteria (primarily 1A, 1B, 3A, 5A and others to some extent) are scored based on development phases which have already been completed. For example, treatment and distribution expansion projects for several regional water authorities include Year 2010 phases which are built and will not need funding, as well as year 2020 and 2030 phases which have not yet been built or funded.
- There are significant concerns regarding how the results from the completed scoring template will be used in determining project ranking and eligibility of funding in TWDB's process, particularly given the WMS Committee's observation that the resultant scores poorly reflect the strategy needs of the Region.
  - **Example 1:** If the TWDB process takes an approach of only considering a certain number of projects starting from the top score and working down, many projects considered critical for Region H could be ignored. As an example, if only the top 50 projects were considered, most of the qualifying projects would be participants in the City of Houston and SJRA GRPs and regional water authority infrastructure expansions. However the major supply strategies required to make the top 50 possible (Luce Bayou Transfer, City of Houston Treatment and Distribution Expansions, and the SJRA WRAP) would not make the list in spite of being in design or construction.
  - **Example 2:** As noted earlier, phased infrastructure projects are not well represented by the project list. There are concerns that an entity seeking funding for an expansion phase that is a smaller portion of a project as listed in the template might not be eligible for funding as the relevant phase would be significantly different in timing, volume, etc. If the same project had been entered into the database with the same decadal costs and volumes but divided into separated phases or "projects", there would be a project listing matching the relevant phase. Examples include the City of Houston and regional water authority infrastructure expansion strategies. This is an artifact of how projects shown in DB12 and should not be allowed to impact funding eligibility.
  - **Example 3:** Some strategies include multiple participants which may not all initiate participation or require funding at the same time. This is particularly common for GRPs, which may have multiple phases of development and involve WUG participants actively receiving surface water or other alternate supplies at various times. The associated WWP-level supply infrastructure projects and the various stages of participation are all necessary for the GRP to fulfill its mandate. Differences in timing for project participants should not be allowed to reduce funding eligibility for WWP-level projects and their associated infrastructure.
- For the rural / agricultural indicator, no definition of rural was provided for purposes of completing the prioritization template. While this does not impact the project scoring in the template, it could play a role in determining which projects qualify for portions of funding set aside for rural interests. The draft Region H template assumes rural entities to be those with Year 2010 populations below 10,000.
- For the conservation and reuse indicator, no definition of conservation projects was provided for purposes of completing the prioritization template. This does not impact the project scoring in the template, it could play a role in determining which projects qualify for portions of funding set aside for conservation and reuse. While in some cases this question is simple to answer, in others the definition may be less clear.

The RHWPG appreciates this opportunity to provide comment along with the transmittal of its draft list of prioritized projects. Although the task of prioritizing the numerous projects in the State Water Plan is a challenging goal, the RHWPG looks forward to working with TWDB in the future to help ensure the most appropriate allocation of valuable

Mr. Kevin Patteson

May 22, 2014

funding to achieve the goals of HB 4. Please feel free to contact either of us or the Region H consultant, Jason Afinowicz, at 713.600-6841 or [jason.afinowicz@freese.com](mailto:jason.afinowicz@freese.com) if you have any questions regarding this submittal or wish to discuss the issues identified by the RHWPG further.

Sincerely,



Mark Evans  
Region H Chair



Robert Hebert  
Fort Bend County Judge,  
Region H WMS Committee Chair

cc: Lann Bookout, TWDB

**TO:** Mr. Kevin Patteson, TWDB  
Mr. Lann Bookout, TWDB

**FROM:** Jason D. Afinowicz, PE

**SUBJECT:** Methodology for Draft 2011 Region H RWP Project Prioritization

**DATE:** May 22, 2014

## **Introduction**

In accordance with the scope of work for the 2016 Regional Water Plan (RWP), the Region H Water Planning Group in conjunction with Region H Water Management Strategies (WMS) Committee has developed a draft prioritization of projects from the 2011 RWP. Scoring for draft prioritization followed the guidance, standards, and weighting from the Uniform Standards developed by the RWPG stakeholders committee. Scoring was calculated for all strategies listed in TWDB's *Populated Alphabetized-Region-Sponsor-Strategy Template* spreadsheet. Several data sources were used during the prioritization process, including the TWDB template, the 2011 Regional Planning Database (DB12), the 2011 Region H RWP document and supporting data, and updated information from project sponsors and stakeholders.

Prioritization of projects presented a number of challenges due to the size of Region H, the complexity of recommended WMS in the 2011 RWP, and the difficulty of representing certain project types realistically in DB12. While project scoring was carried out strictly in accordance with the Uniform Standards, in some cases it was necessary to develop assumptions in order to apply individual standards logically and consistently across all listed WMS. The following sections document the assumptions made in applying the standards.

## **Strategy Grouping**

The 2011 Region H RWP includes a number of complex and interdependent water management strategies. In many cases, strategies that in reality are mutually dependent are listed separately in DB12. This presents a potential need for grouping of some strategies for project prioritization. Based on the purpose of HB4 and guidance provided by TWDB, any project grouping must be done based on funding relationship rather than supply relationship. Therefore, the majority of strategies remain separate entries and are scored individually. In the few cases where strategies require grouping, costs and volumes were combined as applicable (overlapping volumes were not double-counted) and all strategies within the group received an identical score. The following methodology was applied to determine the limited application of strategy grouping:

- WWP to WWP contracts are listed as ungrouped unless double-listed or there is a direct financial tie-in to another strategy line.
- True multi-sponsor projects (such as Allens Creek) are grouped.
- Phased infrastructure projects are grouped.
- WWP-level Entries for Groundwater Reduction Plan (GRP) entries are grouped at the sponsor / WWP level, regardless of source type.

**Uniform Standard 1A – What is the decade the RWP shows the project comes online?**

The following methodology was applied to determine project start decade:

- The default approach is to score the project based on the first decadal timestep with a supply allocation/strategy volume per the data provided in the scoring template.
- If more specific data is available from the 2011 RWP text and support data regarding implementation year, the year is rounded down to the nearest decadal increment.

**Uniform Standard 1B –In what decade is initial funding needed?**

Limited data was available to address this criterion. In the absence of specific information from the Infrastructure Finance Report (IFR) developed by TWDB or from other sources, standard assumptions on funding lead time were applied based on project type (see *Table 1*). This calculation was done based on the true year (not decadal timestep) of implementation if such information was available. The resultant year of need was then rounded down to the decadal timestep.

***Table 1. Estimated Funding Lead Time***

| <b>Project Type</b>               | <b>Funding Interval (Years)</b> |
|-----------------------------------|---------------------------------|
| Reservoir                         | 20                              |
| Major transmission / distribution | 10                              |
| Other major infrastructure        | 10                              |
| Aquifer storage and recovery      | 5                               |
| Direct reuse                      | 5                               |
| Indirect reuse                    | 5                               |
| Permit strategy                   | 5                               |
| WUG Infrastructure expansion      | 3                               |
| Expanded groundwater use          | 2                               |
| Industrial conservation           | 1                               |
| Interruptible supplies            | 1                               |
| Irrigation conservation           | 1                               |
| Municipal conservation            | 1                               |
| WWP contract                      | 0                               |



**Uniform Standard 2A – What supporting data is available to show that the quantity of water needed is available?**

Scoring for this criterion was based on information from the 2011 RWP unless more recent data was available. It was assumed that modeling does not have to be executed for each individual project or DB12 supply line, but rather for the associated supply source. For example, groundwater expansion which does not create overdrafting was allocated in accordance with the MAG and thus the group total is within modeled availability. The following assumptions were applied:

- If a project / source is unmodeled, or if the project is not within reliable availability (such as temporary overdrafting), the criterion score is 0.
- If the project / source have been modeled and results indicate reliable availability, the score is 3 points. This will be typical for sources that don't yet exist such as modeled but unbuilt reservoirs.
- If the strategy is within modeled availability from an existing source which has been utilized (Lake Houston, groundwater use within the MAG, etc.), then the score is 5 points.

**Uniform Standard 2B – If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require?**

This criterion could not be addressed by calculation and required using available data and judgment. Potential sources of information included the 2011 RWP and support material, the 2016 RWP entity survey, updated stakeholder data, or other references. In the absence of reliable information, assumptions were made and documented. The following general assumptions were applied:

- Contracts known or suspected to not be executed are awarded no points.
- Entities that are listed as GRP participants but have elected to be non-participants are awarded no points for their GRP Participation project entry.
- Expanded use of groundwater strategies are typically awarded no points unless located in a county with no groundwater conservation district (GCD) or subsidence district.
- Conservation projects are allotted the maximum number of points.

**Uniform Standard 2C – What level of engineering and/or planning has been accomplished for this project?**

This criterion could not be addressed by calculation and required using available data and judgment. Sources of information included the 2011 RWP and support material, the 2016 RWP entity survey, updated stakeholder data, or other references. In the absence of reliable information, assumptions were made and documented. The following general assumptions were applied:

- For GRPs, if the supply source conversion process has started the project status is listed as “final design complete” for the project sponsor as well as for any associated WUG-level GRP Participation projects.
- Major transmission and distribution expansions (regional water authority projects and similar) listed as a single project which have started construction on at least their initial phase are listed as “Preliminary design initiated”.
- Municipal conservation projects are listed as “final design complete”.

- Contractual strategies are scored as “outlined in the Regional Water Plan” unless the contract is confirmed or suspected to be in progress or completed. In that case, they are listed as either “feasibility studies initiated” or “final design complete”.

**Uniform Standard 2D – Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan?**

For 2011 RWP prioritization, the answer is assumed to be “Yes” unless the sponsor provided indication (such as in the 2016 RWP survey) that they do not agree with project inclusion.

**Uniform Standard 3A – In the decade the project supply comes online, what is the % of the WUG's (or WUGs') needs satisfied by this project?**

Addressing this criterion required a detailed dataset of WUG needs and project supply. Much of this information was provided by TWDB in the *Populated Alphabetized-Region-Sponsor-Strategy Template*. However, for a number of the strategies listed the supply volume listed by the template is not equal to the ultimate supply allocated at the WUG level and may represent project capacity (peaked transmission size, incremental expansion size, etc.). Further, a number of WWP-level strategies either are listed in the template only at the WWP level (such as Allens Creek) or were listed in DB12 in a manner that does not link directly to WUGs (Luce Bayou and others). In order to address this, a reference table was built to tie all strategies to WUG-level supply allocations. This reference table, which combined the TWDB-provided data additional information extracted from DB12 and the 2011 RWP, was used to address Uniform Standards 3A and 3B. Please note that revisions were also made to the provided needs table in the template as some entities with needs were missing. The following logic was applied in scoring this criterion:

- The calculations for this criterion are based on the needs of ALL of the WUGs served by the strategy.
- For strategies that go beyond being sponsored and developed by a single WUG, there may be more complex relationship. As a general rule, a relationship exists between a strategy and a WUG if removing that strategy would reduce the supply available to that WUG. For example, a pipeline strategy generates no yield of its own, but if it is removed the WUG will lose access to the ultimate supply source. In such a case, the calculation is performed based on all WUGs that would lose access if the strategy were removed.
- Some strategies have DB12 volumes that reflect their capacity, rather than the anticipated supply volume. Capacities are NOT used for this calculation. In this case, the supply volume is the volume that would be lost at the WUG level if the strategy were removed.
- For GRPs, the supply lines at the WWP level are scored based on all GRP participants. The supply lines for the WUG participants (except the primary GRP sponsor) are scored individually.
- In some cases the WUG is allocated supply even though the need in that decade is zero. If the need for a single WUG project or the net need for a multi-WUG project is zero, any allocation is scored as meeting 100% of demand.

**Uniform Standard 3B – In the final decade of the planning period, what is the % of the WUG's (or WUGs') needs satisfied by this project?**

Scoring for this standard followed the same methodology as Uniform Standard 3A.

### **Uniform Standard 3C –Economic Feasibility**

This question was answered using the WUG-level supply table developed for Uniform Standard 3A.

Scoring used the following assumptions:

- If a WUG's only strategy is conservation, the answer is "yes".
- If a WUG has only one strategy besides conservation, the answer is "yes".
- If a WUG has multiple strategies excluding conservation, the answer to this criterion is "no".
- For strategies at the WWP level, the answer is "yes" if the project is the only strategy besides conservation assigned to any one WUG served by the project. That is, if the strategy were removed, one or more WUGs would have no other non-conservation strategies.

### **Uniform Standard 3D – Multiple WUGs**

This question was answered using the WUG-level supply table developed for Uniform Standard 3A.

Projects sponsored by the Regional Water Authorities are assumed to serve multiple WUGs, as these entities aggregate together many MUDs and other utilities that individually would meet the definition of a WUG.

### **Uniform Standard 4A – Project Lifespan**

The majority of projects in the regional plan have estimated lifespans of many decades, and therefore the majority of entries in the prioritization template achieved the maximum points on this criterion. The maximum score was not applied for projects matching either of the following descriptions:

- Interim strategies which depend upon unreliable supplies such as overdrafting of groundwater.
- Strategies which have allocated volume in DB12 in only two decades and return to zero volume by 2060. This does not apply to strategies which would have long lifespans but would start in the last two decades of the planning cycle.

### **Uniform Standard 4B – Change in Supply Volume**

The wording of this criterion references the volume supplied by the project rather than referring to the supply source directly. Because of this, scoring for the criterion was based on allocated supply volume rather than long-term availability patterns of an underlying source. For example, a reservoir might decline in yield over time due to sedimentation, but if a particular entry using that source shows an increasing allocation over time, for that project the water supplied increases with time. Calculations were based on the WUG-level supply table developed for Uniform Standard 3A. The following logic was used in scoring:

- If the allocated supply volume remains constant once the project is initiated, the project is categorized as "no change".
- If the allocated supply changes over time and the Year 2060 value is the highest, the project is categorized as "increases".
- In all other cases, the project is categorized as "decreases" regardless of the magnitude of the decrease.
- For projects which have been fully grouped together for the prioritization analysis, the scoring is based on the sum of the allocated capacities for all relevant supply lines; adjustments are made to prevent double-counting of any overlapping volumes.

**Uniform Standard 5A – Unit Cost**

In order to provide consistency and avoid bias against projects with a later start date, this criterion was addressed using the unit cost for the first decade each strategy is active (when debt service, if any, is active).

- A unit cost for each line in the prioritization template is calculated using the WUG-level supply table developed for Uniform Standard 3A and the annual costs listed in DB12.
- For projects which are grouped together for the prioritization analysis, the unit cost is calculated for the entire project and applied identically to each relevant supply line. The calculation of median cost across all projects only considers one of these supply lines.



Brazos River Authority



May 6, 2014

The Honorable Mark Evans  
Acting Chair  
Region H Regional Water Planning Group  
C/O San Jacinto River Authority  
P.O. Box 329  
Conroe, Texas 77305

Re: Priority Ranking for the Allens Creek Reservoir Project

Dear Judge Evans:

I am writing to express the Brazos River Authority's (BRA) concern regarding the low priority ranking assigned to the Allens Creek Reservoir project by the Region H Water Planning Group. I understand that this rating is based in part upon the project start date of 2025. As you may be aware, the original start date of the project was 2018; however, the City of Houston successfully changed this date from 2018 to 2025 during the 82<sup>nd</sup> Legislative Session.

Despite the start date being moved, a real need for additional water supplies in the lower Brazos Basin still exists. Presently, the BRA has customer requests for water in the amount of 56,177 acre-feet (AF). Two lower basin customers represent 53,412 AF of this request: Gulf Coast Water Authority and the City of Sugar Land. In addition, we have had several requests from industrial users seeking water in amounts greater than 9,000 AF.

The BRA stands ready to begin the environmental permitting, engineering, and design studies that must take place in order to move the Allens Creek Reservoir project forward. Due to the complexity and the size of the project, the permitting process alone will likely take more than five years to complete. The BRA believes the responsible path is to pursue the construction of Allens Creek as soon as possible.

Sincerely,

Phil Ford  
General Manager/CEO

PF:kld



Calculations reflected are from uniform standards adopted by SHC 11/14/2013 at 3pm and approved by TWDB 12/5/2013.

\*\* Indicates that additional data may have to be collected by RWPG in order to score projects.

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| Alphabetized unique identifier | Sponsor Region | Sponsor                      | Recommended Water Management Strategy Name               | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation? | Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |   |    |   |    |     |   |    |     |   |
|--------------------------------|----------------|------------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|----------------------------------|---------------------|---|----|----|-----|----------------------------------|---|----|---|----|-----|---|----|-----|---|
|                                |                |                              |  |               |                        |                        |                        |                        |                        |                        |   |                                  |                     | MAXIMUM SCORES -->                      |    |    |     |                                  |   |    |   |    |     |   |    |     |   |
|                                |                |                              |  |               |                        |                        |                        |                        |                        |                        |   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 | 5 | 25 | 100 | 5 |
| H1                             | H              | ALVIN                        | Contract with GCWA                                       | \$6,517,726   | 0                      | 0                      | 99                     | 208                    | 383                    | 595                    | Y   |                                  |                     | 8                                       | 8  | 14 | 280 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H2                             | H              | ALVIN                        | Municipal conservation - large water user group          | \$0           | 0                      | 170                    | 218                    | 226                    | 237                    | 252                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H3                             | H              | AMES                         | Expanded use of groundwater                              | \$266,289     | 0                      | 22                     | 42                     | 60                     | 84                     | 113                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 16 | 64  |   |    |     |   |
| H4                             | H              | AMES                         | Municipal conservation - small water user group          | \$0           | 0                      | 9                      | 10                     | 11                     | 12                     | 14                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H5                             | H              | ANGLETON                     | Contract with Brazosport Water Authority                 | \$497,284     | 137                    | 98                     | 103                    | 112                    | 160                    | 231                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H6                             | H              | ANGLETON                     | Expanded use of groundwater                              | \$167,312     | 0                      | 46                     | 58                     | 54                     | 61                     | 71                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H7                             | H              | ANGLETON                     | Municipal conservation - large water user group          | \$0           | 141                    | 141                    | 142                    | 143                    | 146                    | 152                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H8                             | H              | ARCOLA                       | Municipal conservation - small water user group          | \$0           | 22                     | 24                     | 26                     | 29                     | 31                     | 35                     | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H9                             | H              | ARCOLA                       | NFBWA Groundwater Reduction Plan participation           | \$935,300     | 0                      | 106                    | 258                    | 295                    | 345                    | 397                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H10                            | H              | BACUFF MUD                   | Contract with GCWA                                       | \$1,162,319   | 0                      | 630                    | 630                    | 630                    | 630                    | 630                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H11                            | H              | BAILEY'S PRAIRIE             | Expanded use of groundwater                              | \$37,706      | 0                      | 3                      | 5                      | 7                      | 11                     | 16                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H12                            | H              | BAILEY'S PRAIRIE             | Municipal conservation - small water user group          | \$0           | 0                      | 0                      | 0                      | 1                      | 1                      | 1                      | N   |                                  |                     | 4                                       | 5  | 10 | 200 | 5                                | 0 | 10 | 5 | 25 | 100 |   |    |     |   |
| H13                            | H              | BAYOU VISTA                  | Expanded use of groundwater                              | \$9,427       | 0                      | 3                      | 4                      | 4                      | 4                      | 4                      | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H14                            | H              | BAYTOWN                      | Expanded use of groundwater                              | \$91,907      | 0                      | 11                     | 22                     | 26                     | 32                     | 39                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 16 | 64  |   |    |     |   |
| H15                            | H              | BAYTOWN                      | Municipal conservation                                   | \$0           | 588                    | 1,183                  | 1,194                  | 1,203                  | 1,228                  | 1,263                  | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H16                            | H              | BAYTOWN AREA WATER AUTHORITY | City of Houston to Baytown Area Water Authority contract | \$0           | 0                      | 26                     | 262                    | 398                    | 535                    | 692                    | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H17                            | H              | BEACH CITY                   | Contract with CLCND                                      | \$6,047,471   | 0                      | 280                    | 350                    | 414                    | 483                    | 552                    | Y   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H18                            | H              | BEACH CITY                   | Expanded use of groundwater                              | \$0           | 0                      | 24                     | 38                     | 48                     | 58                     | 65                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 16 | 64  |   |    |     |   |
| H19                            | H              | BEACH CITY                   | Interim strategies - temporary overdraft                 | \$75,409      | 32                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 0                                | 0 | 10 | 5 | 6  | 24  |   |    |     |   |
| H20                            | H              | BEACH CITY                   | Municipal conservation - small water user group          | \$0           | 15                     | 20                     | 24                     | 28                     | 32                     | 41                     | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H21                            | H              | BEACH CITY                   | Reallocation of existing supplies                        | \$419,178     | 178                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H22                            | H              | BEASLEY                      | Expanded use of groundwater                              | \$212,090     | 0                      | 12                     | 26                     | 42                     | 64                     | 90                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H23                            | H              | BEASLEY                      | Municipal conservation - small water user group          | \$0           | 0                      | 6                      | 7                      | 8                      | 9                      | 10                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H24                            | H              | BELLAIRE                     | Contract with City of Houston                            | \$1,679,461   | 0                      | 1,142                  | 1,327                  | 1,841                  | 2,179                  | 2,179                  | Y   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H25                            | H              | BELLAIRE                     | Expanded use of groundwater                              | \$245,070     | 0                      | 52                     | 104                    | 104                    | 104                    | 104                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H26                            | H              | BELLAIRE                     | Municipal conservation - large water user group          | \$0           | 237                    | 253                    | 270                    | 287                    | 305                    | 325                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H27                            | H              | BELLAIRE                     | Reallocation of existing supplies                        | \$2,839,606   | 1,440                  | 489                    | 496                    | 259                    | 172                    | 467                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H28                            | H              | BELLVILLE                    | Expanded use of groundwater                              | \$1,640,915   | 0                      | 285                    | 472                    | 568                    | 618                    | 697                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H29                            | H              | BELLVILLE                    | Municipal conservation - medium water user group         | \$0           | 0                      | 88                     | 99                     | 105                    | 108                    | 113                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H30                            | H              | BLUE BELL MANOR UTILITY      | City of Houston Groundwater Reduction Plan participation | \$972,541     | 140                    | 363                    | 413                    | 407                    | 402                    | 402                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H31                            | H              | BLUE BELL MANOR UTILITY      | Municipal conservation - small water user group          | \$0           | 32                     | 31                     | 31                     | 30                     | 30                     | 30                     | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H32                            | H              | BOLIVAR PENINSULAR SUBD      | Municipal conservation - medium water user group         | \$0           | 67                     | 72                     | 74                     | 75                     | 75                     | 76                     | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H33                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | \$3,874,222   | 0                      | 300                    | 650                    | 955                    | 1,294                  | 1,648                  | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H34                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | \$0           | 0                      | 72                     | 95                     | 114                    | 135                    | 158                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H35                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | \$4,836,230   | 0                      | 380                    | 813                    | 1,200                  | 1,621                  | 2,060                  | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H36                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | \$0           | 0                      | 95                     | 122                    | 147                    | 173                    | 201                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H37                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | \$2,791,390   | 0                      | 217                    | 468                    | 687                    | 931                    | 1,186                  | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H38                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | \$0           | 0                      | 52                     | 68                     | 82                     | 97                     | 113                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H39                            | H              | BRAZOS RIVER AUTHORITY       | Allens Creek Reservoir                                   | \$66,825,720  | 0                      | 17,218                 | 16,529                 | 26,334                 | 29,895                 | 29,895                 | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 3                                | 5 | 7  | 5 | 20 | 80  |   |    |     |   |
| H40                            | H              | BRAZOS RIVER AUTHORITY       | BRA system operations permit                             | \$0           | 0                      | 6,621                  | 18,870                 | 25,350                 | 25,350                 | 25,350                 | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 3                                | 3 | 8  | 5 | 19 | 76  |   |    |     |   |
| H41                            | H              | BRAZOS RIVER AUTHORITY       | BRA to Brazosport Water Authority contract               | \$0           | 0                      | 116                    | 124                    | 1,557                  | 3,183                  | 5,435                  | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H42                            | H              | BRAZOS RIVER AUTHORITY       | BRA to Cities of Richmond-Rosenberg contract             | \$0           | 0                      | 0                      | 0                      | 1,091                  | 3,060                  | 5,645                  | Y   |                                  |                     | 4                                       | 4  | 8  | 160 | 3                                | 0 | 1  | 0 | 4  | 16  |   |    |     |   |
| H43                            | H              | BRAZOS RIVER AUTHORITY       | BRA to City of Sugar Land contract                       | \$0           | 0                      | 1,027                  | 2,947                  | 3,616                  | 3,875                  | 4,756                  | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 3                                | 5 | 10 | 5 | 23 | 92  |   |    |     |   |
| H44                            | H              | BRAZOS RIVER AUTHORITY       | BRA to GCWA contract                                     | \$0           | 0                      | 17,779                 | 40,008                 | 50,205                 | 56,200                 | 65,564                 | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H45                            | H              | BRAZOS RIVER AUTHORITY       | BRA to NRG Energy contract                               | \$0           | 0                      | 0                      | 0                      | 0                      | 8,500                  | 0                      | Y   |                                  |                     | 0                                       | 0  | 0  | 0   | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H46                            | H              | BRAZOS RIVER AUTHORITY       | Brazoria off-channel reservoir                           | \$173,898,602 | 0                      | 0                      | 0                      | 0                      | 24,000                 | 0                      | N   |                                  |                     | 0                                       | 4  | 4  | 80  | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H47                            | H              | BRAZOS RIVER AUTHORITY       | Brazos saltwater barrier                                 | \$44,470,739  | 0                      | 0                      | 0                      | 0                      | 0                      | 0                      | N   |                                  |                     | 8                                       | 8  | 16 | 320 | 0                                | 5 | 5  | 5 | 15 | 60  |   |    |     |   |
| H48                            | H              | BRAZOS RIVER AUTHORITY       | City of Houston to BRA contract                          | \$0           | 0                      | 27,498                 | 25,201                 | 57,886                 | 69,755                 | 69,755                 | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H49                            | H              | BRAZOS RIVER AUTHORITY       | Fort Bend off-channel reservoir                          | \$202,514,788 | 0                      | 0                      | 0                      | 0                      | 90                     | 45,943                 | N   |                                  |                     | 2                                       | 6  | 8  | 160 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H50                            | H              | BRAZOS RIVER AUTHORITY       | Freeport desalination plant                              | \$255,699,000 | 0                      | 0                      | 0                      | 0                      | 33,600                 | 33,600                 | N   |                                  |                     | 2                                       | 4  | 6  | 120 | 3                                | 0 | 5  | 5 | 13 | 52  |   |    |     |   |
| H51                            | H              | BRAZOSPORT WATER AUTHORITY   | BRA to Brazosport Water Authority contract               | \$0           | 0                      | 116                    | 124                    | 1,557                  | 3,183                  | 5,435                  | Y   |                                  |                     | 8                                       | 8  | 16 | 320 | 3                                | 0 | 1  | 5 | 9  | 36  |   |    |     |   |
| H52                            | H              | BRITMOORE UTILITIES          | Contract with City of Houston                            | \$473,016     | 0                      | 0                      | 339                    | 479                    | 570                    | 570                    | Y   |                                  |                     | 6                                       | 8  | 14 | 280 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H53                            | H              | BRITMOORE UTILITIES          | Municipal conservation - small water user group          | \$0           | 26                     | 31                     | 35                     | 39                     | 43                     | 48                     | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H54                            | H              | BRITMOORE UTILITIES          | Reallocation of existing supplies                        | \$804,698     | 115                    | 354                    | 127                    | 67                     | 45                     | 121                    | N   |                                  |                     | 10                                      | 10 | 20 | 400 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H55                            | H              | BROOKSHIRE                   | Expanded use of groundwater                              | \$2,471,440   | 0                      | 124                    | 304                    | 506                    | 754                    | 1,050                  | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H56                            | H              | BROOKSHIRE                   | Municipal conservation - medium water user group         | \$0           | 0                      | 50                     | 62                     | 75                     | 90                     | 109                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H57                            | H              | BROOKSIDE VILLAGE            | Expanded use of groundwater                              | \$292,211     | 0                      | 14                     | 39                     | 63                     | 91                     | 124                    | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 0 | 10 | 5 | 11 | 44  |   |    |     |   |
| H58                            | H              | BROOKSIDE VILLAGE            | Municipal conservation - small water user group          | \$0           | 0                      | 16                     | 18                     | 19                     | 21                     | 23                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 | 5                                | 5 | 10 | 5 | 25 | 100 |   |    |     |   |
| H59                            | H              | BUFFALO                      | Expanded use of groundwater                              | \$124,896     | 0                      | 36                     | 53                     | 49                     | 44                     | 47                     | N   |                                  |                     | 8                                       | 10 | 18 | 360 |                                  |   |    |   |    |     |   |    |     |   |



Calculations reflected are from uniform standards adopted by SHC 11/14/2013 at 3pm and approved by TWDB 12/5/2013.

| Alphabetized unique identifier | Sponsor Region | Sponsor                      | Recommended Water Management Strategy Name               | Criteria 3 - Project Viability   |   |  |   |  | Criteria 4 - Project Sustainability   |                        |                           |   | Criteria 5 - Project Cost Effectiveness   |                        | FINAL SCORE (0-100) | Grouped With | Comments |                           |  |   |
|--------------------------------|----------------|------------------------------|--|--|---|--|---|--|---|------------------------|---------------------------|---|---|------------------------|---------------------|--------------|----------|---------------------------|--|---|
|                                |                |                              |  | 100  | 10  | 100  | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  |                     |              |          | 150                       | 5  | 100   |
|                                |                |                              |  | Uniform Standard 3A - In the final decade of the planning period, what is the % of the WUG's (or WUG's) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUG's) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score |                     |              |          | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total   |
| H1                             | H              | ALVIN                        | Contract with GCWA                                       | 31.23028391  | 3.12  | 70.24793388  | 7.02  | 0.00   | 0   | 10.15                  | 84.57                     | 10  | 5   | 15.00                  | 150                 | 0            | 550.57   |                           |  |   |
| H2                             | H              | ALVIN                        | Municipal conservation - large water user group          | 100  | 10.00   | 29.75206612  | 2.98  | 0.00   | 0   | 12.98                  | 108.13                    | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 798.13                    |  |   |
| H3                             | H              | AMES                         | Expanded use of groundwater                              | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 822.33                    |  |   |
| H4                             | H              | AMES                         | Municipal conservation - small water user group          | 40.90909091  | 4.09  | 12.38938053  | 1.24  | 5.00   | 0   | 10.33                  | 86.08                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 776.08                    |  |   |
| H5                             | H              | ANGLETON                     | Contract with Brazosport Water Authority                 | 49.28057554  | 4.93  | 50.88105727  | 5.09  | 0.00   | 0   | 10.02                  | 83.47                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 757.47                    |  |   |
| H6                             | H              | ANGLETON                     | Expanded use of groundwater                              | 16.14035088  | 1.61  | 15.63876652  | 1.56  | 0.00   | 0   | 3.18                   | 26.48                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 620.48                    |  |   |
| H7                             | H              | ANGLETON                     | Municipal conservation - large water user group          | 50.71942446  | 5.07  | 33.48017621  | 3.35  | 0.00   | 0   | 8.42                   | 70.17                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 800.17                    |  |   |
| H8                             | H              | ARCOLA                       | Municipal conservation - small water user group          | 100  | 10.00   | 8.101851852  | 0.81  | 0.00   | 0   | 10.81                  | 90.08                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 820.08                    |  |   |
| H9                             | H              | ARCOLA                       | NFBWA Groundwater Reduction Plan participation           | 81.53846154  | 8.15  | 91.89814815  | 9.19  | 0.00   | 0   | 17.34                  | 144.53                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 834.53                    |  |   |
| H10                            | H              | BACUFF MUD                   | Contract with GCWA                                       | 100  | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 800.67                    |  |   |
| H11                            | H              | BAILEY'S PRAIRIE             | Expanded use of groundwater                              | 100  | 10.00   | 94.11764706  | 9.41  | 5.00   | 0   | 24.41                  | 203.43                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 797.43                    |  |   |
| H12                            | H              | BAILEY'S PRAIRIE             | Municipal conservation - small water user group          | 12.5   | 1.25  | 5.82352941   | 0.59  | 5.00   | 0   | 6.84                   | 56.99                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 586.99                    |  |   |
| H13                            | H              | BAYOU VISTA                  | Expanded use of groundwater                              | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 802.33                    |  |   |
| H14                            | H              | BAYTOWN                      | Expanded use of groundwater                              | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 822.33                    |  |   |
| H15                            | H              | BAYTOWN                      | Municipal conservation                                   | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 938.33                    |  |   |
| H16                            | H              | BAYTOWN AREA WATER AUTHORITY | City of Houston to Baytown Area Water Authority contract | 25.74257426  | 2.57  | 86.17683686  | 8.62  | 0.00   | 0   | 11.19                  | 93.27                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 707.27                    |  |   |
| H17                            | H              | BEACH CITY                   | Contract with CLCND                                      | 86.41975309  | 8.64  | 83.89057751  | 8.39  | 0.00   | 0   | 17.03                  | 141.93                    | 10  | 5   | 15.00                  | 150                 | 0            | 0        | 695.93                    |  |   |
| H18                            | H              | BEACH CITY                   | Expanded use of groundwater                              | 7.407407407  | 0.74  | 9.878419453  | 0.99  | 0.00   | 0   | 1.73                   | 14.40                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 688.40                    |  |   |
| H19                            | H              | BEACH CITY                   | Interim strategies - temporary overdraft                 | 14.22222222  | 1.42  | 0  | 0.00  | 0.00   | 0   | 1.42                   | 11.85                     | 5   | 0   | 5.00                   | 50                  | 2            | 40       | 525.85                    |  |   |
| H20                            | H              | BEACH CITY                   | Municipal conservation - small water user group          | 6.666666667  | 0.67  | 6.23100304   | 0.62  | 0.00   | 0   | 1.29                   | 10.75                     | 5   | 0   | 15.00                  | 150                 | 4            | 80       | 740.75                    |  |   |
| H21                            | H              | BEACH CITY                   | Reallocation of existing supplies                        | 79.11111111  | 7.91  | 0  | 0.00  | 0.00   | 0   | 7.91                   | 65.93                     | 5   | 0   | 5.00                   | 50                  | 2            | 40       | 599.93                    |  |   |
| H22                            | H              | BEASLEY                      | Expanded use of groundwater                              | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 802.33                    |  |   |
| H23                            | H              | BEASLEY                      | Municipal conservation - small water user group          | 50   | 5.00  | 11.11111111  | 1.11  | 5.00   | 0   | 11.11                  | 92.59                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 782.59                    |  |   |
| H24                            | H              | BELLAIRE                     | Contract with City of Houston                            | 58.98760331  | 5.90  | 70.8848406   | 7.09  | 0.00   | 0   | 12.99                  | 108.23                    | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 762.23                    |  |   |
| H25                            | H              | BELLAIRE                     | Expanded use of groundwater                              | 2.685950413  | 0.27  | 3.383214053  | 0.34  | 0.00   | 0   | 0.61                   | 5.06                      | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 599.06                    |  |   |
| H26                            | H              | BELLAIRE                     | Municipal conservation - large water user group          | 14.13237925  | 1.41  | 10.57254392  | 1.06  | 0.00   | 0   | 2.47                   | 20.59                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 750.59                    |  |   |
| H27                            | H              | BELLAIRE                     | Reallocation of existing supplies                        | 85.86762075  | 8.59  | 15.19193234  | 1.52  | 0.00   | 0   | 10.11                  | 84.22                     | 10  | 0   | 10.00                  | 100                 | 4            | 80       | 708.22                    |  |   |
| H28                            | H              | BELLVILLE                    | Expanded use of groundwater                              | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 802.33                    |  |   |
| H29                            | H              | BELLVILLE                    | Municipal conservation - medium water user group         | 30.87719298  | 3.09  | 16.2123859   | 1.62  | 5.00   | 0   | 9.71                   | 80.91                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 730.91                    |  |   |
| H30                            | H              | BLUE BELL MANOR UTILITY      | City of Houston Groundwater Reduction Plan participation | 100  | 10.00   | 0.792852494  | 0.08  | 0.00   | 0   | 10.08                  | 83.99                     | 10  | 0   | 10.00                  | 100                 | 2            | 40       | 723.99                    |  |   |
| H31                            | H              | BLUE BELL MANOR UTILITY      | Municipal conservation - small water user group          | 18.60465116  | 1.86  | 6.944444444  | 0.69  | 5.00   | 0   | 7.55                   | 62.96                     | 10  | 0   | 10.00                  | 100                 | 4            | 80       | 742.96                    |  |   |
| H32                            | H              | BOLIVAR PENINSULAR SUD       | Municipal conservation - medium water user group         | 100  | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 898.33                    |  |   |
| H33                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | 80.64516129  | 8.06  | 91.25138427  | 9.13  | 5.00   | 0   | 22.19                  | 184.91                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 778.91                    |  |   |
| H34                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | 19.35483871  | 1.94  | 8.748615725  | 0.87  | 5.00   | 0   | 7.81                   | 65.09                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 715.09                    |  |   |
| H35                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | 80   | 8.00  | 91.11012826  | 9.11  | 5.00   | 0   | 22.11                  | 184.26                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 778.26                    |  |   |
| H36                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | 20   | 2.00  | 8.889871738  | 0.89  | 5.00   | 0   | 7.89                   | 65.74                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 715.74                    |  |   |
| H37                            | H              | BRAZORIA COUNTY MUD #        | Expanded use of groundwater                              | 80.66914498  | 8.07  | 91.30100077  | 9.13  | 5.00   | 0   | 22.20                  | 184.98                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 778.98                    |  |   |
| H38                            | H              | BRAZORIA COUNTY MUD #        | Municipal conservation - medium water user group         | 19.33085502  | 1.93  | 8.69899923   | 0.87  | 5.00   | 0   | 7.80                   | 65.02                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 715.02                    |  |   |
| H39                            | H              | BRAZOS RIVER AUTHORITY       | Allens Creek Reservoir                                   | 14.24762614  | 1.42  | 11.921639  | 1.19  | 0.00   | 5   | 7.62                   | 63.47                     | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 693.47                    | H350   | The lines reflect ownership shares of a single reservoir project. |
| H40                            | H              | BRAZOS RIVER AUTHORITY       | BRA system operations permit                             | 7.100115815  | 0.71  | 5.943658339  | 0.59  | 0.00   | 5   | 6.30                   | 52.54                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 738.54                    |  |   |
| H41                            | H              | BRAZOS RIVER AUTHORITY       | BRA to Brazosport Water Authority contract               | 1.345863789  | 0.13  | 37.86137234  | 3.79  | 0.00   | 0   | 3.92                   | 32.67                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 638.67                    | H51  | Both entries reflect the same contractual WMS.                    |
| H42                            | H              | BRAZOS RIVER AUTHORITY       | BRA to Cities of Richmond-Rosenberg contract             | 59.65008201  | 5.97  | 79.40638627  | 7.94  | 0.00   | 5   | 18.91                  | 157.55                    | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 583.55                    | H663   | Both entries reflect the same contractual WMS.                    |
| H43                            | H              | BRAZOS RIVER AUTHORITY       | BRA to City of Sugar Land contract                       | 71.86843947  | 7.19  | 78.50775834  | 7.85  | 0.00   | 5   | 20.04                  | 166.98                    | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 828.98                    | H762   | Both entries reflect the same contractual WMS.                    |
| H44                            | H              | BRAZOS RIVER AUTHORITY       | BRA to GCWA contract                                     | 8.378574525  | 0.84  | 16.34433692  | 1.63  | 0.00   | 5   | 7.47                   | 62.27                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 668.27                    | H244   | Both entries reflect the same contractual WMS.                    |
| H45                            | H              | BRAZOS RIVER AUTHORITY       | BRA to NRG Energy contract                               | 100  | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 452.67                    | H588   | Both entries reflect the same contractual WMS.                    |
| H46                            | H              | BRAZOS RIVER AUTHORITY       | Brazoria off-channel reservoir                           | 13.64473654  | 1.36  | 13.64473654  | 1.36  | 0.00   | 0   | 2.73                   | 22.74                     | 10  | 3   | 15.00                  | 150                 | 0            | 0        | 288.74                    |  |   |
| H47                            | H              | BRAZOS RIVER AUTHORITY       | Brazos saltwater barrier                                 | 0  | 0.00  | 0  | 0.00  | 5.00   | 0   | 5.00                   | 41.67                     | 10  | 0   | 13.00                  | 130                 | 0            | 0        | 551.67                    |  |   |
| H48                            | H              | BRAZOS RIVER AUTHORITY       | City of Houston to BRA contract                          | 9.973313474  | 1.00  | 8.345147301  | 0.83  | 0.00   | 5   | 6.83                   | 56.93                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 662.93                    | H354   | Both entries reflect the same contractual WMS.                    |
| H49                            | H              | BRAZOS RIVER AUTHORITY       | Fort Bend off-channel reservoir                          | 0.063046402  | 0.01  | 19.52180231  | 1.95  | 0.00   | 5   | 6.96                   | 57.99                     | 10  | 0   | 15.00                  | 150                 | 0            | 0        | 403.99                    |  |   |
| H50                            | H              | BRAZOS RIVER AUTHORITY       | Freeport desalination plant                              | 22.34889553  | 2.23  | 19.10263116  | 1.91  | 0.00   | 0   | 4.15                   | 34.54                     | 10  | 5   | 15.00                  | 150                 | 0            | 0        | 356.54                    |  |   |
| H51                            | H              | BRAZOSPORT WATER AUTHORITY   | BRA to Brazosport Water Authority contract               | 1.345863789  | 0.13  | 37.86137234  | 3.79  | 0.00   | 0   | 3.92                   | 32.67                     | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 638.67                    | H41  | Both entries reflect the same contractual WMS.                    |
| H52                            | H              | BRITMOORE UTILITIES          | Contract with City of Houston                            | 67.66467066  | 6.77  | 77.13125846  | 7.71  | 0.00   | 0   | 14.48                  | 120.66                    | 10  | 5   | 15.00                  | 150                 | 5            | 100      | 694.66                    |  |   |
| H53                            | H              | BRITMOORE UTILITIES          | Municipal conservation - small water user group          | 18.43971631  | 1.84  | 6.49526387   | 0.65  | 0.00   | 0   | 2.49                   | 20.78                     | 10  | 5   | 15.00                  | 150                 | 4            | 80       | 750.78                    |  |   |
| H54                            | H              | BRITMOORE UTILITIES          | Reallocation of existing supplies                        | 81.56028369  | 8.16  | 16.37447767  | 1.64  | 0.00   | 0   | 9.79                   | 81.61                     | 10  | 0   | 10.00                  | 100                 | 4            | 80       | 705.61                    |  |   |
| H55                            | H              | BROOKSHIRE                   | Expanded use of groundwater                              | 71.26436782  | 7.13  | 90.59534081  | 9.06  | 5.00   | 0   | 21.19                  | 176.55                    | 10  | 5   | 15.00                  | 150                 | 2            | 40       | 770.55                    |  |   |
| H56                            | H              | BROOKSHIRE                   | Municipal conservation - medium water user group         | 28.73563218  | 2.87  | 9.404659189  | 0.94  | 5.00   | 0   | 8.81                   |                           |   |   |                        |                     |              |          |                           |  |   |



| Alphabetized unique identifier | Sponsor Region | Sponsor                   | Recommended Water Management Strategy Name                     | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility  |  |   |  |                        |                  |
|--------------------------------|----------------|---------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|---|--|---|--|------------------------|------------------|
|                                |                |                           |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5   | 5  | 10  | 5  | 25                     | 100              |
|                                |                |                           |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] | Criteria 2 Total Score | Criteria 2 Total |
| H86                            | H              | CLEVELAND                 | Expanded use of groundwater                                    | \$443,014     | 0                      | 24                     | 51                     | 75                     | 123                    | 188                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H87                            | H              | CLEVELAND                 | Municipal conservation - medium water user group               | \$0           | 0                      | 24                     | 51                     | 75                     | 87                     | 91                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H88                            | H              | CLUTE                     | Contract with Brazosport Water Authority                       | \$349,878     | 0                      | 0                      | 24                     | 42                     | 84                     | 144                    | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H89                            | H              | CLUTE                     | Expanded use of groundwater                                    | \$103,689     | 0                      | 0                      | 14                     | 20                     | 32                     | 44                     | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H90                            | H              | CLUTE                     | Municipal conservation - large water user group                | \$0           | 34                     | 67                     | 80                     | 82                     | 86                     | 90                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H91                            | H              | COLDSRING                 | Expanded use of groundwater                                    | \$186,170     | 0                      | 30                     | 54                     | 68                     | 75                     | 79                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H92                            | H              | COLDSRING                 | Municipal conservation - small water user group                | \$0           | 0                      | 13                     | 14                     | 15                     | 15                     | 15                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H93                            | H              | CONROE                    | Contract with SJRA   | \$9,663,986   | 0                      | 0                      | 0                      | 2,165                  | 9,786                  | 17,812                 | Y   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H94                            | H              | CONROE                    | Expanded use of groundwater                                    | \$0           | 0                      | 0                      | 37                     | 359                    | 626                    | 858                    | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H95                            | H              | CONROE                    | Interim strategies - temporary overdraft                       | \$4,159,924   | 1,870                  | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H96                            | H              | CONROE                    | Municipal conservation - large water user group                | \$0           | 714                    | 925                    | 1,174                  | 1,457                  | 1,830                  | 2,273                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H97                            | H              | CONROE                    | SJRA Water Resources Assessment Plan participation             | \$32,378,451  | 0                      | 12,849                 | 16,769                 | 15,216                 | 13,490                 | 12,274                 | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H98                            | H              | CONSOLIDATED WSC          | Expanded use of groundwater                                    | \$2,357       | 0                      | 1                      | 1                      | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H99                            | H              | CONSUMERS WATER INC       | Contract with City of Houston                                  | \$697,026     | 0                      | 0                      | 352                    | 522                    | 661                    | 661                    | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H100                           | H              | CONSUMERS WATER INC       | Interim strategies - temporary overdraft                       | \$89,547      | 38                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H101                           | H              | CONSUMERS WATER INC       | Municipal conservation - medium water user group               | \$0           | 37                     | 45                     | 57                     | 68                     | 81                     | 96                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H102                           | H              | CONSUMERS WATER INC       | Reallocation of existing supplies                              | \$823,058     | 96                     | 336                    | 131                    | 74                     | 52                     | 173                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H103                           | H              | CONSUMERS WATER INC       | SJRA Water Resources Assessment Plan participation             | \$841,177     | 0                      | 89                     | 143                    | 204                    | 291                    | 395                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H104                           | H              | COUNTY-OTHER, AUSTIN      | Expanded use of groundwater                                    | \$172,030     | 0                      | 29                     | 50                     | 58                     | 63                     | 73                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H105                           | H              | COUNTY-OTHER, AUSTIN      | Municipal conservation - small water user group                | \$0           | 19                     | 20                     | 21                     | 21                     | 21                     | 21                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H106                           | H              | COUNTY-OTHER, BRAZORIA    | Contract with Brazosport Water Authority                       | \$14,149,011  | 6,482                  | 5,689                  | 6,318                  | 5,879                  | 5,355                  | 4,546                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H107                           | H              | COUNTY-OTHER, BRAZORIA    | Contract with Brazosport Water Authority                       | \$2,102,169   | 0                      | 116                    | 124                    | 1,557                  | 3,183                  | 5,435                  | Y   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H108                           | H              | COUNTY-OTHER, BRAZORIA    | Expanded use of groundwater                                    | \$6,545,334   | 0                      | 1,945                  | 2,687                  | 2,793                  | 2,758                  | 2,722                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H109                           | H              | COUNTY-OTHER, BRAZORIA    | Municipal conservation - small water user group                | \$0           | 801                    | 869                    | 951                    | 1,017                  | 1,098                  | 1,187                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H110                           | H              | COUNTY-OTHER, BRAZORIA    | Wastewater reclamation for municipal irrigation                | \$612,746     | 0                      | 0                      | 116                    | 227                    | 344                    | 465                    | N   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H111                           | H              | COUNTY-OTHER, CHAMBER     | Contract with CLCND  | \$3,155,158   | 0                      | 288                    | 280                    | 272                    | 265                    | 265                    | Y   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H112                           | H              | COUNTY-OTHER, CHAMBER     | Interim strategies - temporary overdraft                       | \$454,446     | 193                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H113                           | H              | COUNTY-OTHER, CHAMBER     | Municipal conservation - small water user group                | \$0           | 26                     | 25                     | 24                     | 22                     | 22                     | 21                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H114                           | H              | COUNTY-OTHER, CHAMBER     | Reallocation of existing supplies                              | \$245,025     | 104                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H115                           | H              | COUNTY-OTHER, FORT BEN    | City of Missouri City Groundwater Reduction Plan participation | \$4,467,355   | 0                      | 198                    | 944                    | 1,523                  | 1,724                  | 1,788                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H116                           | H              | COUNTY-OTHER, FORT BEN    | City of Sugar Land Groundwater Reduction Plan participation    | \$4,470,689   | 0                      | 131                    | 979                    | 1,829                  | 2,105                  | 1,997                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H117                           | H              | COUNTY-OTHER, FORT BEN    | Contract with BRA  | \$239,698,342 | 0                      | 23                     | 487                    | 4,477                  | 19,667                 | 37,779                 | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H118                           | H              | COUNTY-OTHER, FORT BEN    | Contract with GCWA   | \$34,290,507  | 0                      | 0                      | 0                      | 1,950                  | 1,950                  | 1,950                  | Y   |  | 4                                       | 6  | 10 | 200 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H119                           | H              | COUNTY-OTHER, FORT BEN    | Municipal conservation - small water user group                | \$0           | 34                     | 92                     | 296                    | 798                    | 1,861                  | 3,085                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H120                           | H              | COUNTY-OTHER, FORT BEN    | Wastewater reclamation for municipal irrigation                | \$8,973,765   | 0                      | 0                      | 477                    | 1,616                  | 4,045                  | 6,810                  | N   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H121                           | H              | COUNTY-OTHER, GALVESTON   | Contract with GCWA   | \$24,107,245  | 0                      | 2,659                  | 2,659                  | 2,659                  | 2,659                  | 2,659                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H122                           | H              | COUNTY-OTHER, HARRIS      | City of Houston indirect reuse                                 | \$157,804,088 | 0                      | 0                      | 0                      | 11,372                 | 32,445                 | 32,445                 | N   |  | 4                                       | 6  | 10 | 200 | 3   | 0  | 4   | 5  | 12                     | 48               |
| H123                           | H              | COUNTY-OTHER, HARRIS      | Contract with City of Houston                                  | \$1,234,058   | 0                      | 0                      | 47                     | 47                     | 2,202                  | 2,202                  | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H124                           | H              | COUNTY-OTHER, HARRIS      | Contract with SJRA   | \$34,903,768  | 0                      | 0                      | 5,299                  | 19,014                 | 16,041                 | 17,533                 | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H125                           | H              | COUNTY-OTHER, HARRIS      | Municipal conservation - small water user group                | \$0           | 0                      | 0                      | 823                    | 1,890                  | 3,350                  | 4,892                  | N   |  | 6                                       | 8  | 14 | 280 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H126                           | H              | COUNTY-OTHER, HARRIS      | Reallocation of existing supplies                              | \$7,549,158   | 203                    | 0                      | 17                     | 181                    | 1,937                  | 13,715                 | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H127                           | H              | COUNTY-OTHER, HARRIS      | Wastewater reclamation for municipal irrigation                | \$11,663,259  | 0                      | 0                      | 1,008                  | 3,001                  | 5,818                  | 8,780                  | N   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H128                           | H              | COUNTY-OTHER, LEON        | Expanded use of groundwater                                    | \$117,828     | 0                      | 41                     | 50                     | 32                     | 18                     | 24                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H129                           | H              | COUNTY-OTHER, LEON        | Municipal conservation - small water user group                | \$0           | 0                      | 41                     | 47                     | 32                     | 18                     | 24                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H130                           | H              | COUNTY-OTHER, LIBERTY     | Expanded use of groundwater                                    | \$7,110,457   | 0                      | 422                    | 988                    | 1,582                  | 2,221                  | 3,023                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H131                           | H              | COUNTY-OTHER, LIBERTY     | Municipal conservation - small water user group                | \$0           | 0                      | 279                    | 312                    | 345                    | 382                    | 428                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H132                           | H              | COUNTY-OTHER, MADISON     | Expanded use of groundwater                                    | \$426,512     | 0                      | 65                     | 113                    | 78                     | 112                    | 181                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H133                           | H              | COUNTY-OTHER, MADISON     | Municipal conservation - small water user group                | \$0           | 0                      | 56                     | 59                     | 60                     | 62                     | 64                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H134                           | H              | COUNTY-OTHER, MONTGOMERY  | Contract with SJRA   | \$21,897,960  | 0                      | 0                      | 0                      | 537                    | 8,580                  | 25,585                 | Y   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H135                           | H              | COUNTY-OTHER, MONTGOMERY  | Expanded use of groundwater                                    | \$1,607,119   | 0                      | 0                      | 406                    | 2,740                  | 5,360                  | 7,371                  | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H136                           | H              | COUNTY-OTHER, MONTGOMERY  | Interim strategies - temporary overdraft                       | \$8,156,834   | 3,989                  | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H137                           | H              | COUNTY-OTHER, MONTGOMERY  | Municipal conservation - small water user group                | \$0           | 1,272                  | 1,508                  | 2,131                  | 2,879                  | 3,962                  | 5,221                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H138                           | H              | COUNTY-OTHER, MONTGOMERY  | SJRA Water Resources Assessment Plan participation             | \$32,798,932  | 0                      | 10,308                 | 16,122                 | 19,183                 | 13,789                 | 5,335                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H139                           | H              | COUNTY-OTHER, MONTGOMERY  | SJRA Water Resources Assessment Plan participation             | \$26,789,272  | 0                      | 0                      | 375                    | 4,087                  | 12,079                 | 17,836                 | Y   |  | 8                                       | 8  | 16 | 320 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H140                           | H              | COUNTY-OTHER, MONTGOMERY  | Wastewater reclamation for municipal irrigation                | \$13,460,649  | 0                      | 0                      | 1,752                  | 3,838                  | 6,787                  | 10,215                 | N   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H141                           | H              | COUNTY-OTHER, POLK        | Expanded use of groundwater                                    | \$838,828     | 0                      | 71                     | 124                    | 174                    | 260                    | 356                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H142                           | H              | COUNTY-OTHER, POLK        | Municipal conservation - small water user group                | \$0           | 0                      | 91                     | 97                     | 100                    | 104                    | 110                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H143                           | H              | COUNTY-OTHER, SAN JACINTO | Expanded use of groundwater                                    | \$1,246,221   | 0                      | 280                    | 452                    | 347                    | 279                    | 261                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H144                           | H              | COUNTY-OTHER, SAN JACINTO | Municipal conservation - small water user group                | \$0           | 0                      | 54                     | 58                     | 61                     | 62                     | 63                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H145                           | H              | COUNTY-OTHER, TRINITY     | Expanded use of groundwater                                    | \$82,479      | 0                      | 32                     | 35                     | 21                     | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H146                           | H              | COUNTY-OTHER, WALKER      | Expanded use of groundwater                                    | \$2,357       | 0                      | 1                      | 0                      | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H147                           | H              | COUNTY-OTHER, WALKER      | Municipal conservation - small water user group                | \$0           | 0                      | 1                      | 0                      | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H148                           | H              | COUNTY-OTHER, WALLER      | Expanded use of groundwater                                    | \$3,377,200   | 0                      | 172                    | 414                    | 659                    | 1,024                  | 1,435                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H149                           | H              | COUNTY-OTHER, WALLER      | Municipal conservation - small water user group                | \$0           | 0                      | 79                     | 110                    | 124                    | 144                    | 168                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H150                           | H              | CROSBY MUD                | Expanded use of groundwater                                    | \$63,627      | 0                      | 14                     | 27                     | 27                     | 27                     | 27                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H151                           | H              | CROSBY MUD                | Municipal conservation - medium water user group               | \$0           | 0                      | 0                      | 0                      | 0                      | 0                      | 11                     | N   |  | 0                                       | 2  | 2  | 40  | 5   | 5  | 10  | 5  | 25                     | 100              |
| H152                           | H              | CRYSTAL SPRINGS WATER CO  | Contract with City of Houston                                  | \$33,055      | 0                      | 0                      | 17                     | 26                     | 32                     | 32                     | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H153                           | H              | CRYSTAL SPRINGS WATER CO  | Expanded use of groundwater                                    | \$            |                        |                        |                        |                        |                        |                        |   |  |   |    |    |     |   |  |   |  |                        |                  |

| Alphabetized unique identifier | Sponsor Region | Sponsor                   | Recommended Water Management Strategy Name                     | Criteria 3 - Project Viability   |   |   |   |  |   | Criteria 4 - Project Sustainability |                           |   |   | Criteria 5 - Project Cost Effectiveness |                           | FINAL SCORE | Grouped With | Comments |  |                           |
|--------------------------------|----------------|---------------------------|--|--|---|---|---|--|---|-------------------------------------|---------------------------|---|---|---|---------------------------|-------------|--------------|----------|--|---------------------------|
|                                |                |                           |  | 100  | 10  | 100   | 10  | 5.00   | 5   | 30.00                               | 250.00                    | 10  | 5   | 15.00                                   | 150                       |             |              |          | 5  | 100                       |
|                                |                |                           |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score              | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score                  | Weighted Criteria 4 Total |             |              |          | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H86                            | H              | CLEVELAND                 | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 822.33   |  |                           |
| H87                            | H              | CLEVELAND                 | Municipal conservation - medium water user group               | 100  | 10.00   | 48.40425532   | 4.84  | 5.00   | 0   | 19.84                               | 165.34                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 815.34   |  |                           |
| H88                            | H              | CLUTE                     | Contract with Brazosport Water Authority                       | 20.33898305  | 2.03  | 51.79856115   | 5.18  | 0.00   | 0   | 7.21                                | 60.11                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 554.11   |  |                           |
| H89                            | H              | CLUTE                     | Expanded use of groundwater                                    | 11.86440678  | 1.19  | 15.82733813   | 1.58  | 0.00   | 0   | 2.77                                | 23.08                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 537.08   |  |                           |
| H90                            | H              | CLUTE                     | Municipal conservation - large water user group                | 100  | 10.00   | 32.37410072   | 3.24  | 0.00   | 0   | 13.24                               | 110.31                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 840.31   |  |                           |
| H91                            | H              | COLDSRING                 | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H92                            | H              | COLDSRING                 | Municipal conservation - small water user group                | 43.33333333  | 4.33  | 18.98734177   | 1.90  | 5.00   | 0   | 11.23                               | 93.60                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 783.60   |  |                           |
| H93                            | H              | CONROE                    | Contract with SJRA   | 21.24006671  | 2.12  | 74.96317495   | 7.50  | 0.00   | 0   | 9.62                                | 80.17                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 574.17   |  |                           |
| H94                            | H              | CONROE                    | Expanded use of groundwater                                    | 0.379059523  | 0.04  | 3.610959135   | 0.36  | 0.00   | 0   | 0.40                                | 3.33                      | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 577.33   |  |                           |
| H95                            | H              | CONROE                    | Interim strategies - temporary overdraft                       | 72.36842105  | 7.24  | 0   | 0.00  | 0.00   | 0   | 7.24                                | 60.31                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 574.31   |  |                           |
| H96                            | H              | CONROE                    | Municipal conservation - large water user group                | 27.63157895  | 2.76  | 9.566095703   | 0.96  | 0.00   | 0   | 3.72                                | 31.00                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 761.00   |  |                           |
| H97                            | H              | CONROE                    | SJRA Water Resources Assessment Plan participation             | 100  | 10.00   | 51.65607508   | 5.17  | 0.00   | 0   | 15.17                               | 126.38                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 806.38   |  |                           |
| H98                            | H              | CONSOLIDATED WSC          | Expanded use of groundwater                                    | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 15.00                               | 125.00                    | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 619.00   |  |                           |
| H99                            | H              | CONSUMERS WATER INC       | Contract with City of Houston                                  | 51.53733529  | 5.15  | 49.88679245   | 4.99  | 0.00   | 0   | 10.14                               | 84.52                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 658.52   |  |                           |
| H100                           | H              | CONSUMERS WATER INC       | Interim strategies - temporary overdraft                       | 22.22222222  | 2.22  | 0   | 0.00  | 0.00   | 0   | 2.22                                | 18.52                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 532.52   |  |                           |
| H101                           | H              | CONSUMERS WATER INC       | Municipal conservation - medium water user group               | 21.6374269   | 2.16  | 7.245283019   | 0.72  | 0.00   | 0   | 2.89                                | 24.07                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 714.07   |  |                           |
| H102                           | H              | CONSUMERS WATER INC       | Reallocation of existing supplies                              | 56.14035088  | 5.61  | 13.05660377   | 1.31  | 0.00   | 0   | 6.92                                | 57.66                     | 10  | 0   | 10.00                                   | 100                       | 3           | 60           | 661.66   |  |                           |
| H103                           | H              | CONSUMERS WATER INC       | SJRA Water Resources Assessment Plan participation             | 18.93617021  | 1.89  | 29.81132075   | 2.98  | 0.00   | 0   | 4.87                                | 40.62                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 770.62   |  |                           |
| H104                           | H              | COUNTY-OTHER, AUSTIN      | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H105                           | H              | COUNTY-OTHER, AUSTIN      | Municipal conservation - small water user group                | 65.51724138  | 6.55  | 28.76712329   | 2.88  | 5.00   | 0   | 14.43                               | 120.24                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 810.24   |  |                           |
| H106                           | H              | COUNTY-OTHER, BRAZORIA    | Contract with Brazosport Water Authority                       | 89.00178498  | 8.90  | 31.66840822   | 3.17  | 0.00   | 0   | 12.07                               | 100.56                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 724.56   |  |                           |
| H107                           | H              | COUNTY-OTHER, BRAZORIA    | Contract with Brazosport Water Authority                       | 1.345863789  | 0.13  | 37.86137234   | 3.79  | 0.00   | 0   | 3.92                                | 32.67                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 666.67   |  |                           |
| H108                           | H              | COUNTY-OTHER, BRAZORIA    | Expanded use of groundwater                                    | 22.56642302  | 2.26  | 18.96203413   | 1.90  | 0.00   | 0   | 4.15                                | 34.61                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 598.61   |  |                           |
| H109                           | H              | COUNTY-OTHER, BRAZORIA    | Municipal conservation - small water user group                | 10.99821502  | 1.10  | 8.268895855   | 0.83  | 0.00   | 0   | 1.93                                | 16.06                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 746.06   |  |                           |
| H110                           | H              | COUNTY-OTHER, BRAZORIA    | Wastewater reclamation for municipal irrigation                | 1.150793651  | 0.12  | 3.239289446   | 0.32  | 0.00   | 0   | 0.44                                | 3.66                      | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 489.66   |  |                           |
| H111                           | H              | COUNTY-OTHER, CHAMBER     | Contract with CLCND  | 92.01277955  | 9.20  | 92.65734266   | 9.27  | 0.00   | 0   | 18.47                               | 153.89                    | 10  | 0   | 10.00                                   | 100                       | 0           | 0            | 657.89   |  |                           |
| H112                           | H              | COUNTY-OTHER, CHAMBER     | Interim strategies - temporary overdraft                       | 59.75232198  | 5.98  | 0   | 0.00  | 0.00   | 0   | 5.98                                | 49.79                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 563.79   |  |                           |
| H113                           | H              | COUNTY-OTHER, CHAMBER     | Municipal conservation - small water user group                | 8.049535604  | 0.80  | 7.342657343   | 0.73  | 0.00   | 0   | 1.54                                | 12.83                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 692.83   |  |                           |
| H114                           | H              | COUNTY-OTHER, CHAMBER     | Reallocation of existing supplies                              | 32.19814241  | 3.22  | 0   | 0.00  | 0.00   | 0   | 3.22                                | 26.83                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 560.83   |  |                           |
| H115                           | H              | COUNTY-OTHER, FORT BEN    | City of Missouri City Groundwater Reduction Plan participation | 46.58823529  | 4.66  | 3.349882904   | 0.33  | 0.00   | 0   | 4.99                                | 41.62                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 731.62   |  |                           |
| H116                           | H              | COUNTY-OTHER, FORT BEN    | City of Sugar Land Groundwater Reduction Plan participation    | 30.82352941  | 3.08  | 3.741451991   | 0.37  | 0.00   | 0   | 3.46                                | 28.80                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 668.80   |  |                           |
| H117                           | H              | COUNTY-OTHER, FORT BEN    | Contract with BRA  | 5.411764706  | 0.54  | 70.78032787   | 7.08  | 0.00   | 0   | 7.62                                | 63.49                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 609.49   |  |                           |
| H118                           | H              | COUNTY-OTHER, FORT BEN    | Contract with GCWA   | 16.02037463  | 1.60  | 3.653395785   | 0.37  | 0.00   | 0   | 1.97                                | 16.39                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 402.39   |  |                           |
| H119                           | H              | COUNTY-OTHER, FORT BEN    | Municipal conservation - small water user group                | 100  | 10.00   | 5.779859485   | 0.58  | 0.00   | 0   | 10.58                               | 88.15                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 818.15   |  |                           |
| H120                           | H              | COUNTY-OTHER, FORT BEN    | Wastewater reclamation for municipal irrigation                | 15.22502394  | 1.52  | 12.7587822  | 1.28  | 0.00   | 0   | 2.80                                | 23.32                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 509.32   |  |                           |
| H121                           | H              | COUNTY-OTHER, GALVESTON   | Contract with GCWA   | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 720.67   |  |                           |
| H122                           | H              | COUNTY-OTHER, HARRIS      | City of Houston indirect reuse                                 | 44.858191  | 4.49  | 40.84523  | 4.08  | 0.00   | 0   | 8.57                                | 71.42                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 469.42   |  |                           |
| H123                           | H              | COUNTY-OTHER, HARRIS      | Contract with City of Houston                                  | 0.753446618  | 0.08  | 2.772112697   | 0.28  | 0.00   | 0   | 0.35                                | 2.94                      | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 576.94   |  |                           |
| H124                           | H              | COUNTY-OTHER, HARRIS      | Contract with SJRA   | 84.94709843  | 8.49  | 22.07241232   | 2.21  | 0.00   | 0   | 10.70                               | 89.18                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 593.18   |  |                           |
| H125                           | H              | COUNTY-OTHER, HARRIS      | Municipal conservation - small water user group                | 13.1933312   | 1.32  | 6.158571896   | 0.62  | 0.00   | 0   | 1.94                                | 16.13                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 626.13   |  |                           |
| H126                           | H              | COUNTY-OTHER, HARRIS      | Reallocation of existing supplies                              | 100  | 10.00   | 17.26590629   | 1.73  | 0.00   | 0   | 11.73                               | 97.72                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 771.72   |  |                           |
| H127                           | H              | COUNTY-OTHER, HARRIS      | Wastewater reclamation for municipal irrigation                | 16.15902533  | 1.62  | 11.0532014  | 1.11  | 0.00   | 0   | 2.72                                | 22.68                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 508.68   |  |                           |
| H128                           | H              | COUNTY-OTHER, LEON        | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 752.33   |  |                           |
| H129                           | H              | COUNTY-OTHER, LEON        | Municipal conservation - small water user group                | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 848.33   |  |                           |
| H130                           | H              | COUNTY-OTHER, LIBERTY     | Expanded use of groundwater                                    | 70.92436975  | 7.09  | 92.16463415   | 9.22  | 5.00   | 0   | 21.31                               | 177.57                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 791.57   |  |                           |
| H131                           | H              | COUNTY-OTHER, LIBERTY     | Municipal conservation - small water user group                | 46.8907563   | 4.69  | 13.04878049   | 1.30  | 5.00   | 0   | 10.99                               | 91.62                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 781.62   |  |                           |
| H132                           | H              | COUNTY-OTHER, MADISON     | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H133                           | H              | COUNTY-OTHER, MADISON     | Municipal conservation - small water user group                | 86.15384615  | 8.62  | 35.35911602   | 3.54  | 5.00   | 0   | 17.15                               | 142.93                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 832.93   |  |                           |
| H134                           | H              | COUNTY-OTHER, MONTGOMERY  | Contract with SJRA   | 1.614357864  | 0.16  | 35.75171527   | 3.58  | 0.00   | 0   | 3.74                                | 31.14                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 505.14   |  |                           |
| H135                           | H              | COUNTY-OTHER, MONTGOMERY  | Expanded use of groundwater                                    | 1.953237756  | 0.20  | 10.30001537   | 1.03  | 0.00   | 0   | 1.23                                | 10.21                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 564.21   |  |                           |
| H136                           | H              | COUNTY-OTHER, MONTGOMERY  | Interim strategies - temporary overdraft                       | 75.82208706  | 7.58  | 0   | 0.00  | 0.00   | 0   | 7.58                                | 63.19                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 577.19   |  |                           |
| H137                           | H              | COUNTY-OTHER, MONTGOMERY  | Municipal conservation - small water user group                | 24.17791294  | 2.42  | 7.29566955  | 0.73  | 0.00   | 0   | 3.15                                | 26.23                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 756.23   |  |                           |
| H138                           | H              | COUNTY-OTHER, MONTGOMERY  | SJRA Water Resources Assessment Plan participation             | 89.51024661  | 8.95  | 7.454969747   | 0.75  | 0.00   | 0   | 9.70                                | 80.80                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 760.80   |  |                           |
| H139                           | H              | COUNTY-OTHER, MONTGOMERY  | SJRA Water Resources Assessment Plan participation             | 1.804098913  | 0.18  | 24.92349398   | 2.49  | 0.00   | 0   | 2.67                                | 22.27                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 672.27   |  |                           |
| H140                           | H              | COUNTY-OTHER, MONTGOMERY  | Wastewater reclamation for municipal irrigation                | 8.42875012   | 0.84  | 14.27413608   | 1.43  | 0.00   | 0   | 2.27                                | 18.92                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 504.92   |  |                           |
| H141                           | H              | COUNTY-OTHER, POLK        | Expanded use of groundwater                                    | 14.54918033  | 1.45  | 30.06756757   | 3.01  | 5.00   | 0   | 9.46                                | 78.85                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 672.85   |  |                           |
| H142                           | H              | COUNTY-OTHER, POLK        | Municipal conservation - small water user group                | 18.64754098  | 1.86  | 9.290540541   | 0.93  | 5.00   | 0   | 7.79                                | 64.95                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 754.95   |  |                           |
| H143                           | H              | COUNTY-OTHER, SAN JACINTO | Expanded use of groundwater                                    | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 752.33   |  |                           |
| H144                           | H              | COUNTY-OTHER, SAN JACINTO | Municipal conservation - small water user group                | 50.94339623  | 5.09  | 24.13793103   | 2.41  | 5.00   | 0   | 12.51                               | 104.23                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 794.23   |  |                           |
| H145                           | H              | COUNTY-OTHER, TRINITY     | Expanded use of groundwater                                    | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 15.00                               | 125.00                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 689.00   |  |                           |
| H146                           | H              | COUNTY-OTHER, WALKER      | Expanded use of groundwater                                    | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 15.00                               | 125.00                    | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 619.00   |  |                           |
| H147                           | H              | COUNTY-OTHER, WALKER      | Municipal conservation - small water user group                | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 15.00                               | 125.00                    | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 715.00   |  |                           |
| H148                           | H              | COUNTY-OTHER, WALLER      | Expanded use of groundwater                                    | 88.20512821  | 8.82  | 96.05087015   | 9.61  | 5.00   | 0   | 23.43                               | 195.21                    | 10  | 5   | 15.00                                   | 150</                     |             |              |          |  |                           |

| Alphabetized unique identifier | Sponsor Region | Sponsor                  | Recommended Water Management Strategy Name                     | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility  |  |   |  |                        |                  |
|--------------------------------|----------------|--------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|---|--|---|--|------------------------|------------------|
|                                |                |                          |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5   | 5  | 10  | 5  | 25                     | 100              |
|                                |                |                          |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] | Criteria 2 Total Score | Criteria 2 Total |
| H174                           | H              | DICKINSON                | Interim strategies   | \$1,146,303   | 489                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H175                           | H              | DICKINSON                | Municipal conservation - large water user group                | \$0           | 196                    | 217                    | 227                    | 230                    | 232                    | 235                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 10  | 5  | 25                     | 100              |
| H176                           | H              | DOW CHEMICAL USA         | DOW off-channel Reservoir                                      | \$124,468,000 | 0                      | 21,800                 | 21,800                 | 21,800                 | 21,800                 | 21,800                 | N   |  | 8                                       | 10 | 18 | 360 | 3   | 5  | 2   | 5  | 15                     | 60               |
| H177                           | H              | EAST PLANTATION UD       | Contract with SJRA   | \$544,862     | 0                      | 0                      | 0                      | 91                     | 426                    | 794                    | Y   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H178                           | H              | EAST PLANTATION UD       | Expanded use of groundwater                                    | \$0           | 0                      | 0                      | 0                      | 11                     | 38                     | 59                     | N   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H179                           | H              | EAST PLANTATION UD       | Interim strategies - temporary overdraft                       | \$193,211     | 82                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H180                           | H              | EAST PLANTATION UD       | Municipal conservation - small water user group                | \$0           | 26                     | 31                     | 41                     | 53                     | 69                     | 88                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H181                           | H              | EAST PLANTATION UD       | SJRA Water Resources Assessment Plan participation             | \$285,054     | 0                      | 203                    | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H182                           | H              | EAST PLANTATION UD       | SJRA Water Resources Assessment Plan participation             | \$1,818,729   | 0                      | 0                      | 670                    | 635                    | 586                    | 547                    | Y   |  | 8                                       | 8  | 16 | 320 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H183                           | H              | EL DORADO UD             | City of Houston Groundwater Reduction Plan participation       | \$1,239,025   | 130                    | 325                    | 403                    | 440                    | 481                    | 526                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H184                           | H              | EL DORADO UD             | Municipal conservation - medium water user group               | \$0           | 9                      | 30                     | 32                     | 35                     | 37                     | 40                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H185                           | H              | EL LAGO                  | Contract with City of Pasadena                                 | \$55,583      | 0                      | 0                      | 206                    | 258                    | 276                    | 276                    | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H186                           | H              | EL LAGO                  | Municipal conservation - small water user group                | \$0           | 30                     | 29                     | 28                     | 28                     | 28                     | 28                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H187                           | H              | EL LAGO                  | Reallocation of existing supplies                              | \$573,047     | 248                    | 270                    | 77                     | 36                     | 22                     | 33                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H188                           | H              | FAIRCHILD                | Contract with BRA  | \$9,374,505   | 0                      | 125                    | 354                    | 483                    | 657                    | 856                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H189                           | H              | FAIRCHILD                | Municipal conservation - small water user group                | \$0           | 0                      | 29                     | 36                     | 44                     | 54                     | 66                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H190                           | H              | FIRST COLONY MUD #9      | City of Missouri City Groundwater Reduction Plan participation | \$916,985     | 0                      | 342                    | 390                    | 163                    | 78                     | 50                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H191                           | H              | FIRST COLONY MUD #9      | Contract with City of Missouri City                            | \$1,586,729   | 0                      | 0                      | 403                    | 668                    | 801                    | 876                    | Y   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H192                           | H              | FIRST COLONY MUD #9      | Municipal conservation - medium water user group               | \$0           | 0                      | 85                     | 87                     | 90                     | 93                     | 96                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H193                           | H              | FLO COMMUNITY WSC        | Expanded use of groundwater                                    | \$376,981     | 0                      | 107                    | 160                    | 156                    | 141                    | 149                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H194                           | H              | FLO COMMUNITY WSC        | Municipal conservation - medium water user group               | \$0           | 0                      | 31                     | 34                     | 34                     | 33                     | 34                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H195                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | \$654,698     | 0                      | 80                     | 278                    | 127                    | 64                     | 37                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H196                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$926,837     | 0                      | 155                    | 245                    | 394                    | 457                    | 484                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H197                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | \$0           | 0                      | 53                     | 53                     | 53                     | 53                     | 53                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H198                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$634,307     | 0                      | 141                    | 312                    | 312                    | 312                    | 312                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H199                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | \$0           | 0                      | 32                     | 32                     | 32                     | 32                     | 32                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H200                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | \$252,136     | 0                      | 64                     | 107                    | 102                    | 51                     | 29                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H201                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$811,605     | 0                      | 186                    | 417                    | 417                    | 417                    | 417                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H202                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | \$0           | 0                      | 46                     | 46                     | 46                     | 46                     | 46                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H203                           | H              | FORT BEND COUNTY MUD     | City of Missouri City Groundwater Reduction Plan participation | \$1,234,366   | 0                      | 464                    | 526                    | 210                    | 94                     | 58                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H204                           | H              | FORT BEND COUNTY MUD     | Contract with City of Missouri City                            | \$1,812,349   | 0                      | 0                      | 543                    | 859                    | 976                    | 1,012                  | Y   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H205                           | H              | FORT BEND COUNTY MUD     | Municipal conservation   | \$0           | 71                     | 141                    | 141                    | 141                    | 141                    | 141                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H206                           | H              | FORT BEND COUNTY MUD     | Contract with BRA  | \$41,171,973  | 0                      | 0                      | 1,025                  | 1,769                  | 2,775                  | 3,924                  | Y   |  | 6                                       | 8  | 14 | 280 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H207                           | H              | FORT BEND COUNTY MUD     | Fort Bend County MUD #25 Groundwater Reduction Plan - reuse    | \$776,145     | 0                      | 589                    | 589                    | 589                    | 589                    | 589                    | N   |  | 10                                      | 10 | 20 | 400 | 3   | 5  | 10  | 5  | 23                     | 92               |
| H208                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - large water user group                | \$0           | 101                    | 141                    | 191                    | 241                    | 309                    | 387                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H209                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | \$270,984     | 0                      | 69                     | 115                    | 108                    | 54                     | 31                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H210                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$852,071     | 0                      | 197                    | 441                    | 441                    | 441                    | 441                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H211                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | \$0           | 0                      | 49                     | 49                     | 48                     | 48                     | 48                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H212                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | \$188,518     | 0                      | 50                     | 74                     | 80                     | 40                     | 23                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H213                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$654,586     | 0                      | 144                    | 324                    | 324                    | 324                    | 324                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H214                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | \$0           | 0                      | 36                     | 36                     | 36                     | 36                     | 36                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H215                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | \$148,461     | 0                      | 40                     | 51                     | 63                     | 32                     | 18                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H216                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | \$546,336     | 0                      | 117                    | 260                    | 260                    | 260                    | 260                    | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H217                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | \$0           | 0                      | 27                     | 26                     | 26                     | 26                     | 26                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H218                           | H              | FORT BEND COUNTY MUD     | Contract with BRA  | \$20,877,667  | 0                      | 253                    | 734                    | 1,042                  | 1,451                  | 1,918                  | Y   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H219                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | \$0           | 43                     | 57                     | 75                     | 93                     | 117                    | 144                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H220                           | H              | FORT BEND COUNTY WCID    | Fort Bend County WCID #2 Groundwater Reduction Plan            | \$24,828,857  | 0                      | 2,296                  | 5,753                  | 5,753                  | 5,753                  | 5,753                  | Y   |  | 10                                      | 10 | 20 | 400 | 3   | 5  | 10  | 5  | 23                     | 92               |
| H221                           | H              | FORT BEND COUNTY WCID    | GCWA to Fort Bend County WCID #2 contract                      | \$0           | 0                      | 491                    | 1,092                  | 1,092                  | 1,092                  | 1,092                  | Y   |  | 8                                       | 8  | 16 | 320 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H222                           | H              | FOUNTAINVIEW SUBDIVISION | Contract with City of Houston                                  | \$300,428     | 0                      | 0                      | 237                    | 326                    | 384                    | 384                    | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H223                           | H              | FOUNTAINVIEW SUBDIVISION | Municipal conservation - small water user group                | \$0           | 19                     | 22                     | 24                     | 27                     | 30                     | 32                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H224                           | H              | FOUNTAINVIEW SUBDIVISION | Reallocation of existing supplies                              | \$594,472     | 83                     | 250                    | 89                     | 46                     | 30                     | 81                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H225                           | H              | FREEPORT                 | Contract with Brazosport Water Authority                       | \$1,714,929   | 0                      | 95                     | 263                    | 439                    | 670                    | 950                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H226                           | H              | FREEPORT                 | Expanded use of groundwater                                    | \$801,151     | 0                      | 54                     | 173                    | 245                    | 297                    | 340                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H227                           | H              | FREEPORT                 | Municipal conservation - large water user group                | \$0           | 0                      | 139                    | 158                    | 175                    | 194                    | 216                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H228                           | H              | FRIENDSWOOD              | Expanded use of groundwater                                    | \$94,262      | 0                      | 28                     | 40                     | 38                     | 40                     | 40                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H229                           | H              | FULSHEAR                 | Fulshear reuse   | \$566,625     | 0                      | 287                    | 430                    | 430                    | 430                    | 430                    | N   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 3   | 5  | 11                     | 44               |
| H230                           | H              | FULSHEAR                 | Municipal conservation - small water user group                | \$0           | 12                     | 25                     | 31                     | 37                     | 46                     | 55                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H231                           | H              | FULSHEAR                 | NFBWA Groundwater Reduction Plan participation                 | \$702,763     | 0                      | 0                      | 0                      | 0                      | 121                    | 290                    | N   |  | 2                                       | 4  | 6  | 120 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H232                           | H              | GALENA PARK              | Contract with City of Houston                                  | \$112,338     | 0                      | 0                      | 24                     | 35                     | 66                     | 66                     | Y   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H233                           | H              | GALENA PARK              | Expanded use of groundwater                                    | \$4,713       | 0                      | 0                      | 2                      | 2                      | 2                      | 2                      | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H234                           | H              | GALENA PARK              | Municipal conservation - large water user group                | \$0           | 78                     | 78                     | 79                     | 79                     | 81                     | 84                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H235                           | H              | GALENA PARK              | Reallocation of existing supplies                              | \$188,211     | 22                     | 25                     | 9                      | 5                      | 49                     | 5                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H236                           | H              | GALVESTON                | Contract with City of Galveston                                | \$10,542,328  | 0                      | 7,262                  | 7,262                  | 7,262                  | 7,262                  | 7,262                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 16                     | 64               |
| H237                           | H              | GALVESTON                | GCWA to City of Galveston contract                             | \$0           | 0                      | 7,262                  | 7,262                  | 7,262                  | 7,262                  | 7,262                  | Y   |  | 8                                       | 8  | 16 | 320 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H238                           | H              | GALVESTON COUNTY MUD     | Expanded use of groundwater                                    | \$18,853      | 0                      | 5                      | 8                      | 8                      | 8                      | 8                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H239                           | H              | GALVESTON COUNTY WCID    | GCWA to Galveston County WCID #1 contract                      | \$0           | 0                      | 766                    | 909                    | 940                    | 975                    | 1,014                  | Y   |  | 8                                       | 8  | 16 | 320 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H240                           | H              | GALVESTON COUNTY WCID    | Contract with GCWA   | \$21,443,918  | 0                      | 2,287                  | 2,287                  | 2,287                  | 2,287                  | 2,287                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H241                           | H              | GALVESTON COUNTY WCID    | Expanded use of groundwater                                    | \$9,427       | 0                      | 3                      | 4                      | 4                      | 4                      | 4                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H242                           | H              | GREEN TRAILS MUD         | City of Houston Groundwater Reduction Plan participation       | \$2,831,586   | 224                    | 668                    | 862</                  |                        |                        |                        |   |  |   |    |    |     |   |  |   |  |                        |                  |



| Alphabetized unique identifier | Sponsor Region | Sponsor                  | Recommended Water Management Strategy Name                     | Criteria 3 - Project Viability  |   |  |   |  | Criteria 4 - Project Sustainability   |                        |                           |   | Criteria 5 - Project Cost Effectiveness   |                        | FINAL SCORE | Grouped With | Comments |                           |  |                           |
|--------------------------------|----------------|--------------------------|--|---|---|--|---|--|---|------------------------|---------------------------|---|---|------------------------|-------------|--------------|----------|---------------------------|--|---------------------------|
|                                |                |                          |  | 100   | 10  | 100  | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  |             |              |          | 150                       | 5  | 100                       |
|                                |                |                          |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score |             |              |          | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H174                           | H              | DICKINSON                | Interim strategies   | 71.38686131   | 7.14  | 0  | 0.00  | 0.00   | 0   | 7.14                   | 59.49                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 593.49                    |  |                           |
| H175                           | H              | DICKINSON                | Municipal conservation - large water user group                | 28.61313869   | 2.86  | 18.09083911  | 1.81  | 0.00   | 0   | 4.67                   | 38.92                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 768.92                    |  |                           |
| H176                           | H              | DOW CHEMICAL USA         | DOW off-channel Reservoir                                      | 26.67188685   | 2.67  | 12.39396903  | 1.24  | 0.00   | 0   | 3.91                   | 32.55                     | 10  | 5   | 15.00                  | 150         | 1            | 20       | 622.55                    |  |                           |
| H177                           | H              | EAST PLANTATION UD       | Contract with SJRA   | 21.77033493   | 2.18  | 74.20560748  | 7.42  | 0.00   | 0   | 9.60                   | 79.98                     | 10  | 5   | 15.00                  | 150         | 5            | 100      | 573.98                    |  |                           |
| H178                           | H              | EAST PLANTATION UD       | Expanded use of groundwater                                    | 2.631578947   | 0.26  | 5.514018692  | 0.55  | 0.00   | 0   | 0.81                   | 6.79                      | 10  | 5   | 15.00                  | 150         | 5            | 100      | 500.79                    |  |                           |
| H179                           | H              | EAST PLANTATION UD       | Interim strategies - temporary overdraft                       | 75.92592593   | 7.59  | 0  | 0.00  | 0.00   | 0   | 7.59                   | 63.27                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 577.27                    |  |                           |
| H180                           | H              | EAST PLANTATION UD       | Municipal conservation - small water user group                | 24.07407407   | 2.41  | 8.224299065  | 0.82  | 0.00   | 0   | 3.23                   | 26.92                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 756.92                    |  |                           |
| H181                           | H              | EAST PLANTATION UD       | SJRA Water Resources Assessment Plan participation             | 86.75213675   | 8.68  | 0  | 0.00  | 0.00   | 0   | 8.68                   | 72.29                     | 5   | 0   | 5.00                   | 50          | 4            | 80       | 646.29                    |  |                           |
| H182                           | H              | EAST PLANTATION UD       | SJRA Water Resources Assessment Plan participation             | 100   | 10.00   | 51.12149533  | 5.11  | 0.00   | 0   | 15.11                  | 125.93                    | 10  | 0   | 10.00                  | 100         | 4            | 80       | 669.93                    |  |                           |
| H183                           | H              | EL DORADO UD             | City of Houston Groundwater Reduction Plan participation       | 93.52517986   | 9.35  | 92.93286219  | 9.29  | 5.00   | 0   | 23.65                  | 197.05                    | 10  | 2   | 15.00                  | 150         | 2            | 40       | 887.05                    |  |                           |
| H184                           | H              | EL DORADO UD             | Municipal conservation - medium water user group               | 6.474820144   | 0.65  | 7.067137809  | 0.71  | 5.00   | 0   | 6.35                   | 52.95                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 742.95                    |  |                           |
| H185                           | H              | EL LAGO                  | Contract with City of Pasadena                                 | 66.23794212   | 6.62  | 81.89910979  | 8.19  | 0.00   | 0   | 14.81                  | 123.45                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 697.45                    |  |                           |
| H186                           | H              | EL LAGO                  | Municipal conservation - small water user group                | 10.79136691   | 1.08  | 8.308605341  | 0.83  | 0.00   | 0   | 1.91                   | 15.92                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 695.92                    |  |                           |
| H187                           | H              | EL LAGO                  | Reallocation of existing supplies                              | 89.20863309   | 8.92  | 9.792284866  | 0.98  | 0.00   | 0   | 9.90                   | 82.50                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 706.50                    |  |                           |
| H188                           | H              | FAIRCHILD                | Contract with BRA  | 81.16883117   | 8.12  | 92.84164859  | 9.28  | 0.00   | 0   | 17.40                  | 145.01                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 691.01                    |  |                           |
| H189                           | H              | FAIRCHILD                | Municipal conservation - small water user group                | 18.83116883   | 1.88  | 7.15835141   | 0.72  | 0.00   | 0   | 2.60                   | 21.66                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 711.66                    |  |                           |
| H190                           | H              | FIRST COLONY MUD #9      | City of Missouri City Groundwater Reduction Plan participation | 80.09367681   | 8.01  | 4.89237906   | 0.49  | 0.00   | 0   | 8.50                   | 70.82                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 710.82                    |  |                           |
| H191                           | H              | FIRST COLONY MUD #9      | Contract with City of Missouri City                            | 45.79545455   | 4.58  | 85.71428571  | 8.57  | 0.00   | 0   | 13.15                  | 109.59                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 655.59                    |  |                           |
| H192                           | H              | FIRST COLONY MUD #9      | Municipal conservation - medium water user group               | 19.90632319   | 1.99  | 9.39334638   | 0.94  | 0.00   | 0   | 2.93                   | 24.42                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 674.42                    |  |                           |
| H193                           | H              | FLO COMMUNITY WSC        | Expanded use of groundwater                                    | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 752.33                    |  |                           |
| H194                           | H              | FLO COMMUNITY WSC        | Municipal conservation - medium water user group               | 28.97196262   | 2.90  | 22.81871915  | 2.28  | 5.00   | 0   | 10.18                  | 84.83                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 734.83                    |  |                           |
| H195                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | 27.77777778   | 2.78  | 6.445993031  | 0.64  | 0.00   | 0   | 3.42                   | 28.52                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 668.52                    |  |                           |
| H196                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 53.81944444   | 5.38  | 84.32055749  | 8.43  | 0.00   | 0   | 13.81                  | 115.12                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 741.12                    |  |                           |
| H197                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | 18.40277778   | 1.84  | 9.23449477   | 0.92  | 0.00   | 0   | 2.76                   | 23.03                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 713.03                    |  |                           |
| H198                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 81.50289017   | 8.15  | 90.96209913  | 9.10  | 0.00   | 0   | 17.25                  | 143.72                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 769.72                    |  |                           |
| H199                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | 18.49710983   | 1.85  | 9.329446064  | 0.93  | 0.00   | 0   | 2.78                   | 23.19                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 713.19                    |  |                           |
| H200                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | 27.58620669   | 2.76  | 6.290672451  | 0.63  | 0.00   | 0   | 3.39                   | 28.23                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 668.23                    |  |                           |
| H201                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 80.17241379   | 8.02  | 90.45553145  | 9.05  | 0.00   | 0   | 17.06                  | 142.19                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 768.19                    |  |                           |
| H202                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | 19.82758621   | 1.98  | 9.978308026  | 1.00  | 0.00   | 0   | 2.98                   | 24.84                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 674.84                    |  |                           |
| H203                           | H              | FORT BEND COUNTY MUD     | City of Missouri City Groundwater Reduction Plan participation | 76.69421488   | 7.67  | 4.789430223  | 0.48  | 0.00   | 0   | 8.15                   | 67.90                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 707.90                    |  |                           |
| H204                           | H              | FORT BEND COUNTY MUD     | Contract with City of Missouri City                            | 44.87603306   | 4.49  | 83.56729975  | 8.36  | 0.00   | 0   | 12.84                  | 107.04                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 653.04                    |  |                           |
| H205                           | H              | FORT BEND COUNTY MUD     | Municipal conservation   | 100   | 10.00   | 11.64327002  | 1.16  | 0.00   | 0   | 11.16                  | 93.04                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 823.04                    |  |                           |
| H206                           | H              | FORT BEND COUNTY MUD     | Contract with BRA  | 56.7867036  | 5.68  | 80.08163265  | 8.01  | 0.00   | 0   | 13.69                  | 114.06                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 580.06                    |  |                           |
| H207                           | H              | FORT BEND COUNTY MUD     | Fort Bend County MUD #25 Groundwater Reduction Plan - reuse    | 88.30584708   | 8.83  | 12.0240816   | 1.20  | 0.00   | 0   | 10.03                  | 83.61                     | 10  | 5   | 15.00                  | 150         | 1            | 20       | 745.61                    |  |                           |
| H208                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - large water user group                | 100   | 10.00   | 7.897959184  | 0.79  | 0.00   | 0   | 10.79                  | 89.91                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 819.91                    |  |                           |
| H209                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | 28.04878049   | 2.80  | 6.352459016  | 0.64  | 0.00   | 0   | 3.44                   | 28.67                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 668.67                    |  |                           |
| H210                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 80.08130081   | 8.01  | 90.36885246  | 9.04  | 0.00   | 0   | 17.05                  | 142.04                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 768.04                    |  |                           |
| H211                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | 19.91869919   | 1.99  | 9.836065574  | 0.98  | 0.00   | 0   | 2.98                   | 24.80                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 624.80                    |  |                           |
| H212                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | 27.77777778   | 2.78  | 6.388888889  | 0.64  | 0.00   | 0   | 3.42                   | 28.47                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 668.47                    |  |                           |
| H213                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 80  | 8.00  | 90   | 9.00  | 0.00   | 0   | 17.00                  | 141.67                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 767.67                    |  |                           |
| H214                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - medium water user group               | 20  | 2.00  | 10   | 1.00  | 0.00   | 0   | 3.00                   | 25.00                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 675.00                    |  |                           |
| H215                           | H              | FORT BEND COUNTY MUD     | City of Sugar Land Groundwater Reduction Plan participation    | 27.77777778   | 2.78  | 6.293706294  | 0.63  | 0.00   | 0   | 3.41                   | 28.39                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 668.39                    |  |                           |
| H216                           | H              | FORT BEND COUNTY MUD     | Contract with City of Sugar Land                               | 81.25   | 8.13  | 90.90909091  | 9.09  | 0.00   | 0   | 17.22                  | 143.47                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 769.47                    |  |                           |
| H217                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | 18.75   | 1.88  | 9.090909091  | 0.91  | 0.00   | 0   | 2.78                   | 23.20                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 663.20                    |  |                           |
| H218                           | H              | FORT BEND COUNTY MUD     | Contract with BRA  | 81.61290323   | 8.16  | 93.01648885  | 9.30  | 0.00   | 0   | 17.46                  | 145.52                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 691.52                    |  |                           |
| H219                           | H              | FORT BEND COUNTY MUD     | Municipal conservation - small water user group                | 100   | 10.00   | 6.983511154  | 0.70  | 0.00   | 0   | 10.70                  | 89.15                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 819.15                    |  |                           |
| H220                           | H              | FORT BEND COUNTY WCID    | Fort Bend County WCID #2 Groundwater Reduction Plan            | 100   | 10.00   | 100  | 10.00   | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  | 150         | 1            | 20       | 912.00                    |  |                           |
| H221                           | H              | FORT BEND COUNTY WCID    | GCWA to Fort Bend County WCID #2 contract                      | 80.09787928   | 8.01  | 91.53394803  | 9.15  | 0.00   | 0   | 17.16                  | 143.03                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 749.03                    |  |                           |
| H222                           | H              | FOUNTAINVIEW SUBDIVISION | Contract with City of Houston                                  | 67.71428571   | 6.77  | 77.26358149  | 7.73  | 0.00   | 0   | 14.50                  | 120.81                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 694.81                    |  |                           |
| H223                           | H              | FOUNTAINVIEW SUBDIVISION | Municipal conservation - small water user group                | 18.62745098   | 1.86  | 6.438631791  | 0.64  | 0.00   | 0   | 2.51                   | 20.89                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 750.89                    |  |                           |
| H224                           | H              | FOUNTAINVIEW SUBDIVISION | Reallocation of existing supplies                              | 81.37254902   | 8.14  | 16.29778672  | 1.63  | 0.00   | 0   | 9.77                   | 81.39                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 665.39                    |  |                           |
| H225                           | H              | FREEMONT                 | Contract with Brazosport Water Authority                       | 32.98611111   | 3.30  | 63.0810093   | 6.31  | 0.00   | 0   | 9.61                   | 80.06                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 674.06                    |  |                           |
| H226                           | H              | FREEMONT                 | Expanded use of groundwater                                    | 18.75   | 1.88  | 22.57636122  | 2.26  | 0.00   | 0   | 4.13                   | 34.44                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 628.44                    |  |                           |
| H227                           | H              | FREEMONT                 | Municipal conservation - large water user group                | 48.26388889   | 4.83  | 14.34262948  | 1.43  | 0.00   | 0   | 6.26                   | 52.17                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 742.17                    |  |                           |
| H228                           | H              | FRIENDSWOOD              | Expanded use of groundwater                                    | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |                           |
| H229                           | H              | FULSHEAR                 | Fulshear reuse   | 100   | 10.00   | 55.48387097  | 5.55  | 0.00   | 0   | 15.55                  | 129.57                    | 10  | 5   | 15.00                  | 150         | 1            | 20       | 703.57                    |  |                           |
| H230                           | H              | FULSHEAR                 | Municipal conservation - small water user group                | 100   | 10.00   | 7.096774194  | 0.71  | 0.00   | 0   | 10.71                  | 89.25                     | 10  | 5   | 15.00                  | 150         | 4            | 80       |                           |  |                           |

| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Capital Cost | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |                           |   |  |   |  |
|--------------------------------|----------------|------------------------|--|--------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|----------------------------------|---------------------------|---|--|---|--|
|                                |                |                        |  |              |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5                                | 5                         | 10  | 5  | 25  | 100  |
|                                |                |                        |  |              |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Criteria 1 Total Score           | Weighted Criteria 1 Total | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] |
| H262                           | H              | HARRIS COUNTY FWSD #6  | Expanded use of groundwater                              | \$21,209     | 0                      | 5                      | 9                      | 9                      | 9                      | 9                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H263                           | H              | HARRIS COUNTY FWSD #6  | Municipal conservation - medium water user group         | \$0          | 21                     | 24                     | 26                     | 29                     | 32                     | 36                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H264                           | H              | HARRIS COUNTY FWSD #6  | Reallocation of existing supplies                        | \$405,886    | 103                    | 145                    | 50                     | 29                     | 21                     | 74                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H265                           | H              | HARRIS COUNTY MUD #11  | City of Houston Groundwater Reduction Plan participation | \$1,279,090  | 102                    | 303                    | 389                    | 437                    | 487                    | 543                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H266                           | H              | HARRIS COUNTY MUD #11  | Municipal conservation - small water user group          | \$0          | 23                     | 26                     | 29                     | 32                     | 35                     | 38                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H267                           | H              | HARRIS COUNTY MUD #11  | City of Houston Groundwater Reduction Plan participation | \$1,563,834  | 211                    | 588                    | 665                    | 652                    | 644                    | 644                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H268                           | H              | HARRIS COUNTY MUD #11  | Municipal conservation - medium water user group         | \$0          | 52                     | 55                     | 54                     | 52                     | 52                     | 52                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H269                           | H              | HARRIS COUNTY MUD #13  | Municipal conservation - medium water user group         | \$0          | 105                    | 130                    | 154                    | 178                    | 202                    | 227                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H270                           | H              | HARRIS COUNTY MUD #13  | WHCRWA Groundwater Reduction Plan participation          | \$7,140,215  | 421                    | 1,393                  | 1,909                  | 2,292                  | 2,667                  | 3,058                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H271                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | \$0          | 76                     | 76                     | 75                     | 75                     | 75                     | 75                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H272                           | H              | HARRIS COUNTY MUD #15  | WHCRWA Groundwater Reduction Plan participation          | \$2,188,073  | 306                    | 811                    | 932                    | 925                    | 925                    | 925                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H273                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | \$0          | 47                     | 60                     | 73                     | 86                     | 100                    | 113                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H274                           | H              | HARRIS COUNTY MUD #15  | WHCRWA Groundwater Reduction Plan participation          | \$3,611,948  | 189                    | 650                    | 909                    | 1,112                  | 1,324                  | 1,536                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H275                           | H              | HARRIS COUNTY MUD #15  | City of Houston Groundwater Reduction Plan participation | \$6,514,003  | 295                    | 1,069                  | 1,559                  | 1,961                  | 2,373                  | 2,782                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H276                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | \$0          | 73                     | 99                     | 126                    | 151                    | 177                    | 203                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H277                           | H              | HARRIS COUNTY MUD #15  | City of Houston Groundwater Reduction Plan participation | \$2,685,245  | 163                    | 532                    | 721                    | 860                    | 995                    | 1,141                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H278                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | \$0          | 40                     | 49                     | 58                     | 67                     | 75                     | 85                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H279                           | H              | HARRIS COUNTY MUD #15  | Contract with City of Houston                            | \$106,157    | 0                      | 0                      | 18                     | 18                     | 18                     | 18                     | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H280                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | \$0          | 0                      | 7                      | 35                     | 34                     | 34                     | 34                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H281                           | H              | HARRIS COUNTY MUD #15  | Reallocation of existing supplies                        | \$41,283     | 0                      | 0                      | 7                      | 2                      | 1                      | 0                      | N   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H282                           | H              | HARRIS COUNTY MUD #18  | Municipal conservation - medium water user group         | \$0          | 37                     | 44                     | 51                     | 59                     | 66                     | 74                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H283                           | H              | HARRIS COUNTY MUD #18  | WHCRWA Groundwater Reduction Plan participation          | \$2,349,383  | 148                    | 475                    | 640                    | 758                    | 874                    | 998                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H284                           | H              | HARRIS COUNTY MUD #18  | City of Houston Groundwater Reduction Plan participation | \$3,083,891  | 193                    | 621                    | 838                    | 995                    | 1,148                  | 1,311                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H285                           | H              | HARRIS COUNTY MUD #18  | Municipal conservation - medium water user group         | \$0          | 48                     | 58                     | 68                     | 77                     | 87                     | 98                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H286                           | H              | HARRIS COUNTY MUD #26  | Contract with City of Houston                            | \$112,392    | 0                      | 0                      | 423                    | 513                    | 537                    | 537                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H287                           | H              | HARRIS COUNTY MUD #26  | Municipal conservation - small water user group          | \$0          | 48                     | 48                     | 48                     | 48                     | 48                     | 48                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H288                           | H              | HARRIS COUNTY MUD #26  | Reallocation of existing supplies                        | \$982,728    | 140                    | 495                    | 158                    | 72                     | 42                     | 42                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H289                           | H              | HARRIS COUNTY MUD #34  | Contract with City of Houston                            | \$183,537    | 0                      | 0                      | 756                    | 916                    | 959                    | 959                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H290                           | H              | HARRIS COUNTY MUD #34  | Municipal conservation - medium water user group         | \$0          | 84                     | 84                     | 84                     | 83                     | 83                     | 83                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H291                           | H              | HARRIS COUNTY MUD #34  | Reallocation of existing supplies                        | \$1,683,538  | 341                    | 898                    | 282                    | 129                    | 76                     | 76                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H292                           | H              | HARRIS COUNTY MUD #46  | Municipal conservation - medium water user group         | \$0          | 50                     | 49                     | 48                     | 48                     | 48                     | 48                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H293                           | H              | HARRIS COUNTY MUD #46  | WHCRWA Groundwater Reduction Plan participation          | \$1,407,012  | 201                    | 526                    | 598                    | 593                    | 593                    | 593                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H294                           | H              | HARRIS COUNTY MUD #5   | Contract with City of Houston                            | \$66,961     | 0                      | 0                      | 339                    | 402                    | 415                    | 415                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H295                           | H              | HARRIS COUNTY MUD #5   | Municipal conservation - medium water user group         | \$0          | 39                     | 38                     | 37                     | 37                     | 36                     | 36                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H296                           | H              | HARRIS COUNTY MUD #5   | Reallocation of existing supplies                        | \$826,178    | 157                    | 411                    | 126                    | 57                     | 33                     | 33                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H297                           | H              | HARRIS COUNTY MUD #50  | Contract with SJRA                                       | \$0          | 0                      | 0                      | 0                      | 0                      | 28                     | 72                     | N   |  | 2                                       | 4  | 6  | 120 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H298                           | H              | HARRIS COUNTY MUD #50  | Harris County MUD #50 water treatment plant              | \$6,131,600  | 560                    | 560                    | 560                    | 560                    | 588                    | 632                    | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H299                           | H              | HARRIS COUNTY MUD #50  | Municipal conservation - medium water user group         | \$0          | 0                      | 0                      | 27                     | 44                     | 46                     | 49                     | N   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H300                           | H              | HARRIS COUNTY MUD #53  | Contract with NCWA                                       | \$2,143,945  | 0                      | 0                      | 896                    | 1,448                  | 1,880                  | 1,880                  | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H301                           | H              | HARRIS COUNTY MUD #53  | Expanded use of groundwater                              | \$409,976    | 0                      | 90                     | 174                    | 174                    | 174                    | 174                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H302                           | H              | HARRIS COUNTY MUD #53  | Municipal conservation - large water user group          | \$0          | 123                    | 151                    | 178                    | 205                    | 232                    | 261                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H303                           | H              | HARRIS COUNTY MUD #53  | Reallocation of existing supplies                        | \$2,099,015  | 587                    | 920                    | 335                    | 204                    | 149                    | 574                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H304                           | H              | HARRIS COUNTY MUD #8   | Contract with City of Houston                            | \$307,696    | 0                      | 0                      | 130                    | 205                    | 271                    | 271                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H305                           | H              | HARRIS COUNTY MUD #8   | Expanded use of groundwater                              | \$54,201     | 0                      | 12                     | 23                     | 23                     | 23                     | 23                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H306                           | H              | HARRIS COUNTY MUD #8   | Municipal conservation - medium water user group         | \$0          | 42                     | 45                     | 48                     | 52                     | 55                     | 60                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H307                           | H              | HARRIS COUNTY MUD #8   | Reallocation of existing supplies                        | \$407,603    | 96                     | 140                    | 49                     | 29                     | 21                     | 88                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H308                           | H              | HARRIS COUNTY UD #14   | City of Houston Groundwater Reduction Plan participation | \$1,556,495  | 143                    | 409                    | 511                    | 559                    | 609                    | 661                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H309                           | H              | HARRIS COUNTY UD #14   | Municipal conservation - small water user group          | \$0          | 32                     | 35                     | 38                     | 41                     | 44                     | 47                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H310                           | H              | HARRIS COUNTY UD #15   | City of Houston Groundwater Reduction Plan participation | \$1,337,944  | 104                    | 312                    | 403                    | 455                    | 509                    | 568                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H311                           | H              | HARRIS COUNTY UD #15   | Municipal conservation - small water user group          | \$0          | 24                     | 27                     | 30                     | 33                     | 36                     | 40                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H312                           | H              | HARRIS COUNTY WCID #1  | Contract with Baytown Area Water Authority               | \$900,444    | 0                      | 0                      | 191                    | 349                    | 496                    | 496                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H313                           | H              | HARRIS COUNTY WCID #1  | Municipal conservation - large water user group          | \$0          | 0                      | 75                     | 84                     | 93                     | 102                    | 111                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H314                           | H              | HARRIS COUNTY WCID #1  | Reallocation of existing supplies                        | \$378,303    | 0                      | 26                     | 71                     | 49                     | 39                     | 196                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H315                           | H              | HARRIS COUNTY WCID #13 | City of Houston Groundwater Reduction Plan participation | \$1,301,473  | 181                    | 480                    | 553                    | 546                    | 550                    | 550                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H316                           | H              | HARRIS COUNTY WCID #13 | Municipal conservation - medium water user group         | \$0          | 45                     | 45                     | 45                     | 44                     | 44                     | 44                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H317                           | H              | HARRIS COUNTY WCID #21 | Contract with NCWA                                       | \$284,811    | 0                      | 0                      | 254                    | 341                    | 411                    | 411                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H318                           | H              | HARRIS COUNTY WCID #21 | Expanded use of groundwater                              | \$21,209     | 0                      | 5                      | 9                      | 9                      | 9                      | 9                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H319                           | H              | HARRIS COUNTY WCID #21 | Municipal conservation - large water user group          | \$0          | 90                     | 93                     | 96                     | 98                     | 102                    | 107                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H320                           | H              | HARRIS COUNTY WCID #21 | Reallocation of existing supplies                        | \$690,297    | 272                    | 313                    | 95                     | 48                     | 32                     | 102                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H321                           | H              | HARRIS COUNTY WCID #36 | Contract with NCWA                                       | \$550,440    | 0                      | 0                      | 246                    | 384                    | 500                    | 500                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H322                           | H              | HARRIS COUNTY WCID #36 | Expanded use of groundwater                              | \$94,262     | 0                      | 27                     | 40                     | 40                     | 40                     | 40                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H323                           | H              | HARRIS COUNTY WCID #36 | Municipal conservation - large water user group          | \$0          | 85                     | 92                     | 98                     | 105                    | 112                    | 120                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H324                           | H              | HARRIS COUNTY WCID #36 | Reallocation of existing supplies                        | \$675,184    | 190                    | 268                    | 92                     | 54                     | 40                     | 160                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H325                           | H              | HARRIS COUNTY WCID #50 | Contract with City of Pasadena                           | \$311,281    | 0                      | 0                      | 437                    | 578                    | 657                    | 657                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H326                           | H              | HARRIS COUNTY WCID #50 | Expanded use of groundwater                              | \$25,922     | 0                      | 5                      | 11                     | 11                     | 11                     | 11                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H327                           | H              | HARRIS COUNTY WCID #50 | Municipal conservation - medium water user group         | \$0          | 36                     | 40                     | 43                     | 46                     | 49                     | 53                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H328                           | H              | HARRIS COUNTY WCID #50 | Reallocation of existing supplies                        | \$1,097,660  | 508                    | 557                    | 163                    | 81                     | 52                     | 115                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H329                           | H</            |                        |  |              |                        |                        |                        |                        |                        |                        |   |  |   |    |    |     |                                  |                           |   |  |   |  |

| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Criteria 3 - Project Viability  |   |  |   |  | Criteria 4 - Project Sustainability   |                        |                           |   | Criteria 5 - Project Cost Effectiveness   |                        | FINAL SCORE | Grouped With | Comments |                           |  |                           |
|--------------------------------|----------------|------------------------|--|---|---|--|---|--|---|------------------------|---------------------------|---|---|------------------------|-------------|--------------|----------|---------------------------|--|---------------------------|
|                                |                |                        |  | 100   | 10  | 100  | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  |             |              |          | 150                       | 5  | 100                       |
|                                |                |                        |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGS receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGS receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score |             |              |          | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H262                           | H              | HARRIS COUNTY FWSD #6  | Expanded use of groundwater                              | 2.873563218   | 0.29  | 2.374670185  | 0.24  | 0.00   | 0   | 0.52                   | 4.37                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 598.37                    |  |                           |
| H263                           | H              | HARRIS COUNTY FWSD #6  | Municipal conservation - medium water user group         | 16.93548387   | 1.69  | 9.498680739  | 0.95  | 0.00   | 0   | 2.64                   | 22.03                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 712.03                    |  |                           |
| H264                           | H              | HARRIS COUNTY FWSD #6  | Reallocation of existing supplies                        | 83.06451613   | 8.31  | 19.52506596  | 1.95  | 0.00   | 0   | 10.26                  | 85.49                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 709.49                    |  |                           |
| H265                           | H              | HARRIS COUNTY MUD #11  | City of Houston Groundwater Reduction Plan participation | 81.6  | 8.16  | 93.4595525   | 9.35  | 5.00   | 0   | 22.51                  | 187.55                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 877.55                    |  |                           |
| H266                           | H              | HARRIS COUNTY MUD #11  | Municipal conservation - small water user group          | 18.4  | 1.84  | 6.540447504  | 0.65  | 5.00   | 0   | 7.49                   | 62.45                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 792.45                    |  |                           |
| H267                           | H              | HARRIS COUNTY MUD #11  | City of Houston Groundwater Reduction Plan participation | 80.22813688   | 8.02  | 92.52873563  | 9.25  | 5.00   | 0   | 22.28                  | 185.63                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 825.63                    |  |                           |
| H268                           | H              | HARRIS COUNTY MUD #11  | Municipal conservation - medium water user group         | 19.77186312   | 1.98  | 7.471264368  | 0.75  | 5.00   | 0   | 7.72                   | 64.37                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 704.37                    |  |                           |
| H269                           | H              | HARRIS COUNTY MUD #13  | Municipal conservation - medium water user group         | 19.96197719   | 2.00  | 6.910197869  | 0.69  | 0.00   | 0   | 2.69                   | 22.39                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 712.39                    |  |                           |
| H270                           | H              | HARRIS COUNTY MUD #13  | WHCRWA Groundwater Reduction Plan participation          | 80.03802281   | 8.00  | 93.08980213  | 9.31  | 0.00   | 0   | 17.31                  | 144.27                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 834.27                    |  |                           |
| H271                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | 19.89528796   | 1.99  | 7.5  | 0.75  | 0.00   | 0   | 2.74                   | 22.83                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 662.83                    |  |                           |
| H272                           | H              | HARRIS COUNTY MUD #15  | WHCRWA Groundwater Reduction Plan participation          | 80.10471204   | 8.01  | 92.5   | 9.25  | 0.00   | 0   | 17.26                  | 143.84                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 783.84                    |  |                           |
| H273                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | 19.91525424   | 1.99  | 6.852637962  | 0.69  | 0.00   | 0   | 2.68                   | 22.31                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 712.31                    |  |                           |
| H274                           | H              | HARRIS COUNTY MUD #15  | WHCRWA Groundwater Reduction Plan participation          | 80.08474576   | 8.01  | 93.14736204  | 9.31  | 0.00   | 0   | 17.32                  | 144.36                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 834.36                    |  |                           |
| H275                           | H              | HARRIS COUNTY MUD #15  | City of Houston Groundwater Reduction Plan participation | 80.16304348   | 8.02  | 93.19932998  | 9.32  | 5.00   | 0   | 22.34                  | 186.14                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 876.14                    |  |                           |
| H276                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | 19.83695652   | 1.98  | 6.800670017  | 0.68  | 5.00   | 0   | 7.66                   | 63.86                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 753.86                    |  |                           |
| H277                           | H              | HARRIS COUNTY MUD #15  | City of Houston Groundwater Reduction Plan participation | 80.2955665  | 8.03  | 93.06688418  | 9.31  | 5.00   | 0   | 22.34                  | 186.14                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 876.14                    |  |                           |
| H278                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | 19.7044335  | 1.97  | 6.933115824  | 0.69  | 5.00   | 0   | 7.66                   | 63.86                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 753.86                    |  |                           |
| H279                           | H              | HARRIS COUNTY MUD #15  | Contract with City of Houston                            | 30  | 3.00  | 37.5   | 3.75  | 0.00   | 0   | 6.75                   | 56.25                     | 10  | 5   | 15.00                  | 150         | 1            | 20       | 550.25                    |  |                           |
| H280                           | H              | HARRIS COUNTY MUD #15  | Municipal conservation - medium water user group         | 100   | 10.00   | 70.83333333  | 7.08  | 0.00   | 0   | 17.08                  | 142.36                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 742.36                    |  |                           |
| H281                           | H              | HARRIS COUNTY MUD #15  | Reallocation of existing supplies                        | 11.66666667   | 1.17  | 0  | 0.00  | 0.00   | 0   | 1.17                   | 9.72                      | 10  | 0   | 10.00                  | 100         | 1            | 20       | 453.72                    |  |                           |
| H282                           | H              | HARRIS COUNTY MUD #18  | Municipal conservation - medium water user group         | 20  | 2.00  | 6.902985075  | 0.69  | 0.00   | 0   | 2.69                   | 22.42                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 712.42                    |  |                           |
| H283                           | H              | HARRIS COUNTY MUD #18  | WHCRWA Groundwater Reduction Plan participation          | 80  | 8.00  | 93.09701493  | 9.31  | 0.00   | 0   | 17.31                  | 144.25                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 834.25                    |  |                           |
| H284                           | H              | HARRIS COUNTY MUD #18  | City of Houston Groundwater Reduction Plan participation | 80.08298755   | 8.01  | 93.04471256  | 9.30  | 5.00   | 0   | 22.31                  | 185.94                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 875.94                    |  |                           |
| H285                           | H              | HARRIS COUNTY MUD #18  | Municipal conservation - medium water user group         | 19.91701245   | 1.99  | 6.955287438  | 0.70  | 5.00   | 0   | 7.69                   | 64.06                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 754.06                    |  |                           |
| H286                           | H              | HARRIS COUNTY MUD #26  | Contract with City of Houston                            | 67.24960254   | 6.72  | 85.64593301  | 8.56  | 0.00   | 0   | 15.29                  | 127.41                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 701.41                    |  |                           |
| H287                           | H              | HARRIS COUNTY MUD #26  | Municipal conservation - small water user group          | 25.53191489   | 2.55  | 7.65502392   | 0.77  | 0.00   | 0   | 3.32                   | 27.66                     | 10  | 3   | 13.00                  | 130         | 4            | 80       | 737.66                    |  |                           |
| H288                           | H              | HARRIS COUNTY MUD #26  | Reallocation of existing supplies                        | 74.46808511   | 7.45  | 6.698564593  | 0.67  | 0.00   | 0   | 8.12                   | 67.64                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 691.64                    |  |                           |
| H289                           | H              | HARRIS COUNTY MUD #34  | Contract with City of Houston                            | 67.37967914   | 6.74  | 85.77817531  | 8.58  | 0.00   | 0   | 15.32                  | 127.63                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 701.63                    |  |                           |
| H290                           | H              | HARRIS COUNTY MUD #34  | Municipal conservation - medium water user group         | 19.76470588   | 1.98  | 7.423971377  | 0.74  | 0.00   | 0   | 2.72                   | 22.66                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 662.66                    |  |                           |
| H291                           | H              | HARRIS COUNTY MUD #34  | Reallocation of existing supplies                        | 80.23529412   | 8.02  | 6.797853309  | 0.68  | 0.00   | 0   | 8.70                   | 72.53                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 696.53                    |  |                           |
| H292                           | H              | HARRIS COUNTY MUD #46  | Municipal conservation - medium water user group         | 19.92031873   | 1.99  | 7.488299532  | 0.75  | 0.00   | 0   | 2.74                   | 22.84                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 662.84                    |  |                           |
| H293                           | H              | HARRIS COUNTY MUD #46  | WHCRWA Groundwater Reduction Plan participation          | 80.07968127   | 8.01  | 92.51170047  | 9.25  | 0.00   | 0   | 17.26                  | 143.83                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 783.83                    |  |                           |
| H294                           | H              | HARRIS COUNTY MUD #5   | Contract with City of Houston                            | 67.52988048   | 6.75  | 85.74380165  | 8.57  | 0.00   | 0   | 15.33                  | 127.73                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 701.73                    |  |                           |
| H295                           | H              | HARRIS COUNTY MUD #5   | Municipal conservation - medium water user group         | 19.89795918   | 1.99  | 7.438016529  | 0.74  | 0.00   | 0   | 2.73                   | 22.78                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 662.78                    |  |                           |
| H296                           | H              | HARRIS COUNTY MUD #5   | Reallocation of existing supplies                        | 80.10204082   | 8.01  | 6.818181818  | 0.68  | 0.00   | 0   | 8.69                   | 72.43                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 696.43                    |  |                           |
| H297                           | H              | HARRIS COUNTY MUD #50  | Contract with SJRA                                       | 37.83783784   | 3.78  | 59.50413223  | 5.95  | 0.00   | 0   | 9.73                   | 81.12                     | 10  | 5   | 15.00                  | 150         | 5            | 100      | 495.12                    |  |                           |
| H298                           | H              | HARRIS COUNTY MUD #50  | Harris County MUD #50 water treatment plant              | 100   | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 816.67                    |  |                           |
| H299                           | H              | HARRIS COUNTY MUD #50  | Municipal conservation - medium water user group         | 100   | 10.00   | 40.49586777  | 4.05  | 0.00   | 0   | 14.05                  | 117.08                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 687.08                    |  |                           |
| H300                           | H              | HARRIS COUNTY MUD #53  | Contract with NCWA                                       | 56.60138977   | 5.66  | 65.09695291  | 6.51  | 0.00   | 0   | 12.17                  | 101.42                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 675.42                    |  |                           |
| H301                           | H              | HARRIS COUNTY MUD #53  | Expanded use of groundwater                              | 7.751937984   | 0.78  | 6.024930748  | 0.60  | 0.00   | 0   | 1.38                   | 11.48                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 605.48                    |  |                           |
| H302                           | H              | HARRIS COUNTY MUD #53  | Municipal conservation - large water user group          | 17.32394366   | 1.73  | 9.037396122  | 0.90  | 0.00   | 0   | 2.64                   | 21.97                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 751.97                    |  |                           |
| H303                           | H              | HARRIS COUNTY MUD #53  | Reallocation of existing supplies                        | 82.67605634   | 8.27  | 19.87534626  | 1.99  | 0.00   | 0   | 10.26                  | 85.46                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 709.46                    |  |                           |
| H304                           | H              | HARRIS COUNTY MUD #8   | Contract with City of Houston                            | 52  | 5.20  | 61.31221719  | 6.13  | 0.00   | 0   | 11.33                  | 94.43                     | 10  | 5   | 15.00                  | 150         | 5            | 100      | 668.43                    |  |                           |
| H305                           | H              | HARRIS COUNTY MUD #8   | Expanded use of groundwater                              | 6.091370558   | 0.61  | 5.20361991   | 0.52  | 0.00   | 0   | 1.13                   | 9.41                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 603.41                    |  |                           |
| H306                           | H              | HARRIS COUNTY MUD #8   | Municipal conservation - medium water user group         | 30.43478261   | 3.04  | 13.57466063  | 1.36  | 0.00   | 0   | 4.40                   | 36.67                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 726.67                    |  |                           |
| H307                           | H              | HARRIS COUNTY MUD #8   | Reallocation of existing supplies                        | 69.56521739   | 6.96  | 19.90950226  | 1.99  | 0.00   | 0   | 8.95                   | 74.56                     | 10  | 0   | 10.00                  | 100         | 3            | 60       | 678.56                    |  |                           |
| H308                           | H              | HARRIS COUNTY UD #14   | City of Houston Groundwater Reduction Plan participation | 81.71428571   | 8.17  | 93.36158192  | 9.34  | 5.00   | 0   | 22.51                  | 187.56                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 877.56                    |  |                           |
| H309                           | H              | HARRIS COUNTY UD #14   | Municipal conservation - small water user group          | 18.28571429   | 1.83  | 6.638418079  | 0.66  | 5.00   | 0   | 7.49                   | 62.44                     | 10  | 4   | 15.00                  | 150         | 4            | 80       | 792.44                    |  |                           |
| H310                           | H              | HARRIS COUNTY UD #15   | City of Houston Groundwater Reduction Plan participation | 81.25   | 8.13  | 93.42105263  | 9.34  | 5.00   | 0   | 22.47                  | 187.23                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 877.23                    |  |                           |
| H311                           | H              | HARRIS COUNTY UD #15   | Municipal conservation - small water user group          | 18.75   | 1.88  | 6.578947368  | 0.66  | 5.00   | 0   | 7.53                   | 62.77                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 792.77                    |  |                           |
| H312                           | H              | HARRIS COUNTY WCID #1  | Contract with Baytown Area Water Authority               | 55.20231214   | 5.52  | 61.76836862  | 6.18  | 0.00   | 0   | 11.70                  | 97.48                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 651.48                    |  |                           |
| H313                           | H              | HARRIS COUNTY WCID #1  | Municipal conservation - large water user group          | 74.25742574   | 7.43  | 13.82316314  | 1.38  | 0.00   | 0   | 8.81                   | 73.40                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 763.40                    |  |                           |
| H314                           | H              | HARRIS COUNTY WCID #1  | Reallocation of existing supplies                        | 25.74257426   | 2.57  | 24.40846824  | 2.44  | 0.00   | 0   | 5.02                   | 41.79                     | 10  | 5   | 15.00                  | 150         | 1            | 20       | 615.79                    |  |                           |
| H315                           | H              | HARRIS COUNTY WCID #13 | City of Houston Groundwater Reduction Plan participation | 80.08849558   | 8.01  | 92.59259259  | 9.26  | 5.00   | 0   | 22.27                  | 185.57                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 825.57                    |  |                           |
| H316                           | H              | HARRIS COUNTY WCID #13 | Municipal conservation - medium water user group         | 19.91150442   | 1.99  | 7.407407407  | 0.74  | 5.00   | 0   | 7.73                   | 64.43                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 704.43                    |  |                           |
| H317                           | H              | HARRIS COUNTY WCID #21 | Contract with NCWA                                       | 55.94713656   | 5.59  | 65.3418124   | 6.53  | 0.00   | 0   | 12.13                  | 101.07                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 675.07                    |  |                           |
| H318                           | H              | HARRIS COUNTY WCID #21 | Expanded use of groundwater                              | 1.216545012   | 0.12  | 1.430842607  | 0.14  | 0.00   | 0   | 0.26                   | 2.21                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 596.21                    |  |                           |
| H319                           | H              | HARRIS COUNTY WCID #21 | Municipal conservation - large water user group          | 24.86187845   | 2.49  |  |   |  |   |                        |                           |   |   |                        |             |              |          |                           |  |                           |



| Alphabetized unique identifier | Sponsor Region | Sponsor               | Recommended Water Management Strategy Name            | Capital Cost    | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |                           |   |  |   |  |
|--------------------------------|----------------|-----------------------|---|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|----------------------------------|---------------------------|---|--|---|--|
|                                |                |                       |   |                 |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5                                | 5                         | 10  | 5  | 25  | 100  |
|                                |                |                       |   |                 |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Criteria 1 Total Score           | Weighted Criteria 1 Total | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] |
| H350                           | H              | HOUSTON               | Allens Creek Reservoir                                | \$155,926,680   | 0                      | 40,175                 | 38,567                 | 61,447                 | 69,755                 | 69,755                 | N   |  | 8                                       | 10 | 18 | 360 | 3                                | 5                         | 7   | 5  | 20  | 80   |
| H351                           | H              | HOUSTON               | City of Houston bayous permit                         | \$20,956,000    | 0                      | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 8  | 18 | 360 | 3                                | 5                         | 10  | 5  | 23  | 92   |
| H352                           | H              | HOUSTON               | City of Houston distribution expansion                | \$261,040,000   | 0                      | 280,000                | 128,000                | 64,000                 | 48,000                 | 48,000                 | Y   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 2   | 5  | 17  | 68   |
| H353                           | H              | HOUSTON               | City of Houston indirect reuse                        | \$306,052,884   | 0                      | 0                      | 0                      | 12,518                 | 20,450                 | 66,201                 | N   |  | 4                                       | 6  | 10 | 200 | 3                                | 5                         | 4   | 5  | 17  | 68   |
| H354                           | H              | HOUSTON               | City of Houston to BRA contract                       | \$0             | 0                      | 27,498                 | 25,201                 | 57,886                 | 69,755                 | 69,755                 | Y   |  | 8                                       | 8  | 16 | 320 | 3                                | 0                         | 1   | 5  | 9   | 36   |
| H355                           | H              | HOUSTON               | City of Houston to NFBWA contract                     | \$0             | 0                      | 444                    | 17,971                 | 31,161                 | 41,172                 | 50,442                 | Y   |  | 8                                       | 8  | 16 | 320 | 5                                | 0                         | 2   | 5  | 12  | 48   |
| H356                           | H              | HOUSTON               | City of Houston treatment expansion                   | \$2,045,672,161 | 16,000                 | 280,000                | 128,000                | 64,000                 | 48,000                 | 48,000                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 2   | 5  | 17  | 68   |
| H357                           | H              | HOUSTON               | Expanded use of groundwater                           | \$2,421,029     | 0                      | 7,667                  | 14,820                 | 14,952                 | 15,128                 | 15,336                 | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H358                           | H              | HOUSTON               | Luce Bayou transfer                                   | \$253,916,914   | 0                      | 128,259                | 206,276                | 207,629                | 205,171                | 270,742                | Y   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 9   | 5  | 24  | 96   |
| H359                           | H              | HOUSTON               | Municipal conservation - large water user group       | \$0             | 24,667                 | 27,210                 | 29,610                 | 32,083                 | 34,730                 | 37,603                 | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H360                           | H              | HOUSTON               | SIRA to City of Houston contract                      | \$0             | 0                      | 1,356                  | 5,300                  | 3,875                  | 2,428                  | 2,428                  | Y   |  | 6                                       | 6  | 12 | 240 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H361                           | H              | HOUSTON               | TRA to City of Houston contract                       | \$0             | 0                      | 116,738                | 123,524                | 123,524                | 123,524                | 123,524                | N   |  | 6                                       | 6  | 12 | 240 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H362                           | H              | HOUSTON               | Wastewater reuse for industry                         | \$332,051,761   | 0                      | 0                      | 0                      | 0                      | 0                      | 67,200                 | N   |  | 6                                       | 2  | 2  | 40  | 3                                | 5                         | 1   | 5  | 14  | 56   |
| H363                           | H              | HUMBLE                | Contract with City of Houston                         | \$4,504,288     | 0                      | 1,718                  | 2,355                  | 3,196                  | 3,708                  | 3,708                  | Y   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H364                           | H              | HUMBLE                | Municipal conservation - large water user group       | \$0             | 232                    | 258                    | 283                    | 308                    | 334                    | 362                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H365                           | H              | HUMBLE                | Reallocation of existing supplies                     | \$2,942,206     | 820                    | 820                    | 879                    | 450                    | 293                    | 707                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H366                           | H              | HUNTERS CREEK VILLAGE | Contract with City of Houston                         | \$567,874       | 0                      | 0                      | 809                    | 1,068                  | 1,216                  | 1,216                  | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H367                           | H              | HUNTERS CREEK VILLAGE | Expanded use of groundwater                           | \$110,758       | 0                      | 24                     | 47                     | 47                     | 47                     | 47                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H368                           | H              | HUNTERS CREEK VILLAGE | Municipal conservation - medium water user group      | \$0             | 104                    | 111                    | 118                    | 125                    | 132                    | 139                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H369                           | H              | HUNTERS CREEK VILLAGE | Reallocation of existing supplies                     | \$1,928,245     | 955                    | 1,034                  | 302                    | 150                    | 96                     | 210                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H370                           | H              | HUNTSVILLE            | City of Huntsville water treatment plant              | \$61,023,906    | 11,200                 | 11,200                 | 11,200                 | 11,200                 | 11,200                 | 11,200                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H371                           | H              | IOWA COLONY           | Expanded use of groundwater                           | \$91,907        | 0                      | 3                      | 11                     | 20                     | 29                     | 39                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H372                           | H              | IOWA COLONY           | Municipal conservation - small water user group       | \$0             | 7                      | 7                      | 7                      | 7                      | 8                      | 9                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H373                           | H              | IRRIGATION, BRAZORIA  | Brazoria County interruptible supplies for irrigation | \$0             | 98,189                 | 86,759                 | 64,000                 | 64,000                 | 64,000                 | 64,000                 | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H374                           | H              | IRRIGATION, BRAZORIA  | Contract with GCWA                                    | \$0             | 0                      | 13,628                 | 13,628                 | 13,821                 | 15,465                 | 15,465                 | Y   |  | 6                                       | 8  | 14 | 280 | 3                                | 0                         | 1   | 5  | 9   | 36   |
| H375                           | H              | IRRIGATION, BRAZORIA  | Expanded use of groundwater                           | \$3,277,008     | 0                      | 4,748                  | 2,105                  | 1,912                  | 268                    | 268                    | N   |  | 6                                       | 8  | 14 | 280 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H376                           | H              | IRRIGATION, BRAZORIA  | Irrigation conservation                               | \$198,255       | 18,792                 | 18,792                 | 18,792                 | 18,792                 | 18,792                 | 18,792                 | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H377                           | H              | IRRIGATION, CHAMBERS  | Irrigation conservation                               | \$279,330       | 24,018                 | 24,018                 | 24,018                 | 24,018                 | 24,018                 | 24,018                 | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H378                           | H              | IRRIGATION, CHAMBERS  | Reallocation of existing supplies                     | \$0             | 20,376                 | 20,600                 | 20,734                 | 20,857                 | 20,975                 | 21,076                 | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H379                           | H              | IRRIGATION, FORT BEND | Irrigation conservation                               | \$61,711        | 5,197                  | 5,197                  | 5,197                  | 5,197                  | 5,197                  | 5,197                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H380                           | H              | IRRIGATION, GALVESTON | Brazoria County interruptible supplies for irrigation | \$0             | 6,788                  | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H381                           | H              | IRRIGATION, GALVESTON | Contract with GCWA                                    | \$0             | 0                      | 6,788                  | 6,788                  | 6,788                  | 6,788                  | 6,788                  | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H382                           | H              | IRRIGATION, GALVESTON | Irrigation conservation                               | \$29,422        | 2,392                  | 2,392                  | 2,392                  | 2,392                  | 2,392                  | 2,392                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H383                           | H              | IRRIGATION, LIBERTY   | Expanded use of groundwater                           | \$53,837        | 0                      | 12                     | 24                     | 35                     | 47                     | 78                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H384                           | H              | IRRIGATION, LIBERTY   | Irrigation conservation                               | \$188,718       | 20,876                 | 20,876                 | 20,876                 | 20,876                 | 20,876                 | 20,876                 | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H385                           | H              | IRRIGATION, LIBERTY   | Reallocation of existing supplies                     | \$0             | 6,657                  | 6,697                  | 6,732                  | 6,767                  | 6,805                  | 6,833                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H386                           | H              | IRRIGATION, WALLER    | Expanded use of groundwater                           | \$327,148       | 0                      | 474                    | 0                      | 13                     | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H387                           | H              | IRRIGATION, WALLER    | Irrigation conservation                               | \$0             | 0                      | 0                      | 0                      | 0                      | 6,606                  | 6,606                  | N   |  | 2                                       | 4  | 6  | 120 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H388                           | H              | JACINTO CITY          | Contract with City of Houston                         | \$171,541       | 0                      | 0                      | 0                      | 0                      | 25                     | 25                     | Y   |  | 2                                       | 4  | 6  | 120 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H389                           | H              | JACINTO CITY          | Expanded use of groundwater                           | \$51,844        | 0                      | 9                      | 22                     | 22                     | 22                     | 22                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H390                           | H              | JACINTO CITY          | Municipal conservation - large water user group       | \$0             | 0                      | 0                      | 57                     | 92                     | 97                     | 102                    | N   |  | 6                                       | 8  | 14 | 280 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H391                           | H              | JACINTO CITY          | Reallocation of existing supplies                     | \$116,988       | 0                      | 0                      | 0                      | 0                      | 2                      | 83                     | N   |  | 2                                       | 4  | 6  | 120 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H392                           | H              | JAMAICA BEACH         | Expanded use of groundwater                           | \$16,496        | 0                      | 4                      | 7                      | 7                      | 7                      | 7                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H393                           | H              | JERSEY VILLAGE        | Municipal conservation - medium water user group      | \$0             | 0                      | 112                    | 129                    | 147                    | 164                    | 182                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H394                           | H              | JERSEY VILLAGE        | NHCRWA Groundwater Reduction Plan participation       | \$2,809,145     | 0                      | 364                    | 767                    | 1,043                  | 1,315                  | 1,600                  | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H395                           | H              | JEWETT                | Expanded use of groundwater                           | \$127,253       | 0                      | 35                     | 54                     | 53                     | 49                     | 52                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H396                           | H              | JEWETT                | Municipal conservation - small water user group       | \$0             | 0                      | 13                     | 15                     | 15                     | 13                     | 15                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H397                           | H              | KATY                  | Municipal conservation - large water user group       | \$0             | 238                    | 295                    | 354                    | 416                    | 479                    | 550                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H398                           | H              | KATY                  | WHCRWA Groundwater Reduction Plan participation       | \$16,214,279    | 889                    | 2,958                  | 4,112                  | 5,017                  | 5,971                  | 7,008                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H399                           | H              | KEMAH                 | Contract with GCWA                                    | \$523,817       | 0                      | 208                    | 230                    | 237                    | 241                    | 247                    | N   |  | 8                                       | 10 | 18 | 360 | 3                                | 0                         | 1   | 5  | 9   | 36   |
| H400                           | H              | KEMAH                 | Expanded use of groundwater                           | \$0             | 0                      | 4                      | 7                      | 7                      | 7                      | 7                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H401                           | H              | KEMAH                 | Interim strategies - temporary overdraft              | \$402,715       | 171                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H402                           | H              | KEMAH                 | Municipal conservation - small water user group       | \$0             | 15                     | 18                     | 19                     | 20                     | 20                     | 20                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H403                           | H              | KENDLETON             | Expanded use of groundwater                           | \$914,183       | 0                      | 43                     | 100                    | 173                    | 267                    | 388                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H404                           | H              | KENDLETON             | Municipal conservation - small water user group       | \$0             | 0                      | 11                     | 14                     | 18                     | 23                     | 30                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H405                           | H              | KENEFICK              | Expanded use of groundwater                           | \$209,734       | 0                      | 18                     | 34                     | 50                     | 68                     | 89                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 1   | 5  | 16  | 64   |
| H406                           | H              | KENEFICK              | Municipal conservation - small water user group       | \$0             | 0                      | 6                      | 7                      | 8                      | 9                      | 10                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H407                           | H              | LA PORTE              | Expanded use of groundwater                           | \$176,738       | 0                      | 35                     | 75                     | 75                     | 75                     | 75                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H408                           | H              | LAKE JACKSON          | Contract with Brazosport Water Authority              | \$2,972,940     | 744                    | 708                    | 830                    | 1,049                  | 1,349                  | 1,703</                |   |  |   |    |    |     |                                  |                           |   |  |   |  |

| Alphabetized unique identifier | Sponsor Region | Sponsor               | Recommended Water Management Strategy Name            | Criteria 3 - Project Viability  |   |  |   |  |   |                        |                           | Criteria 4 - Project Sustainability   |   |                        |                           | Criteria 5 - Project Cost Effectiveness  |                           | FINAL SCORE | Grouped With | Comments  |
|--------------------------------|----------------|-----------------------|---|---|---|--|---|--|---|------------------------|---------------------------|---|---|------------------------|---------------------------|--|---------------------------|-------------|--------------|---|
|                                |                |                       |   | 100   | 10  | 100  | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       |             |              |   |
|                                |                |                       |   | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |             |              |   |
| H350                           | H              | HOUSTON               | Allens Creek Reservoir                                | 14.24762614   | 1.42  | 11.921639  | 1.19  | 0.00   | 5   | 7.62                   | 63.47                     | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 693.47      | H39          | The lines reflect ownership shares of a single reservoir project. |
| H351                           | H              | HOUSTON               | City of Houston bayous permit                         | 0   | 0.00  | 0  | 0.00  | 0.00   | 0   | 0.00                   | 0.00                      | 10  | 3   | 13.00                  | 130                       | 0  | 0                         | 582.00      |              |   |
| H352                           | H              | HOUSTON               | City of Houston distribution expansion                | 100   | 10.00   | 100  | 10.00   | 0.00   | 5   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 886.33      |              |   |
| H353                           | H              | HOUSTON               | City of Houston indirect reuse                        | 95.28811753   | 9.53  | 100  | 10.00   | 0.00   | 0   | 19.53                  | 162.74                    | 10  | 5   | 15.00                  | 150                       | 0  | 0                         | 580.74      |              |   |
| H354                           | H              | HOUSTON               | City of Houston to BRA contract                       | 9.973313474   | 1.00  | 8.345147301  | 0.83  | 0.00   | 5   | 6.83                   | 56.93                     | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 662.93      | H48          | Both entries reflect the same contractual WMS.                    |
| H355                           | H              | HOUSTON               | City of Houston to NFBWA contract                     | 9.36116382  | 0.94  | 79.62808026  | 7.96  | 0.00   | 5   | 13.90                  | 115.82                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 733.82      | H59          | Both entries reflect the same contractual WMS.                    |
| H356                           | H              | HOUSTON               | City of Houston treatment expansion                   | 100   | 10.00   | 100  | 10.00   | 0.00   | 5   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 1  | 20                        | 846.33      |              |   |
| H357                           | H              | HOUSTON               | Expanded use of groundwater                           | 99.83072917   | 9.98  | 30.24673096  | 3.02  | 0.00   | 0   | 13.01                  | 108.40                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 762.40      |              |   |
| H358                           | H              | HOUSTON               | Luce Bayou transfer                                   | 98.07970246   | 9.81  | 78.18962139  | 7.82  | 0.00   | 5   | 22.63                  | 188.56                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 834.56      |              |   |
| H359                           | H              | HOUSTON               | Municipal conservation - large water user group       | 100   | 10.00   | 74.1632645   | 7.42  | 0.00   | 0   | 17.42                  | 145.14                    | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 875.14      |              |   |
| H360                           | H              | HOUSTON               | SIRA to City of Houston contract                      | 1.549413257   | 0.15  | 2.336727427  | 0.23  | 0.00   | 0   | 0.39                   | 3.24                      | 10  | 0   | 10.00                  | 100                       | 5  | 100                       | 487.24      |              |   |
| H361                           | H              | HOUSTON               | TRA to City of Houston contract                       | 30.00753157   | 3.00  | 15.88581923  | 1.59  | 0.00   | 5   | 9.59                   | 79.91                     | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 613.91      |              |   |
| H362                           | H              | HOUSTON               | Wastewater reuse for industry                         | 100   | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150                       | 0  | 0                         | 412.67      |              |   |
| H363                           | H              | HUMBLE                | Contract with City of Houston                         | 61.44492132   | 6.14  | 77.63819095  | 7.76  | 0.00   | 0   | 13.91                  | 115.90                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 769.90      |              |   |
| H364                           | H              | HUMBLE                | Municipal conservation - large water user group       | 22.05323194   | 2.21  | 7.579564489  | 0.76  | 0.00   | 0   | 2.96                   | 24.69                     | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 754.69      |              |   |
| H365                           | H              | HUMBLE                | Reallocation of existing supplies                     | 77.94676806   | 7.79  | 14.80318258  | 1.48  | 0.00   | 0   | 9.27                   | 77.29                     | 10  | 0   | 10.00                  | 100                       | 4  | 80                        | 701.29      |              |   |
| H366                           | H              | HUNTERS CREEK VILLAGE | Contract with City of Houston                         | 63.40125392   | 6.34  | 75.43424318  | 7.54  | 0.00   | 0   | 13.88                  | 115.70                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 689.70      |              |   |
| H367                           | H              | HUNTERS CREEK VILLAGE | Expanded use of groundwater                           | 2.053036784   | 0.21  | 2.915632754  | 0.29  | 0.00   | 0   | 0.50                   | 4.14                      | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 598.14      |              |   |
| H368                           | H              | HUNTERS CREEK VILLAGE | Municipal conservation - medium water user group      | 9.820585458   | 0.98  | 8.622828784  | 0.86  | 0.00   | 0   | 1.84                   | 15.37                     | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 705.37      |              |   |
| H369                           | H              | HUNTERS CREEK VILLAGE | Reallocation of existing supplies                     | 90.17941454   | 9.02  | 13.02729529  | 1.30  | 0.00   | 0   | 10.32                  | 86.01                     | 10  | 0   | 10.00                  | 100                       | 4  | 80                        | 710.01      |              |   |
| H370                           | H              | HUNTSVILLE            | City of Huntsville water treatment plant              | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 3   | 13.00                  | 130                       | 0  | 0                         | 838.33      |              |   |
| H371                           | H              | IOWA COLONY           | Expanded use of groundwater                           | 30  | 3.00  | 81.25  | 8.13  | 5.00   | 0   | 16.13                  | 134.38                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 728.38      |              |   |
| H372                           | H              | IOWA COLONY           | Municipal conservation - small water user group       | 70  | 7.00  | 18.75  | 1.88  | 5.00   | 0   | 13.88                  | 115.63                    | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 805.63      |              |   |
| H373                           | H              | IRRIGATION, BRAZORIA  | Brazoria County interruptible supplies for irrigation | 95.06423848   | 9.51  | 75.44411831  | 7.54  | 0.00   | 0   | 17.05                  | 142.09                    | 10  | 0   | 10.00                  | 100                       | 5  | 100                       | 766.09      |              |   |
| H374                           | H              | IRRIGATION, BRAZORIA  | Contract with GCWA                                    | 15.57948648   | 1.56  | 18.2303639   | 1.82  | 0.00   | 0   | 3.38                   | 28.17                     | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 594.17      |              |   |
| H375                           | H              | IRRIGATION, BRAZORIA  | Expanded use of groundwater                           | 5.427898576   | 0.54  | 0.315922245  | 0.03  | 0.00   | 0   | 0.57                   | 4.79                      | 10  | 0   | 10.00                  | 100                       | 5  | 100                       | 548.79      |              |   |
| H376                           | H              | IRRIGATION, BRAZORIA  | Irrigation conservation                               | 18.19396439   | 1.82  | 22.15227924  | 2.22  | 0.00   | 0   | 4.03                   | 33.62                     | 10  | 3   | 13.00                  | 130                       | 5  | 100                       | 727.62      |              |   |
| H377                           | H              | IRRIGATION, CHAMBERS  | Irrigation conservation                               | 88.78128119   | 8.88  | 86.54199546  | 8.65  | 5.00   | 0   | 22.53                  | 187.77                    | 10  | 3   | 13.00                  | 130                       | 5  | 100                       | 881.77      |              |   |
| H378                           | H              | IRRIGATION, CHAMBERS  | Reallocation of existing supplies                     | 75.31881862   | 7.53  | 75.94133967  | 7.59  | 5.00   | 0   | 20.13                  | 167.72                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 861.72      |              |   |
| H379                           | H              | IRRIGATION, FORT BEND | Irrigation conservation                               | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 3   | 13.00                  | 130                       | 5  | 100                       | 902.33      |              |   |
| H380                           | H              | IRRIGATION, GALVESTON | Brazoria County interruptible supplies for irrigation | 73.94335512   | 7.39  | 0  | 0.00  | 0.00   | 0   | 7.39                   | 61.62                     | 5   | 0   | 5.00                   | 50                        | 5  | 100                       | 635.62      |              |   |
| H381                           | H              | IRRIGATION, GALVESTON | Contract with GCWA                                    | 73.94335512   | 7.39  | 73.94335512  | 7.39  | 0.00   | 0   | 14.79                  | 123.24                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 777.24      |              |   |
| H382                           | H              | IRRIGATION, GALVESTON | Irrigation conservation                               | 26.05664488   | 2.61  | 26.05664488  | 2.61  | 0.00   | 0   | 5.21                   | 43.43                     | 10  | 3   | 13.00                  | 130                       | 5  | 100                       | 737.43      |              |   |
| H383                           | H              | IRRIGATION, LIBERTY   | Expanded use of groundwater                           | 0.096432015   | 0.01  | 0.397148676  | 0.04  | 0.00   | 0   | 0.05                   | 0.41                      | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 674.41      |              |   |
| H384                           | H              | IRRIGATION, LIBERTY   | Irrigation conservation                               | 100   | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 3   | 13.00                  | 130                       | 5  | 100                       | 860.67      |              |   |
| H385                           | H              | IRRIGATION, LIBERTY   | Reallocation of existing supplies                     | 56.19618437   | 5.62  | 34.79124236  | 3.48  | 0.00   | 0   | 9.10                   | 75.82                     | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 769.82      |              |   |
| H386                           | H              | IRRIGATION, WALLER    | Expanded use of groundwater                           | 100   | 10.00   | 0  | 0.00  | 5.00   | 0   | 15.00                  | 125.00                    | 5   | 0   | 5.00                   | 50                        | 5  | 100                       | 679.00      |              |   |
| H387                           | H              | IRRIGATION, WALLER    | Irrigation conservation                               | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 642.33      |              |   |
| H388                           | H              | JACINTO CITY          | Contract with City of Houston                         | 17.12328767   | 1.71  | 10.77586207  | 1.08  | 0.00   | 0   | 2.79                   | 23.25                     | 10  | 5   | 15.00                  | 150                       | 1  | 20                        | 357.25      |              |   |
| H389                           | H              | JACINTO CITY          | Expanded use of groundwater                           | 100   | 10.00   | 9.482758621  | 0.95  | 0.00   | 0   | 10.95                  | 91.24                     | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 685.24      |              |   |
| H390                           | H              | JACINTO CITY          | Municipal conservation - large water user group       | 100   | 10.00   | 43.96551724  | 4.40  | 0.00   | 0   | 14.40                  | 119.97                    | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 729.97      |              |   |
| H391                           | H              | JACINTO CITY          | Reallocation of existing supplies                     | 1.369863014   | 0.14  | 35.77586207  | 3.58  | 0.00   | 0   | 3.71                   | 30.95                     | 10  | 5   | 15.00                  | 150                       | 1  | 20                        | 364.95      |              |   |
| H392                           | H              | JAMAICA BEACH         | Expanded use of groundwater                           | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 802.33      |              |   |
| H393                           | H              | JERSEY VILLAGE        | Municipal conservation - medium water user group      | 23.52941176   | 2.35  | 10.21324355  | 1.02  | 0.00   | 0   | 3.37                   | 28.12                     | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 678.12      |              |   |
| H394                           | H              | JERSEY VILLAGE        | NHCRWA Groundwater Reduction Plan participation       | 76.47058824   | 7.65  | 89.78675645  | 8.98  | 0.00   | 0   | 16.63                  | 138.55                    | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 828.55      |              |   |
| H395                           | H              | JEWETT                | Expanded use of groundwater                           | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 0   | 10.00                  | 100                       | 2  | 40                        | 752.33      |              |   |
| H396                           | H              | JEWETT                | Municipal conservation - small water user group       | 37.14285714   | 3.71  | 28.84615385  | 2.88  | 5.00   | 0   | 11.60                  | 96.66                     | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 786.66      |              |   |
| H397                           | H              | KATY                  | Municipal conservation - large water user group       | 21.11801242   | 2.11  | 7.270757423  | 0.73  | 0.00   | 0   | 2.84                   | 23.66                     | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 753.66      |              |   |
| H398                           | H              | KATY                  | WHCRWA Groundwater Reduction Plan participation       | 78.88198758   | 7.89  | 92.72294258  | 9.27  | 0.00   | 0   | 17.16                  | 143.00                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 833.00      |              |   |
| H399                           | H              | KEMAH                 | Contract with GCWA                                    | 90.43478261   | 9.04  | 90.1459854   | 9.01  | 0.00   | 0   | 18.06                  | 150.48                    | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 776.48      |              |   |
| H400                           | H              | KEMAH                 | Expanded use of groundwater                           | 1.739130435   | 0.17  | 2.554744526  | 0.26  | 0.00   | 0   | 0.43                   | 3.58                      | 10  | 5   | 15.00                  | 150                       | 5  | 100                       | 657.58      |              |   |
| H401                           | H              | KEMAH                 | Interim strategies - temporary overdraft              | 91.93548387   | 9.19  | 0  | 0.00  | 0.00   | 0   | 9.19                   | 76.61                     | 5   | 0   | 5.00                   | 50                        | 2  | 40                        | 590.61      |              |   |
| H402                           | H              | KEMAH                 | Municipal conservation - small water user group       | 8.064516129   | 0.81  | 7.299270073  | 0.73  | 0.00   | 0   | 1.54                   | 12.80                     | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 742.80      |              |   |
| H403                           | H              | KENDLETON             | Expanded use of groundwater                           | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 802.33      |              |   |
| H404                           | H              | KENDLETON             | Municipal conservation - small water user group       | 25.58139535   | 2.56  | 7.731958763  | 0.77  | 5.00   | 0   | 8.33                   | 69.43                     | 10  | 5   | 15.00                  | 150                       | 4  | 80                        | 759.43      |              |   |
| H405                           | H              | KENEFICK              | Expanded use of groundwater                           | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150                       | 2  | 40                        | 822.33      |              |   |
| H406                           | H              | KENEFICK              | Municipal conservation - small water user group       | 33.33333333   | 3.33  | 11.23595506  |   |  |   |                        |                           |   |   |                        |                           |  |                           |             |              |   |



| Alphabetized unique identifier | Sponsor Region | Sponsor                    | Recommended Water Management Strategy Name                                      | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project   |  |   |  | Criteria 2 - Project Feasibility |                           |   |    |    |    |     |     |
|--------------------------------|----------------|----------------------------|---|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|--|---|--|----------------------------------|---------------------------|---|----|----|----|-----|-----|
|                                |                |                            |   |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->  |  |   |  | Criteria 1 Total Score           | Weighted Criteria 1 Total | 5 | 5  | 10 | 5  | 25  | 100 |
|                                |                |                            |   |               |                        |                        |                        |                        |                        |                        |   |  | 10  | 10   | 20  | 400  |                                  |                           |   |    |    |    |     |     |
|                                |                |                            |   |               |                        |                        |                        |                        |                        |                        |   |  | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] | Criteria 2 Total Score           | Weighted Criteria 2 Total |   |    |    |    |     |     |
| H437                           | H              | MANUFACTURING, BRAZORIA    | Contract with GCWA  | \$94,758,507  | 0                      | 0                      | 39,500                 | 39,500                 | 39,500                 | 39,500                 | Y   |  |   | 6  | 8   | 14   | 280                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H438                           | H              | MANUFACTURING, BRAZORIA    | Expanded use of groundwater   | \$8,782,696   | 0                      | 397                    | 1,821                  | 2,880                  | 3,364                  | 3,812                  | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H439                           | H              | MANUFACTURING, BRAZORIA    | Interim strategies - temporary overdraft  | \$41,388,791  | 24,916                 | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 0                         | 0 | 1  | 5  | 6  | 24  |     |
| H440                           | H              | MANUFACTURING, BRAZORIA    | Reallocation of existing supplies   | \$146,209,754 | 13,694                 | 13,694                 | 13,694                 | 13,694                 | 13,694                 | 13,694                 | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H441                           | H              | MANUFACTURING, CHAMBERS    | Contract with TRA   | \$104,032,121 | 8,264                  | 9,230                  | 10,252                 | 11,284                 | 12,240                 | 13,445                 | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H442                           | H              | MANUFACTURING, CHAMBERS    | Expanded use of groundwater   | \$463,884     | 0                      | 191                    | 197                    | 189                    | 154                    | 139                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H443                           | H              | MANUFACTURING, FORT BEND   | Contract with BRA   | \$20,181,897  | 0                      | 623                    | 1,698                  | 1,799                  | 1,867                  | 1,719                  | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H444                           | H              | MANUFACTURING, FORT BEND   | Contract with Fort Bend County WCID #1  | \$1,815,739   | 0                      | 148                    | 824                    | 940                    | 1,016                  | 1,016                  | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H445                           | H              | MANUFACTURING, FORT BEND   | Industrial conservation   | \$0           | 0                      | 558                    | 558                    | 558                    | 558                    | 558                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H446                           | H              | MANUFACTURING, GALVESTON   | Expanded use of groundwater   | \$1,420,055   | 0                      | 232                    | 604                    | 604                    | 604                    | 604                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H447                           | H              | MANUFACTURING, HARRIS      | City of Houston indirect reuse  | \$44,811,089  | 0                      | 0                      | 0                      | 14,250                 | 16,080                 | 16,080                 | N   |  |   | 4  | 6   | 10   | 200                              | 3                         | 0 | 4  | 5  | 12 | 48  |     |
| H448                           | H              | MANUFACTURING, HARRIS      | Contract with City of Houston   | \$91,710,759  | 0                      | 8,611                  | 12,358                 | 9,181                  | 9,181                  | 9,181                  | Y   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H449                           | H              | MANUFACTURING, HARRIS      | Contract with SJRA  | \$230,022,461 | 23,008                 | 27,754                 | 31,791                 | 35,763                 | 38,736                 | 37,244                 | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H450                           | H              | MANUFACTURING, HARRIS      | Expanded use of groundwater   | \$18,771,985  | 0                      | 4,740                  | 8,769                  | 8,769                  | 8,769                  | 8,769                  | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H451                           | H              | MANUFACTURING, HARRIS      | Reallocation of existing supplies   | \$42,221,489  | 4,487                  | 251                    | 251                    | 2,029                  | 1,394                  | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H452                           | H              | MANUFACTURING, LEON        | Expanded use of groundwater   | \$1,411,137   | 0                      | 128                    | 253                    | 379                    | 493                    | 599                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H453                           | H              | MANUFACTURING, LIBERTY     | Expanded use of groundwater   | \$808,253     | 0                      | 72                     | 144                    | 218                    | 285                    | 343                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H454                           | H              | MANUFACTURING, MADISON     | Expanded use of groundwater   | \$325,201     | 0                      | 29                     | 56                     | 83                     | 107                    | 138                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H455                           | H              | MANUFACTURING, MONTGOMERY  | Interim strategies - temporary overdraft  | \$1,099,885   | 469                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 0                         | 0 | 1  | 5  | 6  | 24  |     |
| H456                           | H              | MANUFACTURING, MONTGOMERY  | SJRA Water Resources Assessment Plan participation                              | \$4,777,069   | 0                      | 988                    | 1,384                  | 1,756                  | 2,129                  | 2,504                  | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H457                           | H              | MANUFACTURING, SAN JACINTO | Expanded use of groundwater   | \$47,131      | 0                      | 4                      | 8                      | 12                     | 15                     | 20                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H458                           | H              | MANUFACTURING, WALKER      | Expanded use of groundwater   | \$6,024,477   | 0                      | 719                    | 1,500                  | 1,777                  | 2,154                  | 2,571                  | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H459                           | H              | MANUFACTURING, WALLER      | Expanded use of groundwater   | \$129,613     | 0                      | 12                     | 23                     | 34                     | 44                     | 55                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H460                           | H              | MANVEL                     | Contract with GCWA  | \$559,334     | 0                      | 49                     | 44                     | 45                     | 48                     | 51                     | Y   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H461                           | H              | MANVEL                     | Expanded use of groundwater   | \$58,914      | 0                      | 23                     | 25                     | 22                     | 18                     | 15                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H462                           | H              | MANVEL                     | Municipal conservation - large water user group                                 | \$0           | 0                      | 30                     | 30                     | 29                     | 28                     | 28                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H463                           | H              | MASON CREEK UD             | City of Houston Groundwater Reduction Plan participation                        | \$3,946,995   | 566                    | 1,487                  | 1,696                  | 1,682                  | 1,674                  | 1,674                  | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H464                           | H              | MASON CREEK UD             | Municipal conservation - medium water user group                                | \$0           | 140                    | 138                    | 137                    | 135                    | 135                    | 135                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H465                           | H              | MEADOWS                    | Contract with Fort Bend County WCID #2  | \$2,049,847   | 0                      | 491                    | 1,092                  | 1,092                  | 1,092                  | 1,092                  | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H466                           | H              | MEADOWS                    | Municipal conservation - medium water user group                                | \$0           | 123                    | 122                    | 119                    | 119                    | 119                    | 119                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H467                           | H              | MERCY WSC                  | Expanded use of groundwater   | \$570,266     | 0                      | 79                     | 142                    | 187                    | 217                    | 242                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 16 | 64  |     |
| H468                           | H              | MERCY WSC                  | Municipal conservation - small water user group                                 | \$0           | 0                      | 27                     | 31                     | 33                     | 35                     | 36                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H469                           | H              | MINING, AUSTIN             | Expanded use of groundwater   | \$37,706      | 0                      | 5                      | 8                      | 11                     | 14                     | 16                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H470                           | H              | MINING, BRAZORIA           | Contract with BRA   | \$15,168,210  | 0                      | 623                    | 785                    | 962                    | 1,173                  | 1,387                  | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H471                           | H              | MINING, BRAZORIA           | Expanded use of groundwater   | \$756,326     | 0                      | 168                    | 241                    | 296                    | 317                    | 321                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H472                           | H              | MINING, CHAMBERS           | Contract with TRA   | \$145,447,351 | 5,559                  | 7,853                  | 9,720                  | 11,604                 | 13,492                 | 15,227                 | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H473                           | H              | MINING, CHAMBERS           | Expanded use of groundwater   | \$1,602,345   | 0                      | 301                    | 338                    | 416                    | 514                    | 592                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H474                           | H              | MINING, CHAMBERS           | Reallocation of existing supplies   | \$1,858,825   | 149                    | 664                    | 655                    | 652                    | 652                    | 649                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H475                           | H              | MINING, FORT BEND          | Contract with BRA   | \$6,288,364   | 0                      | 266                    | 548                    | 557                    | 567                    | 574                    | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H476                           | H              | MINING, FORT BEND          | Contract with GCWA  | \$7,991,054   | 0                      | 86                     | 703                    | 717                    | 729                    | 739                    | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H477                           | H              | MINING, FORT BEND          | Expanded use of groundwater   | \$21,209      | 0                      | 4                      | 4                      | 6                      | 7                      | 9                      | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H478                           | H              | MINING, GALVESTON          | Contract with GCWA  | \$372,927     | 0                      | 21                     | 24                     | 28                     | 31                     | 34                     | N   |  |   | 8  | 10  | 18   | 360                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H479                           | H              | MINING, GALVESTON          | Contract with LNVA  | \$405,835     | 16                     | 23                     | 26                     | 29                     | 33                     | 37                     | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H480                           | H              | MINING, GALVESTON          | Expanded use of groundwater   | \$2,357       | 0                      | 1                      | 2                      | 2                      | 2                      | 2                      | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H481                           | H              | MINING, GALVESTON          | Interim strategies - temporary overdraft  | \$35,348      | 15                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 0                         | 0 | 1  | 5  | 6  | 24  |     |
| H482                           | H              | MINING, HARRIS             | Contract with City of Houston   | \$3,322,367   | 0                      | 0                      | 266                    | 407                    | 515                    | 515                    | Y   |  |   | 6  | 8   | 14   | 280                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H483                           | H              | MINING, HARRIS             | Expanded use of groundwater   | \$58,914      | 0                      | 16                     | 25                     | 25                     | 25                     | 25                     | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H484                           | H              | MINING, HARRIS             | Reallocation of existing supplies   | \$3,704,430   | 143                    | 279                    | 99                     | 57                     | 41                     | 126                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H485                           | H              | MINING, LIBERTY            | Expanded use of groundwater   | \$709,291     | 0                      | 67                     | 124                    | 178                    | 237                    | 300                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H486                           | H              | MINING, MONTGOMERY         | Interim strategies - temporary overdraft  | \$259,154     | 110                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 0                         | 0 | 1  | 5  | 6  | 24  |     |
| H487                           | H              | MINING, MONTGOMERY         | SJRA Water Resources Assessment Plan participation                              | \$742,228     | 0                      | 216                    | 279                    | 331                    | 382                    | 425                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H488                           | H              | MINING, POLK               | Expanded use of groundwater   | \$14,141      | 0                      | 2                      | 3                      | 4                      | 5                      | 6                      | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H489                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan                                | \$24,003,201  | 0                      | 395                    | 4,644                  | 8,362                  | 8,362                  | 12,775                 | Y   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H490                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan - aquifer storage and recovery | \$58,967,437  | 0                      | 4,147                  | 4,147                  | 4,147                  | 4,147                  | 4,147                  | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H491                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan - reuse                        | \$9,100,352   | 0                      | 640                    | 640                    | 640                    | 640                    | 640                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H492                           | H              | MISSOURI CITY              | Contract with City of Missouri City   | \$0           | 0                      | 395                    | 4,644                  | 8,362                  | 8,362                  | 12,775                 | Y   |  |   | 8  | 10  | 18   | 360                              | 3                         | 5 | 1  | 5  | 14 | 56  |     |
| H493                           | H              | MISSOURI CITY              | GCWA to City of Missouri City contract  | \$0           | 0                      | 713                    | 6,330                  | 10,661                 | 10,911                 | 15,435                 | Y   |  |   | 8  | 8   | 16   | 320                              | 3                         | 0 | 1  | 5  | 9  | 36  |     |
| H494                           | H              | MISSOURI CITY              | Municipal conservation - large water user group                                 | \$0           | 83                     | 1,243                  | 1,481                  | 1,727                  | 1,914                  | 2,312                  | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H495                           | H              | MONT BELVIEU               | Contract with CLCND   | \$19,160,183  | 0                      | 945                    | 1,159                  | 1,351                  | 1,552                  | 1,762                  | Y   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H496                           | H              | MONT BELVIEU               | Expanded use of groundwater   | \$0           | 0                      | 52                     | 94                     | 125                    | 155                    | 183                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 5 | 1  | 5  | 16 | 64  |     |
| H497                           | H              | MONT BELVIEU               | Interim strategies - temporary overdraft  | \$1,208,870   | 516                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 0                         | 0 | 1  | 5  | 6  | 24  |     |
| H498                           | H              | MONT BELVIEU               | Municipal conservation - small water user group                                 | \$0           | 54                     | 71                     | 86                     | 99                     | 113                    | 126                    | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 5 | 10 | 5  | 25 | 100 |     |
| H499                           | H              | MONT BELVIEU               | Reallocation of existing supplies   | \$477,951     | 203                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10   | 10  | 20   | 400                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H500                           | H              | MONTGOMERY                 | Contract with SJRA  | \$1,892,736   | 0                      | 0                      | 0                      | 0                      | 835                    | 1,467                  | Y   |  |   | 2  | 4   | 6  | 120                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |
| H501                           | H              | MONTGOMERY                 | Expanded use of groundwater   | \$1,682,732   | 0                      | 396                    | 513                    | 583                    | 596                    | 587                    | N   |  |   | 8  | 10  | 18   | 360                              | 5                         | 0 | 1  | 5  | 11 | 44  |     |

| Alphabetized unique identifier | Sponsor Region | Sponsor                    | Recommended Water Management Strategy Name                                      | Criteria 3 - Project Viability   |   |   |   |  | Criteria 4 - Project Sustainability   |                        |                           |   | Criteria 5 - Project Cost Effectiveness   |                        | FINAL SCORE | Grouped With | Comments |                           |  |  |
|--------------------------------|----------------|----------------------------|---|--|---|---|---|--|---|------------------------|---------------------------|---|---|------------------------|-------------|--------------|----------|---------------------------|--|--|
|                                |                |                            |   | 100  | 10  | 100   | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  |             |              |          | 150                       | 5  | 100  |
|                                |                |                            |   | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score |             |              |          | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total                                    |
| H437                           | H              | MANUFACTURING, BRAZOR      | Contract with GCWA  | 37.48268205  | 3.75  | 22.45696223   | 2.25  | 0.00   | 0   | 5.99                   | 49.95                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 595.95                    |  |  |
| H438                           | H              | MANUFACTURING, BRAZOR      | Expanded use of groundwater   | 0.485721976  | 0.05  | 2.167238988   | 0.22  | 0.00   | 0   | 0.27                   | 2.21                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 596.21                    |  |  |
| H439                           | H              | MANUFACTURING, BRAZOR      | Interim strategies - temporary overdraft  | 63.99219232  | 6.40  | 0   | 0.00  | 0.00   | 0   | 6.40                   | 53.33                     | 5   | 0   | 5.00                   | 50          | 4            | 80       | 607.33                    |  |  |
| H440                           | H              | MANUFACTURING, BRAZOR      | Reallocation of existing supplies   | 35.17053626  | 3.52  | 7.785459259   | 0.78  | 0.00   | 0   | 4.30                   | 35.80                     | 10  | 3   | 13.00                  | 130         | 4            | 0        | 609.80                    |  |  |
| H441                           | H              | MANUFACTURING, CHAMBERS    | Contract with TRA   | 100  | 10.00   | 98.97673734   | 9.90  | 0.00   | 0   | 19.90                  | 165.81                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 759.81                    |  |  |
| H442                           | H              | MANUFACTURING, CHAMBERS    | Expanded use of groundwater   | 2.027385628  | 0.20  | 1.023262662   | 0.10  | 0.00   | 0   | 0.31                   | 2.54                      | 10  | 0   | 10.00                  | 100         | 2            | 40       | 566.54                    |  |  |
| H443                           | H              | MANUFACTURING, FORT BEND   | Contract with BRA   | 80.80415045  | 8.08  | 56.7514031  | 5.68  | 0.00   | 0   | 13.76                  | 114.63                    | 10  | 0   | 10.00                  | 100         | 0            | 0        | 610.63                    |  |  |
| H444                           | H              | MANUFACTURING, FORT BEND   | Contract with Fort Bend County WCID #1  | 19.19584955  | 1.92  | 33.54242324   | 3.35  | 0.00   | 0   | 5.27                   | 43.95                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 677.95                    |  |  |
| H445                           | H              | MANUFACTURING, FORT BEND   | Industrial conservation   | 72.37354086  | 7.24  | 18.42192143   | 1.84  | 0.00   | 0   | 9.08                   | 75.66                     | 10  | 5   | 15.00                  | 150         | 5            | 100      | 749.66                    |  |  |
| H446                           | H              | MANUFACTURING, GALVESTON   | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H447                           | H              | MANUFACTURING, HARRIS      | City of Houston indirect reuse  | 26.42951203  | 2.64  | 28.32681535   | 2.83  | 0.00   | 0   | 5.48                   | 45.63                     | 10  | 5   | 15.00                  | 150         | 1            | 20       | 463.63                    |  |  |
| H448                           | H              | MANUFACTURING, HARRIS      | Contract with City of Houston   | 22.88333776  | 2.29  | 16.17341366   | 1.62  | 0.00   | 0   | 3.91                   | 32.55                     | 10  | 0   | 10.00                  | 100         | 1            | 20       | 556.55                    |  |  |
| H449                           | H              | MANUFACTURING, HARRIS      | Contract with SJRA  | 83.68066921  | 8.37  | 65.60969594   | 6.56  | 0.00   | 0   | 14.93                  | 124.41                    | 10  | 0   | 10.00                  | 100         | 0            | 0        | 668.41                    |  |  |
| H450                           | H              | MANUFACTURING, HARRIS      | Expanded use of groundwater   | 12.59633271  | 1.26  | 15.4476271  | 1.54  | 0.00   | 0   | 2.80                   | 23.37                     | 10  | 5   | 15.00                  | 150         | 2            | 40       | 617.37                    |  |  |
| H451                           | H              | MANUFACTURING, HARRIS      | Reallocation of existing supplies   | 16.31933079  | 1.63  | 0   | 0.00  | 0.00   | 0   | 1.63                   | 13.60                     | 10  | 0   | 10.00                  | 100         | 0            | 0        | 557.60                    |  |  |
| H452                           | H              | MANUFACTURING, LEON        | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H453                           | H              | MANUFACTURING, LIBERTY     | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 822.33                    |  |  |
| H454                           | H              | MANUFACTURING, MADISON     | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H455                           | H              | MANUFACTURING, MONTGOMERY  | Interim strategies - temporary overdraft  | 100  | 10.00   | 0   | 0.00  | 0.00   | 0   | 10.00                  | 83.33                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 597.33                    |  |  |
| H456                           | H              | MANUFACTURING, MONTGOMERY  | SJRA Water Resources Assessment Plan participation                              | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 896.67                    |  |  |
| H457                           | H              | MANUFACTURING, SAN JACINTO | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H458                           | H              | MANUFACTURING, WALKER      | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H459                           | H              | MANUFACTURING, WALLER      | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H460                           | H              | MANVEL                     | Contract with GCWA  | 48.03921569  | 4.80  | 54.25531915   | 5.43  | 0.00   | 0   | 10.23                  | 85.25                     | 10  | 5   | 15.00                  | 150         | 0            | 0        | 639.25                    |  |  |
| H461                           | H              | MANVEL                     | Expanded use of groundwater   | 22.54901961  | 2.25  | 15.95744681   | 1.60  | 0.00   | 0   | 3.85                   | 32.09                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 576.09                    |  |  |
| H462                           | H              | MANVEL                     | Municipal conservation - large water user group                                 | 29.41176471  | 2.94  | 29.78723404   | 2.98  | 0.00   | 0   | 5.92                   | 49.33                     | 10  | 0   | 10.00                  | 100         | 4            | 80       | 689.33                    |  |  |
| H463                           | H              | MASON CREEK UD             | City of Houston Groundwater Reduction Plan participation                        | 80.16997167  | 8.02  | 92.53731343   | 9.25  | 5.00   | 0   | 22.27                  | 185.59                    | 10  | 0   | 10.00                  | 100         | 2            | 40       | 825.59                    |  |  |
| H464                           | H              | MASON CREEK UD             | Municipal conservation - medium water user group                                | 19.83002833  | 1.98  | 7.462686563   | 0.75  | 5.00   | 0   | 7.73                   | 64.41                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 704.41                    |  |  |
| H465                           | H              | MEADOWS                    | Contract with Fort Bend County WCID #2  | 80.09787928  | 8.01  | 91.53394803   | 9.15  | 0.00   | 0   | 17.16                  | 143.03                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 769.03                    |  |  |
| H466                           | H              | MEADOWS                    | Municipal conservation - medium water user group                                | 100  | 10.00   | 9.974853311   | 1.00  | 0.00   | 0   | 11.00                  | 91.65                     | 10  | 0   | 10.00                  | 100         | 2            | 40       | 731.65                    |  |  |
| H467                           | H              | MERCY WSC                  | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 822.33                    |  |  |
| H468                           | H              | MERCY WSC                  | Municipal conservation - small water user group                                 | 34.17721519  | 3.42  | 14.87603306   | 1.49  | 5.00   | 0   | 9.91                   | 82.54                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 772.54                    |  |  |
| H469                           | H              | MINING, AUSTIN             | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H470                           | H              | MINING, BRAZORIA           | Contract with BRA   | 78.76106195  | 7.88  | 81.20608899   | 8.12  | 0.00   | 0   | 16.00                  | 133.31                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 679.31                    |  |  |
| H471                           | H              | MINING, BRAZORIA           | Expanded use of groundwater   | 21.23893805  | 2.12  | 18.79391101   | 1.88  | 0.00   | 0   | 4.00                   | 33.36                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 627.36                    |  |  |
| H472                           | H              | MINING, CHAMBERS           | Contract with TRA   | 97.38962859  | 9.74  | 92.46417294   | 9.25  | 0.00   | 0   | 18.99                  | 158.21                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 752.21                    |  |  |
| H473                           | H              | MINING, CHAMBERS           | Expanded use of groundwater   | 3.413472443  | 0.34  | 3.594850619   | 0.36  | 0.00   | 0   | 0.70                   | 5.84                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 619.84                    |  |  |
| H474                           | H              | MINING, CHAMBERS           | Reallocation of existing supplies   | 2.610371409  | 0.26  | 3.940976439   | 0.39  | 0.00   | 0   | 0.66                   | 5.46                      | 10  | 0   | 10.00                  | 100         | 2            | 40       | 589.46                    |  |  |
| H475                           | H              | MINING, FORT BEND          | Contract with BRA   | 74.71910112  | 7.47  | 43.41906203   | 4.34  | 0.00   | 0   | 11.81                  | 98.45                     | 10  | 5   | 15.00                  | 150         | 0            | 0        | 644.45                    |  |  |
| H476                           | H              | MINING, FORT BEND          | Contract with GCWA  | 24.15730337  | 2.42  | 55.90015129   | 5.59  | 0.00   | 0   | 8.01                   | 66.71                     | 10  | 5   | 15.00                  | 150         | 0            | 0        | 612.71                    |  |  |
| H477                           | H              | MINING, FORT BEND          | Expanded use of groundwater   | 1.123595506  | 0.11  | 0.680786687   | 0.07  | 0.00   | 0   | 0.18                   | 1.50                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 595.50                    |  |  |
| H478                           | H              | MINING, GALVESTON          | Contract with GCWA  | 46.66666667  | 4.67  | 46.57534247   | 4.66  | 0.00   | 0   | 9.32                   | 77.70                     | 10  | 5   | 15.00                  | 150         | 0            | 0        | 623.70                    |  |  |
| H479                           | H              | MINING, GALVESTON          | Contract with LNVA  | 51.61290323  | 5.16  | 50.68493151   | 5.07  | 0.00   | 0   | 10.23                  | 85.25                     | 10  | 5   | 15.00                  | 150         | 0            | 0        | 679.25                    |  |  |
| H480                           | H              | MINING, GALVESTON          | Expanded use of groundwater   | 2.222222222  | 0.22  | 2.739726027   | 0.27  | 0.00   | 0   | 0.50                   | 4.13                      | 10  | 5   | 15.00                  | 150         | 5            | 100      | 658.13                    |  |  |
| H481                           | H              | MINING, GALVESTON          | Interim strategies - temporary overdraft  | 48.38709677  | 4.84  | 0   | 0.00  | 0.00   | 0   | 4.84                   | 40.32                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 554.32                    |  |  |
| H482                           | H              | MINING, HARRIS             | Contract with City of Houston   | 68.20512821  | 6.82  | 77.32732733   | 7.73  | 0.00   | 0   | 14.55                  | 121.28                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 635.28                    |  |  |
| H483                           | H              | MINING, HARRIS             | Expanded use of groundwater   | 5.423728814  | 0.54  | 3.753753754   | 0.38  | 0.00   | 0   | 0.92                   | 7.65                      | 10  | 5   | 15.00                  | 150         | 2            | 40       | 601.65                    |  |  |
| H484                           | H              | MINING, HARRIS             | Reallocation of existing supplies   | 100  | 10.00   | 18.91891892   | 1.89  | 0.00   | 0   | 11.89                  | 99.10                     | 10  | 0   | 10.00                  | 100         | 0            | 0        | 643.10                    |  |  |
| H485                           | H              | MINING, LIBERTY            | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 822.33                    |  |  |
| H486                           | H              | MINING, MONTGOMERY         | Interim strategies - temporary overdraft  | 100  | 10.00   | 0   | 0.00  | 0.00   | 0   | 10.00                  | 83.33                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 597.33                    |  |  |
| H487                           | H              | MINING, MONTGOMERY         | SJRA Water Resources Assessment Plan participation                              | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 4            | 80       | 896.67                    |  |  |
| H488                           | H              | MINING, POLK               | Expanded use of groundwater   | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2            | 40       | 802.33                    |  |  |
| H489                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan                                | 100  | 10.00   | 18.00816281   | 1.80  | 0.00   | 5   | 16.80                  | 140.01                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 790.01                    | H490, H491   | Represent components of a single Groundwater Reduction Plan. |
| H490                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan - aquifer storage and recovery | 100  | 10.00   | 18.00816281   | 1.80  | 0.00   | 5   | 16.80                  | 140.01                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 790.01                    | H489, H491   | Represent components of a single Groundwater Reduction Plan. |
| H491                           | H              | MISSOURI CITY              | City of Missouri City Groundwater Reduction Plan - reuse                        | 100  | 10.00   | 18.00816281   | 1.80  | 0.00   | 5   | 16.80                  | 140.01                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 790.01                    | H489, H490   | Represent components of a single Groundwater Reduction Plan. |
| H492                           | H              | MISSOURI CITY              | Contract with City of Missouri City   | 100  | 10.00   | 73.07934329   | 7.31  | 0.00   | 0   | 17.31                  | 144.23                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 810.23                    |  |  |
| H493                           | H              | MISSOURI CITY              | GCWA to City of Missouri City contract  | 51.07449857  | 5.11  | 75.52478348   | 7.55  | 0.00   | 5   | 17.66                  | 147.17                    | 10  | 5   | 15.00                  | 150         | 5            | 100      | 753.17                    |  |  |
| H494                           | H              | MISSOURI CITY              | Municipal conservation - large water user group                                 | 100  | 10.00   | 13.225788   | 1.32  | 0.00   | 0   | 11.32                  | 94.35                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 824.35                    |  |  |
| H495                           | H              | MONT BELVIEU               | Contract with CLCND   | 88.48314607  | 8.85  | 85.07967166   | 8.51  | 0.00   | 0   | 17.36                  | 144.64                    | 10  | 5   | 15.00                  | 150         | 0            | 0        | 698.64                    |  |  |
| H496                           | H              | MONT BELVIEU               | Expanded use of groundwater   | 4.868913858  | 0.49  | 8.836310961   | 0.88  | 0.00   | 0   | 1.37                   | 11.42                     | 10  | 5   | 15.00                  | 150         | 5            | 100      | 685.42                    |  |  |
| H497                           | H              | MONT BELVIEU               | Interim strategies - temporary overdraft  | 66.75291074  | 6.68  | 0   | 0.00  | 0.00   | 0   | 6.68                   | 55.63                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 569.63                    |  |  |
| H498                           | H              | MONT BELVIEU               | Municipal conservation - small water user group                                 | 6.985769728  | 0.70  | 6.084017383   | 0.61  | 0.00   | 0   | 1.31                   | 10.89                     | 10  | 5   | 15.00                  | 150         | 4            | 80       | 740.89                    |  |  |
| H499                           | H              | MONT BELVIEU               | Reallocation of existing supplies   | 26.26131953  | 2.63  | 0   | 0.00  | 0.00   | 0   | 2.63                   | 21.88                     | 5   | 0   | 5.00                   | 50          | 2            | 40       | 555.88                    |  |  |
| H500                           | H              | MONTGOMERY                 | Contract with SJRA  | 43.241843  |   |   |   |  |   |                        |                           |   |   |                        |             |              |          |                           |  |  |

| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |                  |   |  |   |  |
|--------------------------------|----------------|------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|----------------------------------|------------------|---|--|---|--|
|                                |                |                        |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5                                | 5                | 10  | 5  | 25  | 100  |
|                                |                |                        |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Criteria 1 Total Score           | Criteria 1 Total | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] |
| H522                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | \$1,150,799   | 0                      | 51                     | 63                     | 583                    | 407                    | 295                    | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H523                           | H              | MONTGOMERY COUNTY M    | Contract with SJRA                                       | \$336,693     | 0                      | 0                      | 0                      | 160                    | 400                    | 558                    | Y   |  | 4                                       | 6  | 10 | 200 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H524                           | H              | MONTGOMERY COUNTY M    | Expanded use of groundwater                              | \$23,144      | 0                      | 6                      | 31                     | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H525                           | H              | MONTGOMERY COUNTY M    | Interim strategies - temporary overdraft                 | \$325,071     | 138                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H526                           | H              | MONTGOMERY COUNTY M    | Montgomery MUD #8/9 indirect reuse                       | \$6,407,821   | 0                      | 325                    | 415                    | 586                    | 586                    | 586                    | N   |  | 10                                      | 10 | 20 | 400 | 3                                | 3                | 5   | 5  | 16  | 64   |
| H527                           | H              | MONTGOMERY COUNTY M    | Municipal conservation - small water user group          | \$0           | 44                     | 60                     | 76                     | 83                     | 85                     | 86                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H528                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | \$127,663     | 0                      | 19                     | 171                    | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H529                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | \$1,267,983   | 0                      | 51                     | 64                     | 633                    | 453                    | 335                    | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H530                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | \$228,540     | 97                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H531                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - small water user group          | \$0           | 31                     | 31                     | 30                     | 30                     | 30                     | 30                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H532                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | \$640,909     | 0                      | 203                    | 259                    | 298                    | 337                    | 369                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H533                           | H              | MONTGOMERY COUNTY U    | Contract with SJRA                                       | \$319,774     | 0                      | 0                      | 0                      | 60                     | 248                    | 423                    | Y   |  | 4                                       | 6  | 10 | 200 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H534                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | \$193,211     | 82                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H535                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - medium water user group         | \$0           | 29                     | 30                     | 33                     | 37                     | 43                     | 51                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H536                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | \$428,815     | 0                      | 184                    | 264                    | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H537                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | \$992,750     | 0                      | 0                      | 0                      | 418                    | 342                    | 292                    | Y   |  | 6                                       | 6  | 12 | 240 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H538                           | H              | MONTGOMERY COUNTY U    | Contract with SJRA                                       | \$229,664     | 0                      | 0                      | 0                      | 90                     | 322                    | 473                    | Y   |  | 4                                       | 6  | 10 | 200 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H539                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | \$393,307     | 167                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H540                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - medium water user group         | \$0           | 58                     | 58                     | 57                     | 56                     | 56                     | 56                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H541                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | \$671,240     | 0                      | 353                    | 452                    | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H542                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | \$1,215,621   | 0                      | 0                      | 0                      | 630                    | 445                    | 326                    | Y   |  | 6                                       | 6  | 12 | 240 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H543                           | H              | MONTGOMERY COUNTY W    | Interim strategies - temporary overdraft                 | \$197,922     | 84                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H544                           | H              | MONTGOMERY COUNTY W    | Municipal conservation - medium water user group         | \$0           | 30                     | 31                     | 34                     | 39                     | 45                     | 53                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H545                           | H              | MONTGOMERY COUNTY W    | SJRA Water Resources Assessment Plan participation       | \$1,215,683   | 0                      | 189                    | 272                    | 358                    | 470                    | 600                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H546                           | H              | NEEDVILLE              | Expanded use of groundwater                              | \$1,665,869   | 0                      | 96                     | 215                    | 337                    | 506                    | 707                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H547                           | H              | NEEDVILLE              | Municipal conservation - medium water user group         | \$0           | 0                      | 18                     | 22                     | 26                     | 31                     | 38                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H548                           | H              | NEW CANEY MUD          | Expanded use of groundwater                              | \$40,876      | 0                      | 0                      | 0                      | 0                      | 5                      | 55                     | N   |  | 2                                       | 4  | 6  | 120 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H549                           | H              | NEW CANEY MUD          | Interim strategies - temporary overdraft                 | \$625,873     | 266                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                | 1   | 5  | 6   | 24   |
| H550                           | H              | NEW CANEY MUD          | Municipal conservation                                   | \$0           | 69                     | 153                    | 200                    | 252                    | 326                    | 412                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H551                           | H              | NEW CANEY MUD          | SJRA Water Resources Assessment Plan participation       | \$6,131,759   | 0                      | 546                    | 944                    | 1,396                  | 2,058                  | 2,854                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H552                           | H              | NEW WAVERLY            | Expanded use of groundwater                              | \$58,915      | 0                      | 17                     | 25                     | 18                     | 17                     | 17                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H553                           | H              | NEW WAVERLY            | Municipal conservation - small water user group          | \$0           | 0                      | 13                     | 13                     | 13                     | 13                     | 13                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H554                           | H              | NORMANGEE              | Expanded use of groundwater                              | \$63,628      | 0                      | 17                     | 26                     | 23                     | 22                     | 24                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H555                           | H              | NORMANGEE              | Municipal conservation - small water user group          | \$0           | 1                      | 10                     | 11                     | 11                     | 11                     | 11                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H556                           | H              | NORTH BELT UD          | City of Houston Groundwater Reduction Plan participation | \$2,180,544   | 112                    | 384                    | 541                    | 666                    | 796                    | 926                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H557                           | H              | NORTH BELT UD          | Municipal conservation - medium water user group         | \$0           | 27                     | 36                     | 44                     | 51                     | 60                     | 68                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H558                           | H              | NORTH CHANNEL WATER A  | City of Houston to NCWA contract                         | \$0           | 1,954                  | 2,392                  | 2,869                  | 3,511                  | 4,157                  | 4,912                  | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H559                           | H              | NORTH FORT BEND WATER  | City of Houston to NFBWA contract                        | \$0           | 0                      | 444                    | 17,971                 | 31,161                 | 41,172                 | 50,442                 | Y   |  | 8                                       | 8  | 16 | 320 | 5                                | 0                | 2   | 5  | 12  | 48   |
| H560                           | H              | NORTH FORT BEND WATER  | Contract with NFBWA                                      | \$44,964,481  | 0                      | 444                    | 13,085                 | 27,315                 | 38,155                 | 38,155                 | Y   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                | 2   | 5  | 17  | 68   |
| H561                           | H              | NORTH FORT BEND WATER  | Expanded use of groundwater                              | \$12,395,510  | 0                      | 6,590                  | 2,725                  | 2,725                  | 2,725                  | 2,725                  | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H562                           | H              | NORTH FORT BEND WATER  | Municipal conservation - small water user group          | \$0           | 1,693                  | 4,062                  | 4,893                  | 5,557                  | 6,155                  | 6,155                  | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H563                           | H              | NORTH FORT BEND WATER  | NFBWA Groundwater Reduction Plan                         | \$0           | 35,009                 | 61,021                 | 70,363                 | 84,943                 | 96,103                 | 106,402                | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H564                           | H              | NORTH FORT BEND WATER  | NFBWA internal distribution                              | \$225,000,000 | 35,009                 | 61,021                 | 70,363                 | 84,943                 | 96,103                 | 106,402                | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H565                           | H              | NORTH FORT BEND WATER  | NFBWA shared transmission line                           | \$213,000,000 | 0                      | 21,878                 | 39,405                 | 52,595                 | 62,606                 | 71,876                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H566                           | H              | NORTH FORT BEND WATER  | Reallocation of existing supplies                        | \$10,783,239  | 0                      | 0                      | 4,886                  | 3,846                  | 3,017                  | 12,287                 | N   |  | 6                                       | 10 | 16 | 320 | 5                                | 0                | 1   | 5  | 11  | 44   |
| H567                           | H              | NORTH FORT BEND WATER  | Wastewater reclamation for municipal irrigation          | \$6,796,870   | 0                      | 0                      | 1,590                  | 2,980                  | 4,129                  | 5,158                  | N   |  | 6                                       | 10 | 16 | 320 | 3                                | 0                | 1   | 5  | 9   | 36   |
| H568                           | H              | NORTH GREEN MUD        | City of Houston Groundwater Reduction Plan participation | \$876,399     | 84                     | 242                    | 300                    | 321                    | 345                    | 372                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H569                           | H              | NORTH GREEN MUD        | Municipal conservation - medium water user group         | \$0           | 21                     | 23                     | 24                     | 26                     | 28                     | 30                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H570                           | H              | NORTH HARRIS COUNTY RE | City of Houston indirect reuse                           | \$147,080,973 | 0                      | 0                      | 0                      | 18,130                 | 31,629                 | 0                      | N   |  | 4                                       | 6  | 10 | 200 | 3                                | 0                | 4   | 5  | 12  | 48   |
| H571                           | H              | NORTH HARRIS COUNTY RE | City of Houston to NHCRA contract                        | \$0           | 0                      | 56,453                 | 83,041                 | 83,041                 | 78,041                 | 83,041                 | Y   |  | 8                                       | 8  | 16 | 320 | 3                                | 0                | 2   | 5  | 10  | 40   |
| H572                           | H              | NORTH HARRIS COUNTY RE | Contract with NHCRA                                      | \$42,207,965  | 0                      | 56,453                 | 83,041                 | 64,491                 | 34,726                 | 27,478                 | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                | 2   | 5  | 17  | 68   |
| H573                           | H              | NORTH HARRIS COUNTY RE | Municipal conservation - small water user group          | \$0           | 6,441                  | 7,598                  | 8,480                  | 8,961                  | 9,156                  | 9,389                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 10  | 5  | 25  | 100  |
| H574                           | H              | NORTH HARRIS COUNTY RE | NHCRA Groundwater Reduction Plan                         | \$0           | 34,714                 | 91,167                 | 117,755                | 99,625                 | 81,126                 | 117,755                | Y   |  | 10                                      | 10 | 20 | 400 | 3                                | 5                | 8   | 5  | 21  | 84   |
| H575                           | H              | NORTH HARRIS COUNTY RE | NHCRA indirect reuse                                     | \$66,778,694  | 0                      | 0                      | 0                      | 7,300                  | 16,300                 | 16,300                 | N   |  | 4                                       | 6  | 10 | 200 | 3                                | 0                | 1   | 5  | 9   | 36   |
| H576                           | H              | NORTH HARRIS COUNTY RE | NHCRA internal 2010 distribution                         | \$153,149,640 | 34,714                 | 34,714                 | 34,714                 | 34,714                 | 34,714                 | 34,714                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H577                           | H              | NORTH HARRIS COUNTY RE | NHCRA internal 2020 distribution                         | \$345,292,192 | 0                      | 91,167                 | 91,167                 | 91,167                 | 91,167                 | 91,167                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H578                           | H              | NORTH HARRIS COUNTY RE | NHCRA internal 2030 distribution                         | \$37,439,584  | 0                      | 0                      | 117,755                | 117,755                | 117,755                | 117,755                | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H579                           | H              | NORTH HARRIS COUNTY RE | NHCRA transmission 2010                                  | \$80,690,624  | 34,714                 | 34,714                 | 34,714                 | 34,714                 | 34,714                 | 34,714                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                | 8   | 5  | 23  | 92   |
| H580                           | H              | NORTH HARRIS COUNTY RE |  |               |                        |                        |                        |                        |                        |                        |   |  |   |    |    |     |                                  |                  |   |  |   |  |

| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Criteria 3 - Project Viability   |   |   |   |  |   | Criteria 4 - Project Sustainability |                           |   |   | Criteria 5 - Project Cost Effectiveness |                           | FINAL SCORE | Grouped With | Comments |  |                           |
|--------------------------------|----------------|------------------------|--|--|---|---|---|--|---|-------------------------------------|---------------------------|---|---|---|---------------------------|-------------|--------------|----------|--|---------------------------|
|                                |                |                        |  | 100  | 10  | 100   | 10  | 5.00   | 5   | 30.00                               | 250.00                    | 10  | 5   | 15.00                                   | 150                       |             |              |          | 5  | 100                       |
|                                |                |                        |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score              | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score                  | Weighted Criteria 4 Total |             |              |          | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H522                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | 10.99137931  | 1.10  | 31.82308522   | 3.18  | 0.00   | 0   | 4.28                                | 35.68                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 619.68   |  |                           |
| H523                           | H              | MONTGOMERY COUNTY M    | Contract with SJRA                                       | 21.53432032  | 2.15  | 53.55086372   | 5.36  | 0.00   | 0   | 7.51                                | 62.57                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 536.57   |  |                           |
| H524                           | H              | MONTGOMERY COUNTY M    | Expanded use of groundwater                              | 1.301518438  | 0.13  | 0   | 0.00  | 0.00   | 0   | 0.13                                | 1.08                      | 5   | 0   | 5.00                                    | 50                        | 5           | 100          | 555.08   |  |                           |
| H525                           | H              | MONTGOMERY COUNTY M    | Interim strategies - temporary overdraft                 | 75.82417582  | 7.58  | 0   | 0.00  | 0.00   | 0   | 7.58                                | 63.19                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 577.19   |  |                           |
| H526                           | H              | MONTGOMERY COUNTY M    | Montgomery MUD #8/9 indirect reuse                       | 71.02702703  | 7.10  | 56.88166582   | 5.69  | 0.00   | 5   | 17.79                               | 148.26                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 762.26   | H519   |                           |
| H527                           | H              | MONTGOMERY COUNTY M    | Municipal conservation - small water user group          | 24.17582418  | 2.42  | 8.253358925   | 0.83  | 0.00   | 0   | 3.24                                | 27.02                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 757.02   |  |                           |
| H528                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | 4.121475054  | 0.41  | 0   | 0.00  | 0.00   | 0   | 0.41                                | 3.43                      | 5   | 0   | 5.00                                    | 50                        | 5           | 100          | 597.43   |  |                           |
| H529                           | H              | MONTGOMERY COUNTY M    | SJRA Water Resources Assessment Plan participation       | 11.06290672  | 1.11  | 32.14971209   | 3.21  | 0.00   | 0   | 4.32                                | 36.01                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 620.01   |  |                           |
| H530                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | 75.78125   | 7.58  | 0   | 0.00  | 0.00   | 0   | 7.58                                | 63.15                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 577.15   |  |                           |
| H531                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - small water user group          | 24.21875   | 2.42  | 7.518796992   | 0.75  | 0.00   | 0   | 3.17                                | 26.45                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 706.45   |  |                           |
| H532                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | 86.75213675  | 8.68  | 92.48120301   | 9.25  | 0.00   | 0   | 17.92                               | 149.36                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 879.36   |  |                           |
| H533                           | H              | MONTGOMERY COUNTY U    | Contract with SJRA                                       | 22.22222222  | 2.22  | 77.75735294   | 7.78  | 0.00   | 0   | 10.00                               | 83.32                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 557.32   |  |                           |
| H534                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | 73.87387387  | 7.39  | 0   | 0.00  | 0.00   | 0   | 7.39                                | 61.56                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.56   |  |                           |
| H535                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - medium water user group         | 26.12612613  | 2.61  | 9.375   | 0.94  | 0.00   | 0   | 3.55                                | 29.58                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 719.58   |  |                           |
| H536                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | 85.98130841  | 8.60  | 0   | 0.00  | 0.00   | 0   | 8.60                                | 71.65                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 645.65   |  |                           |
| H537                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | 100  | 10.00   | 53.67647059   | 5.37  | 0.00   | 0   | 15.37                               | 128.06                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 592.06   |  |                           |
| H538                           | H              | MONTGOMERY COUNTY U    | Contract with SJRA                                       | 22.11302211  | 2.21  | 77.54098361   | 7.75  | 0.00   | 0   | 9.97                                | 83.05                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 557.05   |  |                           |
| H539                           | H              | MONTGOMERY COUNTY U    | Interim strategies - temporary overdraft                 | 74.22222222  | 7.42  | 0   | 0.00  | 0.00   | 0   | 7.42                                | 61.85                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.85   |  |                           |
| H540                           | H              | MONTGOMERY COUNTY U    | Municipal conservation - medium water user group         | 25.77777778  | 2.58  | 9.180327869   | 0.92  | 0.00   | 0   | 3.50                                | 29.13                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 669.13   |  |                           |
| H541                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | 85.88807786  | 8.59  | 0   | 0.00  | 0.00   | 0   | 8.59                                | 71.57                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 645.57   |  |                           |
| H542                           | H              | MONTGOMERY COUNTY U    | SJRA Water Resources Assessment Plan participation       | 100  | 10.00   | 53.44262295   | 5.34  | 0.00   | 0   | 15.34                               | 127.87                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 591.87   |  |                           |
| H543                           | H              | MONTGOMERY COUNTY W    | Interim strategies - temporary overdraft                 | 73.68421053  | 7.37  | 0   | 0.00  | 0.00   | 0   | 7.37                                | 61.40                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.40   |  |                           |
| H544                           | H              | MONTGOMERY COUNTY W    | Municipal conservation - medium water user group         | 26.31578947  | 2.63  | 8.116385911   | 0.81  | 0.00   | 0   | 3.44                                | 28.69                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 718.69   |  |                           |
| H545                           | H              | MONTGOMERY COUNTY W    | SJRA Water Resources Assessment Plan participation       | 85.90909091  | 8.59  | 91.88361409   | 9.19  | 0.00   | 0   | 17.78                               | 148.16                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 878.16   |  |                           |
| H546                           | H              | NEEDVILLE              | Expanded use of groundwater                              | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H547                           | H              | NEEDVILLE              | Municipal conservation - medium water user group         | 18.75  | 1.88  | 5.374823197   | 0.54  | 5.00   | 0   | 7.41                                | 61.77                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 711.77   |  |                           |
| H548                           | H              | NEW CANEY MUD          | Expanded use of groundwater                              | 0.209292591  | 0.02  | 1.656127672   | 0.17  | 0.00   | 0   | 0.19                                | 1.55                      | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 395.55   |  |                           |
| H549                           | H              | NEW CANEY MUD          | Interim strategies - temporary overdraft                 | 79.40298507  | 7.94  | 0   | 0.00  | 0.00   | 0   | 7.94                                | 66.17                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 580.17   |  |                           |
| H550                           | H              | NEW CANEY MUD          | Municipal conservation                                   | 20.59701493  | 2.06  | 12.40590184   | 1.24  | 0.00   | 0   | 3.30                                | 27.50                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 757.50   |  |                           |
| H551                           | H              | NEW CANEY MUD          | SJRA Water Resources Assessment Plan participation       | 78.11158798  | 7.81  | 85.93797049   | 8.59  | 0.00   | 0   | 16.40                               | 136.71                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 866.71   |  |                           |
| H552                           | H              | NEW WAVERLY            | Expanded use of groundwater                              | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 752.33   |  |                           |
| H553                           | H              | NEW WAVERLY            | Municipal conservation - small water user group          | 76.47058824  | 7.65  | 76.47058824   | 7.65  | 5.00   | 0   | 20.29                               | 169.12                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 859.12   |  |                           |
| H554                           | H              | NORMANGEE              | Expanded use of groundwater                              | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 752.33   |  |                           |
| H555                           | H              | NORMANGEE              | Municipal conservation - small water user group          | 100  | 10.00   | 45.83333333   | 4.58  | 5.00   | 0   | 19.58                               | 163.19                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 893.19   |  |                           |
| H556                           | H              | NORTH BELT UD          | City of Houston Groundwater Reduction Plan participation | 80.57553957  | 8.06  | 93.15895372   | 9.32  | 5.00   | 0   | 22.37                               | 186.45                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 876.45   |  |                           |
| H557                           | H              | NORTH BELT UD          | Municipal conservation - medium water user group         | 19.42446043  | 1.94  | 6.841046278   | 0.68  | 5.00   | 0   | 7.63                                | 63.55                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 753.55   |  |                           |
| H558                           | H              | NORTH CHANNEL WATER A  | City of Houston to NCWA contract                         | 38.86237072  | 3.89  | 41.07710319   | 4.11  | 0.00   | 5   | 12.99                               | 108.28                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 858.28   |  |                           |
| H559                           | H              | NORTH FORT BEND WATER  | City of Houston to NFBWA contract                        | 9.36116382   | 0.94  | 79.62808026   | 7.96  | 0.00   | 5   | 13.90                               | 115.82                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 733.82   | H555   |                           |
| H560                           | H              | NORTH FORT BEND WATER  | Contract with NFBWA                                      | 9.36116382   | 0.94  | 60.23173947   | 6.02  | 0.00   | 5   | 11.96                               | 99.66                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 757.66   |  |                           |
| H561                           | H              | NORTH FORT BEND WATER  | Expanded use of groundwater                              | 100  | 10.00   | 4.301703317   | 0.43  | 0.00   | 5   | 15.43                               | 128.58                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 672.58   |  |                           |
| H562                           | H              | NORTH FORT BEND WATER  | Municipal conservation - small water user group          | 35.69470799  | 3.57  | 9.716324372   | 0.97  | 0.00   | 5   | 9.54                                | 79.51                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 769.51   |  |                           |
| H563                           | H              | NORTH FORT BEND WATER  | NFBWA Groundwater Reduction Plan                         | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 950.33   |  |                           |
| H564                           | H              | NORTH FORT BEND WATER  | NFBWA internal distribution                              | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 930.33   |  |                           |
| H565                           | H              | NORTH FORT BEND WATER  | NFBWA shared transmission line                           | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 950.33   |  |                           |
| H566                           | H              | NORTH FORT BEND WATER  | Reallocation of existing supplies                        | 18.94606227  | 1.89  | 19.39634079   | 1.94  | 0.00   | 5   | 8.83                                | 73.62                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 687.62   |  |                           |
| H567                           | H              | NORTH FORT BEND WATER  | Wastewater reclamation for municipal irrigation          | 6.165419365  | 0.62  | 8.14253471  | 0.81  | 0.00   | 5   | 6.43                                | 53.59                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 579.59   |  |                           |
| H568                           | H              | NORTH GREEN MUD        | City of Houston Groundwater Reduction Plan participation | 80   | 8.00  | 92.53731343   | 9.25  | 5.00   | 0   | 22.25                               | 185.45                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 875.45   |  |                           |
| H569                           | H              | NORTH GREEN MUD        | Municipal conservation - medium water user group         | 20   | 2.00  | 7.462686567   | 0.75  | 5.00   | 0   | 7.75                                | 64.55                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 754.55   |  |                           |
| H570                           | H              | NORTH HARRIS COUNTY RE | City of Houston indirect reuse                           | 18.84928886  | 1.88  | 0   | 0.00  | 0.00   | 5   | 6.88                                | 57.37                     | 5   | 0   | 5.00                                    | 50                        | 0           | 0            | 355.37   |  |                           |
| H571                           | H              | NORTH HARRIS COUNTY RE | City of Houston to NHCWA contract                        | 92.36722406  | 9.24  | 79.91935018   | 7.99  | 0.00   | 5   | 22.23                               | 185.24                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 795.24   |  |                           |
| H572                           | H              | NORTH HARRIS COUNTY RE | Contract with NHCWA                                      | 92.36722406  | 9.24  | 26.44505611   | 2.64  | 0.00   | 5   | 16.88                               | 140.68                    | 10  | 0   | 10.00                                   | 100                       | 5           | 100          | 768.68   |  |                           |
| H573                           | H              | NORTH HARRIS COUNTY RE | Municipal conservation - small water user group          | 100  | 10.00   | 9.036051816   | 0.90  | 0.00   | 5   | 15.90                               | 132.53                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 862.53   |  |                           |
| H574                           | H              | NORTH HARRIS COUNTY RE | NHCWA Groundwater Reduction Plan                         | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 942.33   |  |                           |
| H575                           | H              | NORTH HARRIS COUNTY RE | NHCWA indirect reuse                                     | 7.589619895  | 0.76  | 15.68725579   | 1.57  | 0.00   | 5   | 7.33                                | 61.06                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 447.06   |  |                           |
| H576                           | H              | NORTH HARRIS COUNTY RE | NHCWA internal 2010 distribution                         | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 890.33   | H577, H578   |                           |
| H577                           | H              | NORTH HARRIS COUNTY RE | NHCWA internal 2020 distribution                         | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 890.33   | H576, H578   |                           |
| H578                           | H              | NORTH HARRIS COUNTY RE | NHCWA internal 2030 distribution                         | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 890.33   | H576, H577   |                           |
| H579                           | H              | NORTH HARRIS COUNTY RE | NHCWA transmission 2010                                  | 100  | 10.00   | 100   | 10.00   | 0.00   | 5   | 25.00                               | 20                        |   |   |   |                           |             |              |          |  |                           |



| Alphabetized unique identifier | Sponsor Region | Sponsor             | Recommended Water Management Strategy Name   | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |                           |   |  |   |  |
|--------------------------------|----------------|---------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|----------------------------------|---------------------------|---|--|---|--|
|                                |                |                     |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5                                | 5                         | 10  | 5  | 25  | 100  |
|                                |                |                     |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Criteria 1 Total Score           | Weighted Criteria 1 Total | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RMP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] |
| H598                           | H              | ONALASKA            | Expanded use of groundwater  | \$320,489     | 0                      | 40                     | 71                     | 92                     | 113                    | 136                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H599                           | H              | ONALASKA            | Municipal conservation - small water user group  | \$0           | 0                      | 13                     | 14                     | 16                     | 17                     | 18                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 10  | 5  | 25  | 100  |
| H600                           | H              | ONALASKA WSC        | Expanded use of groundwater  | \$35,349      | 0                      | 4                      | 7                      | 2                      | 6                      | 15                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H601                           | H              | ORBIT SYSTEMS INC   | Contract with BRA  | \$186,464     | 0                      | 4                      | 10                     | 12                     | 14                     | 17                     | Y   |  | 8                                       | 10 | 18 | 360 | 3                                | 0                         | 1   | 5  | 9   | 36   |
| H602                           | H              | ORBIT SYSTEMS INC   | Expanded use of groundwater  | \$841,227     | 0                      | 67                     | 136                    | 205                    | 274                    | 357                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H603                           | H              | ORBIT SYSTEMS INC   | Municipal conservation - medium water user group   | \$0           | 1                      | 31                     | 36                     | 39                     | 44                     | 48                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H604                           | H              | OYSTER CREEK        | Contract with Brazosport Water Authority   | \$275,064     | 25                     | 31                     | 42                     | 57                     | 76                     | 100                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H605                           | H              | OYSTER CREEK        | Expanded use of groundwater  | \$70,697      | 0                      | 15                     | 24                     | 27                     | 29                     | 30                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H606                           | H              | OYSTER CREEK        | Municipal conservation - small water user group  | \$0           | 9                      | 10                     | 12                     | 13                     | 14                     | 15                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H607                           | H              | PANORAMA VILLAGE    | Contract with SJRA   | \$37,261      | 0                      | 0                      | 0                      | 71                     | 265                    | 406                    | Y   |  | 4                                       | 6  | 10 | 200 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H608                           | H              | PANORAMA VILLAGE    | Interim strategies - temporary overdraft   | \$268,573     | 114                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H609                           | H              | PANORAMA VILLAGE    | Municipal conservation - small water user group  | \$0           | 36                     | 38                     | 39                     | 41                     | 43                     | 45                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H610                           | H              | PANORAMA VILLAGE    | SJRA Water Resources Assessment Plan participation   | \$322,717     | 0                      | 251                    | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H611                           | H              | PANORAMA VILLAGE    | SJRA Water Resources Assessment Plan participation   | \$1,219,429   | 0                      | 0                      | 649                    | 496                    | 366                    | 280                    | Y   |  | 8                                       | 8  | 16 | 320 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H612                           | H              | PARKWAY UD          | Contract with City of Houston  | \$0           | 0                      | 0                      | 156                    | 184                    | 190                    | 190                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H613                           | H              | PARKWAY UD          | Municipal conservation - small water user group  | \$0           | 17                     | 16                     | 16                     | 16                     | 15                     | 15                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H614                           | H              | PARKWAY UD          | Reallocation of existing supplies  | \$486,037     | 225                    | 221                    | 58                     | 26                     | 15                     | 17                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H615                           | H              | PASADENA            | City of Houston to City of Pasadena contract   | \$0           | 1,865                  | 2,278                  | 2,665                  | 3,153                  | 3,579                  | 4,068                  | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H616                           | H              | PASADENA            | Expanded use of groundwater  | \$833,945     | 0                      | 185                    | 354                    | 354                    | 354                    | 354                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H617                           | H              | PASADENA            | Municipal conservation - large water user group  | \$0           | 1,298                  | 1,415                  | 1,522                  | 1,636                  | 1,759                  | 1,897                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H618                           | H              | PATTON VILLAGE      | Interim strategies - temporary overdraft   | \$35,348      | 15                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H619                           | H              | PATTON VILLAGE      | Municipal conservation - small water user group  | \$0           | 5                      | 5                      | 6                      | 6                      | 8                      | 9                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H620                           | H              | PATTON VILLAGE      | SJRA Water Resources Assessment Plan participation   | \$230,942     | 0                      | 32                     | 47                     | 64                     | 84                     | 113                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H621                           | H              | PEARLAND            | City of Pearland surface water treatment plant   | \$265,000,000 | 6,720                  | 6,720                  | 6,720                  | 13,420                 | 13,420                 | 13,420                 | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H622                           | H              | PEARLAND            | Contract with GCWA   | \$0           | 0                      | 0                      | 539                    | 2,068                  | 4,156                  | 6,913                  | Y   |  | 6                                       | 8  | 14 | 280 | 3                                | 5                         | 10  | 5  | 23  | 92   |
| H623                           | H              | PEARLAND            | Expanded use of groundwater  | \$4,916,347   | 0                      | 14                     | 448                    | 1,169                  | 1,719                  | 2,101                  | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H624                           | H              | PEARLAND            | Municipal conservation   | \$0           | 224                    | 556                    | 652                    | 742                    | 843                    | 948                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H625                           | H              | PEARLAND            | Reallocation of existing supplies  | \$0           | 0                      | 0                      | 201                    | 294                    | 329                    | 0                      | N   |  | 10                                      | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H626                           | H              | PECAN GROVE MUD #1  | Municipal conservation   | \$0           | 146                    | 205                    | 208                    | 210                    | 216                    | 225                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H627                           | H              | PECAN GROVE MUD #1  | Pecan Grove Groundwater Reduction Plan   | \$15,960,000  | 866                    | 866                    | 1,731                  | 1,731                  | 1,731                  | 1,731                  | Y   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H628                           | H              | PINE ISLAND         | Expanded use of groundwater  | \$443,019     | 0                      | 29                     | 60                     | 93                     | 137                    | 188                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H629                           | H              | PINE ISLAND         | Municipal conservation - small water user group  | \$0           | 0                      | 8                      | 10                     | 12                     | 14                     | 17                     | N   |  | 10                                      | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H630                           | H              | PINE TRAILS UTILITY | Contract with NCWA   | \$362,312     | 0                      | 0                      | 227                    | 332                    | 411                    | 411                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H631                           | H              | PINE TRAILS UTILITY | Expanded use of groundwater  | \$61,271      | 0                      | 14                     | 26                     | 26                     | 26                     | 26                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H632                           | H              | PINE TRAILS UTILITY | Municipal conservation - medium water user group   | \$0           | 56                     | 60                     | 64                     | 68                     | 72                     | 77                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H633                           | H              | PINE TRAILS UTILITY | Reallocation of existing supplies  | \$627,231     | 215                    | 266                    | 85                     | 47                     | 33                     | 110                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H634                           | H              | PINEY POINT VILLAGE | Contract with City of Houston  | \$250,132     | 0                      | 0                      | 556                    | 710                    | 788                    | 788                    | Y   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H635                           | H              | PINEY POINT VILLAGE | Expanded use of groundwater  | \$40,062      | 0                      | 8                      | 17                     | 17                     | 17                     | 17                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H636                           | H              | PINEY POINT VILLAGE | Municipal conservation - medium water user group   | \$0           | 76                     | 78                     | 81                     | 84                     | 86                     | 90                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H637                           | H              | PINEY POINT VILLAGE | Reallocation of existing supplies  | \$1,371,563   | 697                    | 731                    | 207                    | 100                    | 62                     | 114                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H638                           | H              | PLANTATION MUD      | City of Sugar Land Groundwater Reduction Plan participation  | \$374,615     | 0                      | 46                     | 159                    | 71                     | 35                     | 20                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H639                           | H              | PLANTATION MUD      | Contract with City of Sugar Land   | \$557,185     | 0                      | 87                     | 135                    | 217                    | 251                    | 266                    | Y   |  | 8                                       | 10 | 18 | 360 | 3                                | 0                         | 1   | 5  | 9   | 36   |
| H640                           | H              | PLANTATION MUD      | Municipal conservation - medium water user group   | \$0           | 34                     | 33                     | 32                     | 32                     | 32                     | 32                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H641                           | H              | PLEAK               | Expanded use of groundwater  | \$1,505,149   | 0                      | 63                     | 180                    | 298                    | 457                    | 639                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H642                           | H              | PLEAK               | Municipal conservation - small water user group  | \$0           | 0                      | 36                     | 43                     | 50                     | 59                     | 70                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H643                           | H              | PLUM GROVE          | Expanded use of groundwater  | \$419,458     | 0                      | 35                     | 66                     | 99                     | 136                    | 178                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 16  | 64   |
| H644                           | H              | PLUM GROVE          | Municipal conservation - small water user group  | \$0           | 0                      | 10                     | 11                     | 13                     | 15                     | 18                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H645                           | H              | POINT AQUARIUS MUD  | Expanded use of groundwater  | \$509,502     | 0                      | 0                      | 48                     | 127                    | 201                    | 257                    | N   |  | 6                                       | 8  | 14 | 280 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H646                           | H              | POINT AQUARIUS MUD  | Interim strategies - temporary overdraft   | \$292,116     | 124                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H647                           | H              | POINT AQUARIUS MUD  | Municipal conservation - medium water user group   | \$0           | 44                     | 54                     | 78                     | 105                    | 142                    | 184                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H648                           | H              | POINT AQUARIUS MUD  | SJRA Water Resources Assessment Plan participation   | \$4,698,957   | 0                      | 331                    | 613                    | 966                    | 1,472                  | 2,091                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H649                           | H              | POINT BLANK         | Expanded use of groundwater  | \$63,628      | 0                      | 11                     | 19                     | 23                     | 26                     | 27                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H650                           | H              | POINT BLANK         | Municipal conservation - small water user group  | \$0           | 0                      | 5                      | 6                      | 6                      | 6                      | 6                      | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H651                           | H              | PORTER WSC          | Interim strategies - temporary overdraft   | \$759,427     | 323                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H652                           | H              | PORTER WSC          | Municipal conservation - large water user group  | \$0           | 123                    | 137                    | 171                    | 212                    | 210                    | 210                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H653                           | H              | PORTER WSC          | SJRA Water Resources Assessment Plan participation   | \$4,494,176   | 0                      | 777                    | 1,260                  | 1,826                  | 2,047                  | 2,239                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H654                           | H              | PRAIRIE VIEW        | Expanded use of groundwater  | \$1,561,875   | 0                      | 91                     | 198                    | 321                    | 476                    | 663                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H655                           | H              | PRAIRIE VIEW        | Municipal conservation - medium water user group   | \$0           | 0                      | 80                     | 87                     | 94                     | 103                    | 114                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H656                           | H              | RAYFORD ROAD MUD    | Contract with SJRA   | \$0           | 0                      | 0                      | 0                      | 214                    | 769                    | 1,127                  | Y   |  | 4                                       | 6  | 10 | 200 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H657                           | H              | RAYFORD ROAD MUD    | Interim strategies - temporary overdraft   | \$901,989     | 384                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0                                | 0                         | 1   | 5  | 6   | 24   |
| H658                           | H              | RAYFORD ROAD MUD    | Municipal conservation - large water user group  | \$0           | 146                    | 145                    | 144                    | 144                    | 144                    | 144                    | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H659                           | H              | RAYFORD ROAD MUD    | SJRA Water Resources Assessment Plan participation   | \$1,037,129   | 0                      | 826                    | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H660                           | H              | RAYFORD ROAD MUD    | SJRA Water Resources Assessment Plan participation   | \$3,442,156   | 0                      | 0                      | 2,055                  | 1,501                  | 1,060                  | 776                    | Y   |  | 8                                       | 8  | 16 | 320 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H661                           | H              | RICHMOND            | Contract with Cities of Richmond-Rosenberg   | \$0           | 0                      | 0                      | 0                      | 0                      | 0                      | 248                    | Y   |  | 0                                       | 2  | 2  | 40  | 3                                | 5                         | 1   | 5  | 14  | 56   |
| H662                           | H              | RICHMOND            | Municipal conservation   | \$0           | 0                      | 179                    | 213                    | 245                    | 301                    | 363                    | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 5                         | 10  | 5  | 25  | 100  |
| H663                           | H              | RICHMOND-ROSENBERG  | BRA to Cities of Richmond-Rosenberg contract   | \$0           | 0                      | 0                      | 0                      | 1,091                  | 3,060                  | 5,645                  | Y   |  | 4                                       | 4  | 8  | 160 | 3                                | 0                         | 1   | 0  | 4   | 16   |
| H664                           | H              | RICHMOND-ROSENBERG  | Cities of Richmond-Rosenberg Groundwater Reduction Plan - West Fort Bend surface water treatment plant | \$117,220,150 | 0                      | 7,500                  | 7,500                  | 7,500                  | 7,500                  | 7,500                  | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 5                         | 8   | 5  | 23  | 92   |
| H665                           | H              | RICHWOOD            | Contract with Brazosport Water Authority   | \$234,194     | 36                     | 33                     | 36                     | 42                     | 56                     | 76                     | N   |  | 10                                      | 10 | 20 | 400 | 5                                | 0                         | 1   | 5  | 11  | 44   |
| H666                           | H              | RICHWOOD            | Expanded use of groundwater  | \$54,202      | 0                      | 15                     | 20                     | 21                     | 22                     | 23                     | N   |  | 8                                       | 10 | 18 | 360 | 5                                | 0                         | 1   | 5  | 1   |  |

| Alphabetized unique identifier | Sponsor Region | Sponsor             | Recommended Water Management Strategy Name                  | Criteria 3 - Project Viability   |   |   |   |  | Criteria 4 - Project Sustainability   |                        |                           |   | Criteria 5 - Project Cost Effectiveness   |                        | FINAL SCORE |                           |  |                           |
|--------------------------------|----------------|---------------------|---|--|---|---|---|--|---|------------------------|---------------------------|---|---|------------------------|-------------|---------------------------|--|---------------------------|
|                                |                |                     |   | 100  | 10  | 100   | 10  | 5.00   | 5   | 30.00                  | 250.00                    | 10  | 5   | 15.00                  |             | 150                       | 5  | 100                       |
|                                |                |                     |   | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score |             | Weighted Criteria 4 Total | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H598                           | H              | ONALASKA            | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 802.33                    |
| H599                           | H              | ONALASKA            | Municipal conservation - small water user group             | 32.5   | 3.25  | 13.23529412   | 1.32  | 5.00   | 0   | 9.57                   | 79.78                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 769.78                    |
| H600                           | H              | ONALASKA WSC        | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 802.33                    |
| H601                           | H              | ORBIT SYSTEMS INC   | Contract with BRA   | 5.128205128  | 0.51  | 4.415584416   | 0.44  | 0.00   | 0   | 0.95                   | 7.95                      | 10  | 5   | 15.00                  | 150         | 0                         | 0  | 553.95                    |
| H602                           | H              | ORBIT SYSTEMS INC   | Expanded use of groundwater                                 | 85.8974359   | 8.59  | 92.72727273   | 9.27  | 0.00   | 0   | 17.86                  | 148.85                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 742.85                    |
| H603                           | H              | ORBIT SYSTEMS INC   | Municipal conservation - medium water user group            | 100  | 10.00   | 12.46753247   | 1.25  | 0.00   | 0   | 11.25                  | 93.72                     | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 783.72                    |
| H604                           | H              | OYSTER CREEK        | Contract with Brazosport Water Authority                    | 73.52941176  | 7.35  | 68.96551724   | 6.90  | 0.00   | 0   | 14.25                  | 118.75                    | 10  | 5   | 15.00                  | 150         | 1                         | 20   | 732.75                    |
| H605                           | H              | OYSTER CREEK        | Expanded use of groundwater                                 | 26.78571429  | 2.68  | 20.68965517   | 2.07  | 0.00   | 0   | 4.75                   | 39.56                     | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 633.56                    |
| H606                           | H              | OYSTER CREEK        | Municipal conservation - small water user group             | 26.47058824  | 2.65  | 10.34482759   | 1.03  | 0.00   | 0   | 3.68                   | 30.68                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 760.68                    |
| H607                           | H              | PANORAMA VILLAGE    | Contract with SJRA  | 22.32704403  | 2.23  | 78.07692308   | 7.81  | 0.00   | 0   | 10.04                  | 83.67                     | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 577.67                    |
| H608                           | H              | PANORAMA VILLAGE    | Interim strategies - temporary overdraft                    | 76   | 7.60  | 0   | 0.00  | 0.00   | 0   | 7.60                   | 63.33                     | 5   | 0   | 5.00                   | 50          | 2                         | 40   | 577.33                    |
| H609                           | H              | PANORAMA VILLAGE    | Municipal conservation - small water user group             | 24   | 2.40  | 8.653846154   | 0.87  | 0.00   | 0   | 3.27                   | 27.21                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 757.21                    |
| H610                           | H              | PANORAMA VILLAGE    | SJRA Water Resources Assessment Plan participation          | 86.85121107  | 8.69  | 0   | 0.00  | 0.00   | 0   | 8.69                   | 72.38                     | 5   | 0   | 5.00                   | 50          | 4                         | 80   | 646.38                    |
| H611                           | H              | PANORAMA VILLAGE    | SJRA Water Resources Assessment Plan participation          | 100  | 10.00   | 53.84615385   | 5.38  | 0.00   | 0   | 15.38                  | 128.21                    | 10  | 4   | 10.00                  | 100         | 4                         | 80   | 672.21                    |
| H612                           | H              | PARKWAY UD          | Contract with City of Houston                               | 67.82608696  | 6.78  | 85.58558559   | 8.56  | 0.00   | 0   | 15.34                  | 127.84                    | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 701.84                    |
| H613                           | H              | PARKWAY UD          | Municipal conservation - small water user group             | 7.024793388  | 0.70  | 6.756756757   | 0.68  | 0.00   | 0   | 1.38                   | 11.48                     | 10  | 0   | 10.00                  | 100         | 4                         | 80   | 691.48                    |
| H614                           | H              | PARKWAY UD          | Reallocation of existing supplies                           | 92.97520661  | 9.30  | 7.657657658   | 0.77  | 0.00   | 0   | 10.06                  | 83.86                     | 10  | 0   | 10.00                  | 100         | 4                         | 80   | 707.86                    |
| H615                           | H              | PASADENA            | City of Houston to City of Pasadena contract                | 44.74568138  | 4.47  | 44.81163252   | 4.48  | 0.00   | 5   | 13.96                  | 116.30                    | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 866.30                    |
| H616                           | H              | PASADENA            | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 760.67                    |
| H617                           | H              | PASADENA            | Municipal conservation - large water user group             | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 896.67                    |
| H618                           | H              | PATTON VILLAGE      | Interim strategies - temporary overdraft                    | 75   | 7.50  | 0   | 0.00  | 0.00   | 0   | 7.50                   | 62.50                     | 5   | 0   | 5.00                   | 50          | 2                         | 40   | 576.50                    |
| H619                           | H              | PATTON VILLAGE      | Municipal conservation - small water user group             | 25   | 2.50  | 7.37704918  | 0.74  | 0.00   | 0   | 3.24                   | 26.98                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 756.98                    |
| H620                           | H              | PATTON VILLAGE      | SJRA Water Resources Assessment Plan participation          | 86.48648649  | 8.65  | 92.62295082   | 9.26  | 0.00   | 0   | 17.91                  | 149.26                    | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 879.26                    |
| H621                           | H              | PEARLAND            | City of Pearland surface water treatment plant              | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                  | 166.67                    | 10  | 5   | 15.00                  | 150         | 0                         | 0  | 816.67                    |
| H622                           | H              | PEARLAND            | Contract with GCWA  | 30.078125  | 3.01  | 69.39369604   | 6.94  | 0.00   | 0   | 9.95                   | 82.89                     | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 704.89                    |
| H623                           | H              | PEARLAND            | Expanded use of groundwater                                 | 100  | 10.00   | 21.09014254   | 2.11  | 0.00   | 0   | 12.11                  | 100.91                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 694.91                    |
| H624                           | H              | PEARLAND            | Municipal conservation                                      | 100  | 10.00   | 9.516161413   | 0.95  | 0.00   | 0   | 10.95                  | 91.26                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 821.26                    |
| H625                           | H              | PEARLAND            | Reallocation of existing supplies                           | 11.21651786  | 1.12  | 0   | 0.00  | 0.00   | 0   | 1.12                   | 9.35                      | 10  | 0   | 10.00                  | 100         | 5                         | 100  | 533.35                    |
| H626                           | H              | PECAN GROVE MUD #1  | Municipal conservation                                      | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 938.33                    |
| H627                           | H              | PECAN GROVE MUD #1  | Pecan Grove Groundwater Reduction Plan                      | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 0                         | 0  | 858.33                    |
| H628                           | H              | PINE ISLAND         | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 802.33                    |
| H629                           | H              | PINE ISLAND         | Municipal conservation - small water user group             | 27.5862069   | 2.76  | 9.042553191   | 0.90  | 5.00   | 0   | 8.66                   | 72.19                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 762.19                    |
| H630                           | H              | PINE TRAILS UTILITY | Contract with NCWA  | 56.46766169  | 5.65  | 65.86538462   | 6.59  | 0.00   | 0   | 12.23                  | 101.94                    | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 675.94                    |
| H631                           | H              | PINE TRAILS UTILITY | Expanded use of groundwater                                 | 4.117647059  | 0.41  | 4.166666667   | 0.42  | 0.00   | 0   | 0.83                   | 6.90                      | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 600.90                    |
| H632                           | H              | PINE TRAILS UTILITY | Municipal conservation - medium water user group            | 20.66420664  | 2.07  | 12.33974359   | 1.23  | 0.00   | 0   | 3.30                   | 27.50                     | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 717.50                    |
| H633                           | H              | PINE TRAILS UTILITY | Reallocation of existing supplies                           | 79.33579336  | 7.93  | 17.62820513   | 1.76  | 0.00   | 0   | 9.70                   | 80.80                     | 10  | 0   | 10.00                  | 100         | 4                         | 80   | 704.80                    |
| H634                           | H              | PINEY POINT VILLAGE | Contract with City of Houston                               | 64.57607433  | 6.46  | 78.09712587   | 7.81  | 0.00   | 0   | 14.27                  | 118.89                    | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 692.89                    |
| H635                           | H              | PINEY POINT VILLAGE | Expanded use of groundwater                                 | 0.979192166  | 0.10  | 1.684836472   | 0.17  | 0.00   | 0   | 0.27                   | 2.22                      | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 596.22                    |
| H636                           | H              | PINEY POINT VILLAGE | Municipal conservation - medium water user group            | 9.831824062  | 0.98  | 8.91972498  | 0.89  | 0.00   | 0   | 1.88                   | 15.63                     | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 705.63                    |
| H637                           | H              | PINEY POINT VILLAGE | Reallocation of existing supplies                           | 90.16817594  | 9.02  | 11.29831516   | 1.13  | 0.00   | 0   | 10.15                  | 84.56                     | 10  | 0   | 10.00                  | 100         | 4                         | 80   | 708.56                    |
| H638                           | H              | PLANTATION MUD      | City of Sugar Land Groundwater Reduction Plan participation | 27.71084337  | 2.77  | 6.289308176   | 0.63  | 0.00   | 0   | 3.40                   | 28.33                     | 10  | 0   | 10.00                  | 100         | 2                         | 40   | 668.33                    |
| H639                           | H              | PLANTATION MUD      | Contract with City of Sugar Land                            | 52.40963855  | 5.24  | 83.64779874   | 8.36  | 0.00   | 0   | 13.61                  | 113.38                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 699.38                    |
| H640                           | H              | PLANTATION MUD      | Municipal conservation - medium water user group            | 100  | 10.00   | 10.06289308   | 1.01  | 0.00   | 0   | 11.01                  | 91.72                     | 10  | 0   | 10.00                  | 100         | 2                         | 40   | 731.72                    |
| H641                           | H              | PLEAK               | Expanded use of groundwater                                 | 63.63636364  | 6.36  | 90.12693935   | 9.01  | 5.00   | 0   | 20.38                  | 169.80                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 763.80                    |
| H642                           | H              | PLEAK               | Municipal conservation - small water user group             | 36.36363636  | 3.64  | 9.873060649   | 0.99  | 5.00   | 0   | 9.62                   | 80.20                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 770.20                    |
| H643                           | H              | PLUM GROVE          | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 822.33                    |
| H644                           | H              | PLUM GROVE          | Municipal conservation - small water user group             | 28.57142857  | 2.86  | 10.11235955   | 1.01  | 5.00   | 0   | 8.87                   | 73.90                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 763.90                    |
| H645                           | H              | POINT AQUARIUS MUD  | Expanded use of groundwater                                 | 6.49526387   | 0.65  | 10.15007899   | 1.02  | 0.00   | 0   | 1.66                   | 13.87                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 567.87                    |
| H646                           | H              | POINT AQUARIUS MUD  | Interim strategies - temporary overdraft                    | 73.80952381  | 7.38  | 0   | 0.00  | 0.00   | 0   | 7.38                   | 61.51                     | 5   | 0   | 5.00                   | 50          | 2                         | 40   | 575.51                    |
| H647                           | H              | POINT AQUARIUS MUD  | Municipal conservation - medium water user group            | 26.19047619  | 2.62  | 7.266982622   | 0.73  | 0.00   | 0   | 3.35                   | 27.88                     | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 717.88                    |
| H648                           | H              | POINT AQUARIUS MUD  | SJRA Water Resources Assessment Plan participation          | 85.97402597  | 8.60  | 82.58293839   | 8.26  | 0.00   | 0   | 16.86                  | 140.46                    | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 870.46                    |
| H649                           | H              | POINT BLANK         | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 802.33                    |
| H650                           | H              | POINT BLANK         | Municipal conservation - small water user group             | 45.45454545  | 4.55  | 22.22222222   | 2.22  | 5.00   | 0   | 11.77                  | 98.06                     | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 788.06                    |
| H651                           | H              | PORTER WSC          | Interim strategies - temporary overdraft                    | 72.42152466  | 7.24  | 0   | 0.00  | 0.00   | 0   | 7.24                   | 60.35                     | 5   | 0   | 5.00                   | 50          | 2                         | 40   | 574.35                    |
| H652                           | H              | PORTER WSC          | Municipal conservation - large water user group             | 27.57847534  | 2.76  | 8.574928542   | 0.86  | 0.00   | 0   | 3.62                   | 30.13                     | 10  | 0   | 10.00                  | 100         | 4                         | 80   | 710.13                    |
| H653                           | H              | PORTER WSC          | SJRA Water Resources Assessment Plan participation          | 85.01094092  | 8.50  | 91.42507146   | 9.14  | 0.00   | 0   | 17.64                  | 147.03                    | 10  | 5   | 15.00                  | 150         | 4                         | 80   | 821.03                    |
| H654                           | H              | PRAIRIE VIEW        | Expanded use of groundwater                                 | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                  | 208.33                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 802.33                    |
| H655                           | H              | PRAIRIE VIEW        | Municipal conservation - medium water user group            | 87.91208791  | 8.79  | 17.19457014   | 1.72  | 5.00   | 0   | 15.51                  | 129.26                    | 10  | 5   | 15.00                  | 150         | 2                         | 40   | 779.26                    |
| H656                           | H              | RAYFORD ROAD MUD    | Contract with SJRA  | 21.94871795  | 2.19  | 77.19178082   | 7.72  | 0.00   | 0   | 9.91                   | 82.62                     | 10  | 5   | 15.00                  | 150         | 5                         | 100  | 576.62                    |
| H657                           | H              | RAYFORD ROAD MUD    | Interim strategies - temporary overdraft                    | 72.45283019  | 7.25  | 0   | 0.00  | 0.00   | 0</   |                        |                           |   |   |                        |             |                           |  |                           |

| Alphabetized unique identifier | Sponsor Region | Sponsor                     | Recommended Water Management Strategy Name         | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility |                           |   |  |   |  |                        |
|--------------------------------|----------------|-----------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|----------------------------------|---------------------------|---|--|---|--|------------------------|
|                                |                |                             |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5                                | 5                         | 10  | 5  | 25  | 100  |                        |
|                                |                |                             |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Criteria 1 Total Score           | Criteria 1 Weighted Total | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] | Criteria 2 Total Score |
| H586                           | H              | SAN JACINTO RIVER AUTHORITY | City of Houston to SJRA contract                   | \$0           | 0                      | 36,377                 | 55,538                 | 54,582                 | 53,581                 | 52,534                 | Y   |  |   | 8  | 8  | 16  | 320                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H587                           | H              | SAN JACINTO RIVER AUTHORITY | SJRA Water Resources Assessment Plan               | \$900,000,000 | 0                      | 36,377                 | 55,538                 | 62,517                 | 92,677                 | 129,010                | Y   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H588                           | H              | SAN JACINTO RIVER AUTHORITY | TRA to SJRA contract                               | \$302,781,597 | 0                      | 0                      | 0                      | 7,935                  | 39,096                 | 76,476                 | N   |  |   | 4  | 8  | 12  | 240                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H589                           | H              | SAN JACINTO WSC             | Expanded use of groundwater                        | \$426,514     | 0                      | 68                     | 122                    | 155                    | 171                    | 181                    | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H590                           | H              | SAN LEON MUD                | Contract with GCWA                                 | \$2,189,171   | 0                      | 1,260                  | 1,260                  | 1,260                  | 1,260                  | 1,260                  | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H591                           | H              | SAN LEON MUD                | Expanded use of groundwater                        | \$11,783      | 0                      | 4                      | 5                      | 5                      | 5                      | 5                      | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H592                           | H              | SEABROOK                    | Contract with City of Pasadena                     | \$2,551,683   | 0                      | 967                    | 1,298                  | 1,929                  | 2,384                  | 2,384                  | Y   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H593                           | H              | SEABROOK                    | Expanded use of groundwater                        | \$205,013     | 0                      | 45                     | 87                     | 87                     | 87                     | 87                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H594                           | H              | SEABROOK                    | Municipal conservation - large water user group    | \$0           | 153                    | 182                    | 208                    | 237                    | 264                    | 293                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H595                           | H              | SEABROOK                    | Reallocation of existing supplies                  | \$2,564,531   | 1,109                  | 484                    | 484                    | 271                    | 188                    | 603                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H596                           | H              | SEALY                       | City of Sealy groundwater treatment expansion      | \$6,450,000   | 0                      | 360                    | 360                    | 360                    | 360                    | 888                    | Y   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H597                           | H              | SEALY                       | Expanded use of groundwater                        | \$0           | 0                      | 360                    | 608                    | 725                    | 785                    | 888                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H598                           | H              | SEALY                       | Municipal conservation - medium water user group   | \$0           | 0                      | 97                     | 112                    | 119                    | 123                    | 129                    | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H599                           | H              | SHENANDOAH                  | Contract with SJRA                                 | \$917,145     | 0                      | 0                      | 0                      | 258                    | 1,091                  | 1,892                  | Y   |  |   | 4  | 6  | 10  | 200                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H700                           | H              | SHENANDOAH                  | Interim strategies - temporary overdraft           | \$698,545     | 297                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |
| H701                           | H              | SHENANDOAH                  | Municipal conservation - medium water user group   | \$0           | 104                    | 121                    | 141                    | 162                    | 191                    | 226                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H702                           | H              | SHENANDOAH                  | SJRA Water Resources Assessment Plan participation | \$1,032,477   | 0                      | 737                    | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H703                           | H              | SHENANDOAH                  | SJRA Water Resources Assessment Plan participation | \$4,431,977   | 0                      | 0                      | 2,144                  | 1,808                  | 1,504                  | 1,304                  | Y   |  |   | 8  | 8  | 16  | 320                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H704                           | H              | SHEPHERD                    | Expanded use of groundwater                        | \$306,343     | 0                      | 54                     | 93                     | 110                    | 123                    | 130                    | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H705                           | H              | SHEPHERD                    | Municipal conservation - small water user group    | \$0           | 0                      | 20                     | 22                     | 23                     | 24                     | 24                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H706                           | H              | SHOREACRES                  | Expanded use of groundwater                        | \$7,070       | 0                      | 2                      | 3                      | 3                      | 3                      | 3                      | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H707                           | H              | SIENNA PLANTATION MUD       | Contract with City of Missouri City                | \$1,408,669   | 0                      | 318                    | 740                    | 772                    | 772                    | 772                    | Y   |  |   | 8  | 10 | 18  | 360                              | 3                         | 0   | 1  | 5   | 9  | 36                     |
| H708                           | H              | SIENNA PLANTATION MUD       | Municipal conservation - medium water user group   | \$0           | 63                     | 72                     | 72                     | 72                     | 72                     | 72                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H709                           | H              | SIMONTON                    | Expanded use of groundwater                        | \$1,163,829   | 0                      | 78                     | 173                    | 232                    | 352                    | 494                    | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H710                           | H              | SIMONTON                    | Municipal conservation - small water user group    | \$0           | 0                      | 0                      | 0                      | 38                     | 45                     | 54                     | N   |  |   | 4  | 6  | 10  | 200                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H711                           | H              | SOUTH HOUSTON               | Expanded use of groundwater                        | \$110,758     | 0                      | 21                     | 47                     | 47                     | 47                     | 47                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H712                           | H              | SOUTHERN MONTGOMERY         | Contract with SJRA                                 | \$0           | 0                      | 0                      | 0                      | 235                    | 856                    | 1,282                  | Y   |  |   | 4  | 6  | 10  | 200                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H713                           | H              | SOUTHERN MONTGOMERY         | Interim strategies - temporary overdraft           | \$740,701     | 315                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |
| H714                           | H              | SOUTHERN MONTGOMERY         | Municipal conservation - large water user group    | \$0           | 121                    | 152                    | 153                    | 158                    | 160                    | 164                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H715                           | H              | SOUTHERN MONTGOMERY         | SJRA Water Resources Assessment Plan participation | \$1,289,800   | 0                      | 866                    | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H716                           | H              | SOUTHERN MONTGOMERY         | SJRA Water Resources Assessment Plan participation | \$3,650,254   | 0                      | 0                      | 2,190                  | 1,650                  | 1,179                  | 884                    | Y   |  |   | 8  | 8  | 16  | 320                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H717                           | H              | SOUTHSIDE PLACE             | Contract with City of Houston                      | \$132,307     | 0                      | 0                      | 17                     | 39                     | 67                     | 67                     | Y   |  |   | 6  | 8  | 14  | 280                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H718                           | H              | SOUTHSIDE PLACE             | Expanded use of groundwater                        | \$23,565      | 0                      | 6                      | 10                     | 10                     | 10                     | 10                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H719                           | H              | SOUTHSIDE PLACE             | Municipal conservation - small water user group    | \$0           | 6                      | 24                     | 25                     | 27                     | 28                     | 30                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H720                           | H              | SOUTHSIDE PLACE             | Reallocation of existing supplies                  | \$142,789     | 0                      | 3                      | 6                      | 6                      | 5                      | 33                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H721                           | H              | SOUTHWEST UTILITIES         | Contract with City of Houston                      | \$549,865     | 0                      | 0                      | 475                    | 645                    | 752                    | 752                    | Y   |  |   | 6  | 8  | 14  | 280                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H722                           | H              | SOUTHWEST UTILITIES         | Expanded use of groundwater                        | \$44,775      | 0                      | 2                      | 4                      | 7                      | 12                     | 19                     | N   |  |   | 8  | 10 | 18  | 360                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H723                           | H              | SOUTHWEST UTILITIES         | Interim strategies - temporary overdraft           | \$101,329     | 43                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |
| H724                           | H              | SOUTHWEST UTILITIES         | Municipal conservation - large water user group    | \$0           | 42                     | 47                     | 53                     | 57                     | 63                     | 68                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H725                           | H              | SOUTHWEST UTILITIES         | Municipal conservation - medium water user group   | \$0           | 15                     | 20                     | 26                     | 32                     | 38                     | 47                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H726                           | H              | SOUTHWEST UTILITIES         | Reallocation of existing supplies                  | \$1,085,554   | 171                    | 509                    | 178                    | 91                     | 59                     | 151                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H727                           | H              | SOUTHWEST UTILITIES         | SJRA Water Resources Assessment Plan participation | \$975,437     | 0                      | 102                    | 166                    | 237                    | 336                    | 457                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H728                           | H              | SPLENDORA                   | Expanded use of groundwater                        | \$35,231      | 0                      | 0                      | 0                      | 6                      | 17                     | 25                     | N   |  |   | 4  | 6  | 10  | 200                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H729                           | H              | SPLENDORA                   | Interim strategies - temporary overdraft           | \$77,765      | 33                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |
| H730                           | H              | SPLENDORA                   | Municipal conservation - small water user group    | \$0           | 10                     | 12                     | 16                     | 21                     | 28                     | 36                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H731                           | H              | SPLENDORA                   | SJRA Water Resources Assessment Plan participation | \$970,800     | 0                      | 83                     | 141                    | 212                    | 313                    | 435                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H732                           | H              | SPRING CREEK UD             | Contract with SJRA                                 | \$574,559     | 0                      | 0                      | 0                      | 97                     | 455                    | 846                    | Y   |  |   | 4  | 6  | 10  | 200                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H733                           | H              | SPRING CREEK UD             | Expanded use of groundwater                        | \$0           | 0                      | 0                      | 0                      | 0                      | 17                     | 37                     | N   |  |   | 2  | 4  | 6   | 120                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H734                           | H              | SPRING CREEK UD             | Interim strategies - temporary overdraft           | \$214,409     | 91                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |
| H735                           | H              | SPRING CREEK UD             | Municipal conservation - medium water user group   | \$0           | 32                     | 36                     | 48                     | 61                     | 80                     | 101                    | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H736                           | H              | SPRING CREEK UD             | SJRA Water Resources Assessment Plan participation | \$313,303     | 0                      | 224                    | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 0   | 10   | 5   | 20   | 80                     |
| H737                           | H              | SPRING CREEK UD             | SJRA Water Resources Assessment Plan participation | \$1,934,935   | 0                      | 0                      | 727                    | 681                    | 626                    | 583                    | Y   |  |   | 8  | 8  | 16  | 320                              | 5                         | 0   | 10   | 5   | 20   | 80                     |
| H738                           | H              | SPRING VALLEY               | Contract with City of Houston                      | \$289,847     | 0                      | 0                      | 509                    | 642                    | 703                    | 703                    | Y   |  |   | 6  | 8  | 14  | 280                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H739                           | H              | SPRING VALLEY               | Municipal conservation - medium water user group   | \$0           | 53                     | 55                     | 56                     | 58                     | 60                     | 63                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 5   | 10   | 5   | 25   | 100                    |
| H740                           | H              | SPRING VALLEY               | Reallocation of existing supplies                  | \$1,164,476   | 213                    | 585                    | 190                    | 90                     | 56                     | 94                     | N   |  |   | 10 | 10 | 20  | 400                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H741                           | H              | STAGECOACH                  | Expanded use of groundwater                        | \$70,154      | 0                      | 0                      | 7                      | 15                     | 24                     | 36                     | N   |  |   | 6  | 8  | 14  | 280                              | 5                         | 0   | 1  | 5   | 11   | 44                     |
| H742                           | H              | STAGECOACH                  | Interim strategies - temporary overdraft           | \$32,992      | 14                     | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  |   | 10 | 10 | 20  | 400                              | 0                         | 0   | 1  | 5   | 6  | 24                     |

| Alphabetized unique identifier | Sponsor Region | Sponsor                     | Recommended Water Management Strategy Name         | Criteria 3 - Project Viability  |   |  |   |  |   | Criteria 4 - Project Sustainability |                           |   |   | Criteria 5 - Project Cost Effectiveness |                           | FINAL SCORE | Grouped With | Comments |  |                           |
|--------------------------------|----------------|-----------------------------|--|---|---|--|---|--|---|-------------------------------------|---------------------------|---|---|---|---------------------------|-------------|--------------|----------|--|---------------------------|
|                                |                |                             |  | 100   | 10  | 100  | 10  | 5.00   | 5   | 30.00                               | 250.00                    | 10  | 5   | 15.00                                   | 150                       |             |              |          | 5  | 100                       |
|                                |                |                             |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS') needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score              | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score                  | Weighted Criteria 4 Total |             |              |          | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H586                           | H              | SAN JACINTO RIVER AUTHORITY | City of Houston to SJRA contract                   | 86.46984716   | 8.65  | 37.65797151  | 3.77  | 0.00   | 5   | 17.41                               | 145.11                    | 10  | 0   | 10.00                                   | 100                       | 5           | 100          | 765.11   |  |                           |
| H587                           | H              | SAN JACINTO RIVER AUTHORITY | SJRA Water Resources Assessment Plan               | 84.12705341   | 8.41  | 30.14158157  | 3.01  | 0.00   | 5   | 16.43                               | 136.89                    | 10  | 0   | 10.00                                   | 100                       | 0           | 100          | 736.89   |  |                           |
| H588                           | H              | SAN JACINTO RIVER AUTHORITY | TRA to SJRA contract                               | 11.3952954  | 1.14  | 54.58867197  | 5.46  | 0.00   | 5   | 11.60                               | 96.65                     | 10  | 5   | 15.00                                   | 150                       | 0           | 100          | 530.65   |  |                           |
| H589                           | H              | SAN JACINTO WSC             | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H590                           | H              | SAN LEON MUD                | Contract with GCWA                                 | 100   | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 800.67   |  |                           |
| H591                           | H              | SAN LEON MUD                | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 760.67   |  |                           |
| H592                           | H              | SEABROOK                    | Contract with City of Pasadena                     | 57.62812872   | 5.76  | 70.82590612  | 7.08  | 0.00   | 0   | 12.85                               | 107.05                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 761.05   |  |                           |
| H593                           | H              | SEABROOK                    | Expanded use of groundwater                        | 2.681764005   | 0.27  | 2.584670232  | 0.26  | 0.00   | 0   | 0.53                                | 4.39                      | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 598.39   |  |                           |
| H594                           | H              | SEABROOK                    | Municipal conservation - large water user group    | 12.12361331   | 1.21  | 8.704693999  | 0.87  | 0.00   | 0   | 2.08                                | 17.36                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 747.36   |  |                           |
| H595                           | H              | SEABROOK                    | Reallocation of existing supplies                  | 87.87638669   | 8.79  | 17.9144385   | 1.79  | 0.00   | 0   | 10.58                               | 88.16                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 712.16   |  |                           |
| H596                           | H              | SEALY                       | City of Sealy groundwater treatment expansion      | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 0           | 100          | 858.33   |  |                           |
| H597                           | H              | SEALY                       | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 0           | 100          | 858.33   |  |                           |
| H598                           | H              | SEALY                       | Municipal conservation - medium water user group   | 26.94444444   | 2.69  | 14.52702703  | 1.45  | 5.00   | 0   | 9.15                                | 76.23                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 726.23   |  |                           |
| H599                           | H              | SHENANDOAH                  | Contract with SJRA                                 | 22.16494845   | 2.22  | 77.98845837  | 7.80  | 0.00   | 0   | 10.02                               | 83.46                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 577.46   |  |                           |
| H700                           | H              | SHENANDOAH                  | Interim strategies - temporary overdraft           | 74.06483791   | 7.41  | 0  | 0.00  | 0.00   | 0   | 7.41                                | 61.72                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.72   |  |                           |
| H701                           | H              | SHENANDOAH                  | Municipal conservation - medium water user group   | 25.93516209   | 2.59  | 9.315746084  | 0.93  | 0.00   | 0   | 3.53                                | 29.38                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 719.38   |  |                           |
| H702                           | H              | SHENANDOAH                  | SJRA Water Resources Assessment Plan participation | 85.8974359  | 8.59  | 0  | 0.00  | 0.00   | 0   | 8.59                                | 71.58                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 645.58   |  |                           |
| H703                           | H              | SHENANDOAH                  | SJRA Water Resources Assessment Plan participation | 100   | 10.00   | 53.7510305   | 5.38  | 0.00   | 0   | 15.38                               | 128.13                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 672.13   |  |                           |
| H704                           | H              | SHEPHERD                    | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H705                           | H              | SHEPHERD                    | Municipal conservation - small water user group    | 37.03703704   | 3.70  | 18.46153846  | 1.85  | 5.00   | 0   | 10.55                               | 87.92                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 777.92   |  |                           |
| H706                           | H              | SHOREACRES                  | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H707                           | H              | SIENNA PLANTATION MUD       | Contract with City of Missouri City                | 87.36263736   | 8.74  | 100  | 10.00   | 0.00   | 0   | 18.74                               | 156.14                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 782.14   |  |                           |
| H708                           | H              | SIENNA PLANTATION MUD       | Municipal conservation - medium water user group   | 100   | 10.00   | 9.958506224  | 1.00  | 0.00   | 0   | 11.00                               | 91.63                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 781.63   |  |                           |
| H709                           | H              | SIMONTON                    | Expanded use of groundwater                        | 100   | 10.00   | 90.1459854   | 9.01  | 5.00   | 0   | 24.01                               | 200.12                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 794.12   |  |                           |
| H710                           | H              | SIMONTON                    | Municipal conservation - small water user group    | 14.07407407   | 1.41  | 9.854014599  | 0.99  | 5.00   | 0   | 7.39                                | 61.61                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 591.61   |  |                           |
| H711                           | H              | SOUTH HOUSTON               | Expanded use of groundwater                        | 100   | 10.00   | 100  | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H712                           | H              | SOUTHERN MONTGOMERY         | Contract with SJRA                                 | 21.98316183   | 2.20  | 77.36873868  | 7.74  | 0.00   | 0   | 9.94                                | 82.79                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 576.79   |  |                           |
| H713                           | H              | SOUTHERN MONTGOMERY         | Interim strategies - temporary overdraft           | 72.24770642   | 7.22  | 0  | 0.00  | 0.00   | 0   | 7.22                                | 60.21                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 574.21   |  |                           |
| H714                           | H              | SOUTHERN MONTGOMERY         | Municipal conservation - large water user group    | 27.75229358   | 2.78  | 9.897404949  | 0.99  | 0.00   | 0   | 3.76                                | 31.37                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 761.37   |  |                           |
| H715                           | H              | SOUTHERN MONTGOMERY         | SJRA Water Resources Assessment Plan participation | 85.06876228   | 8.51  | 0  | 0.00  | 0.00   | 0   | 8.51                                | 70.89                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 700.89   |  |                           |
| H716                           | H              | SOUTHERN MONTGOMERY         | SJRA Water Resources Assessment Plan participation | 100   | 10.00   | 53.34942667  | 5.33  | 0.00   | 0   | 15.33                               | 127.79                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 727.79   |  |                           |
| H717                           | H              | SOUTHSIDE PLACE             | Contract with City of Houston                      | 29.31034483   | 2.93  | 47.85714286  | 4.79  | 0.00   | 0   | 7.72                                | 64.31                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 618.31   |  |                           |
| H718                           | H              | SOUTHSIDE PLACE             | Expanded use of groundwater                        | 18.18181818   | 1.82  | 7.142857143  | 0.71  | 0.00   | 0   | 2.53                                | 21.10                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 615.10   |  |                           |
| H719                           | H              | SOUTHSIDE PLACE             | Municipal conservation - small water user group    | 100   | 10.00   | 21.42857143  | 2.14  | 0.00   | 0   | 12.14                               | 101.19                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 831.19   |  |                           |
| H720                           | H              | SOUTHSIDE PLACE             | Reallocation of existing supplies                  | 9.090909091   | 0.91  | 23.57142857  | 2.36  | 0.00   | 0   | 3.27                                | 27.22                     | 10  | 5   | 15.00                                   | 150                       | 0           | 100          | 581.22   |  |                           |
| H721                           | H              | SOUTHWEST UTILITIES         | Contract with City of Houston                      | 52.71920089   | 5.27  | 50.40214477  | 5.04  | 0.00   | 0   | 10.31                               | 85.93                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 659.93   |  |                           |
| H722                           | H              | SOUTHWEST UTILITIES         | Expanded use of groundwater                        | 0.29455081  | 0.03  | 1.273458445  | 0.13  | 0.00   | 0   | 0.16                                | 1.31                      | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 595.31   |  |                           |
| H723                           | H              | SOUTHWEST UTILITIES         | Interim strategies - temporary overdraft           | 15.86715867   | 1.59  | 0  | 0.00  | 0.00   | 0   | 1.59                                | 13.22                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 527.22   |  |                           |
| H724                           | H              | SOUTHWEST UTILITIES         | Municipal conservation - large water user group    | 15.49815498   | 1.55  | 4.557640751  | 0.46  | 0.00   | 0   | 2.01                                | 16.71                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 746.71   |  |                           |
| H725                           | H              | SOUTHWEST UTILITIES         | Municipal conservation - medium water user group   | 5.53505351  | 0.55  | 3.150134048  | 0.32  | 0.00   | 0   | 0.87                                | 7.24                      | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 697.24   |  |                           |
| H726                           | H              | SOUTHWEST UTILITIES         | Reallocation of existing supplies                  | 63.099631   | 6.31  | 10.12064343  | 1.01  | 0.00   | 0   | 7.32                                | 61.02                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 685.02   |  |                           |
| H727                           | H              | SOUTHWEST UTILITIES         | SJRA Water Resources Assessment Plan participation | 15.02209131   | 1.50  | 30.63002681  | 3.06  | 0.00   | 0   | 4.57                                | 38.04                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 768.04   |  |                           |
| H728                           | H              | SPLENDORA                   | Expanded use of groundwater                        | 2.510460251   | 0.25  | 5.040322581  | 0.50  | 0.00   | 0   | 0.76                                | 6.29                      | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 480.29   |  |                           |
| H729                           | H              | SPLENDORA                   | Interim strategies - temporary overdraft           | 76.74418605   | 7.67  | 0  | 0.00  | 0.00   | 0   | 7.67                                | 63.95                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 577.95   |  |                           |
| H730                           | H              | SPLENDORA                   | Municipal conservation - small water user group    | 23.25581395   | 2.33  | 7.258064516  | 0.73  | 0.00   | 0   | 3.05                                | 25.43                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 755.43   |  |                           |
| H731                           | H              | SPLENDORA                   | SJRA Water Resources Assessment Plan participation | 87.36842105   | 8.74  | 87.7016129   | 8.77  | 0.00   | 0   | 17.51                               | 145.89                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 875.89   |  |                           |
| H732                           | H              | SPRING CREEK UD             | Contract with SJRA                                 | 22.14611872   | 2.21  | 75.53571429  | 7.55  | 0.00   | 0   | 9.77                                | 81.40                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 575.40   |  |                           |
| H733                           | H              | SPRING CREEK UD             | Expanded use of groundwater                        | 2.266666667   | 0.23  | 3.303571429  | 0.33  | 0.00   | 0   | 0.56                                | 4.64                      | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 418.64   |  |                           |
| H734                           | H              | SPRING CREEK UD             | Interim strategies - temporary overdraft           | 73.98373984   | 7.40  | 0  | 0.00  | 0.00   | 0   | 7.40                                | 61.65                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.65   |  |                           |
| H735                           | H              | SPRING CREEK UD             | Municipal conservation - medium water user group   | 26.01626016   | 2.60  | 9.017857143  | 0.90  | 0.00   | 0   | 3.50                                | 29.20                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 719.20   |  |                           |
| H736                           | H              | SPRING CREEK UD             | SJRA Water Resources Assessment Plan participation | 86.15384615   | 8.62  | 0  | 0.00  | 0.00   | 0   | 8.62                                | 71.79                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 681.79   |  |                           |
| H737                           | H              | SPRING CREEK UD             | SJRA Water Resources Assessment Plan participation | 100   | 10.00   | 52.05357143  | 5.21  | 0.00   | 0   | 15.21                               | 126.71                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 706.71   |  |                           |
| H738                           | H              | SPRING VALLEY               | Contract with City of Houston                      | 67.41721854   | 6.74  | 81.74418605  | 8.17  | 0.00   | 0   | 14.92                               | 124.30                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 698.30   |  |                           |
| H739                           | H              | SPRING VALLEY               | Municipal conservation - medium water user group   | 19.92481203   | 1.99  | 7.325581395  | 0.73  | 0.00   | 0   | 2.73                                | 22.71                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 712.71   |  |                           |
| H740                           | H              | SPRING VALLEY               | Reallocation of existing supplies                  | 80.07518797   | 8.01  | 10.93023256  | 1.09  | 0.00   | 0   | 9.10                                | 75.84                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 699.84   |  |                           |
| H741                           | H              | STAGECOACH                  | Expanded use of groundwater                        | 8.43373494  | 0.84  | 11.80327869  | 1.18  | 0.00   | 0   | 2.02                                | 16.86                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 570.86   |  |                           |
| H742                           | H              | STAGECOACH                  | Interim strategies - temporary overdraft           | 77.77777778   |   |  |   |  |   |                                     |                           |   |   |   |                           |             |              |          |  |                           |



| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Capital Cost  | Strategy Supplies 2010 | Strategy Supplies 2020 | Strategy Supplies 2030 | Strategy Supplies 2040 | Strategy Supplies 2050 | Strategy Supplies 2060 | WMS Supply Volume Listed with Another Strategy? | Rural/Agricultural Conservation/Reuse? | Criteria 1 - Decade of Need for Project |    |    |     | Criteria 2 - Project Feasibility  |  |   |  |                        |                  |
|--------------------------------|----------------|------------------------|--|---------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|--|---|----|----|-----|---|--|---|--|------------------------|------------------|
|                                |                |                        |  |               |                        |                        |                        |                        |                        |                        |   |  | MAXIMUM SCORES -->                      |    |    |     | 5   | 5  | 10  | 5  | 25                     | 100              |
|                                |                |                        |  |               |                        |                        |                        |                        |                        |                        |   |  | 10                                      | 10 | 20 | 400 | Uniform Standard 2A - What supporting data is available to show that the quantity of water needed is available? [Models suggest insufficient quantities of water or no modeling performed = 0 points; models suggest sufficient quantity of water = 3; field tests and measurements confirm sufficient quantities of water = 5] | Uniform Standard 2B - If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require? [Legal rights, water rights and/or contract application not submitted = 0 points; application submitted = 2; application is administratively complete = 3; legal rights, water rights and/or contracts obtained or not needed = 5] | engineering and/or planning has been accomplished for this project? [Project idea is outlined in RWP = 1 point; feasibility studies initiated = 2; feasibility studies completed = 3; conceptual design initiated = 4; conceptual design completed = 5; preliminary engineering report initiated = 6; preliminary engineering report completed = 7; preliminary design initiated = 8; preliminary design completed = 9; final design complete = 10] | Uniform Standard 2D - Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan? [No = 0 points; yes = 5] | Criteria 2 Total Score | Criteria 2 Total |
| H743                           | H              | STAGECOACH             | Municipal conservation - small water user group          | \$0           | 4                      | 6                      | 8                      | 11                     | 15                     | 20                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H744                           | H              | STAGECOACH             | SJRA Water Resources Assessment Plan participation       | \$568,408     | 0                      | 39                     | 68                     | 107                    | 165                    | 249                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 11                     | 44               |
| H745                           | H              | STANLEY LAKE MUD       | Contract with SJRA                                       | \$215,962     | 0                      | 0                      | 0                      | 84                     | 304                    | 445                    | Y   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H746                           | H              | STANLEY LAKE MUD       | Interim strategies - temporary overdraft                 | \$296,825     | 126                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 6                      | 24               |
| H747                           | H              | STANLEY LAKE MUD       | Municipal conservation - medium water user group         | \$0           | 44                     | 54                     | 54                     | 53                     | 53                     | 53                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H748                           | H              | STANLEY LAKE MUD       | SJRA Water Resources Assessment Plan participation       | \$699,426     | 0                      | 329                    | 423                    | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H749                           | H              | STANLEY LAKE MUD       | SJRA Water Resources Assessment Plan participation       | \$1,151,624   | 0                      | 0                      | 0                      | 593                    | 419                    | 307                    | Y   |  | 6                                       | 6  | 12 | 240 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H750                           | H              | STEAM ELECTRIC POWER   | Contract with NRG Energy                                 | \$0           | 0                      | 0                      | 0                      | 0                      | 0                      | 8,500                  | Y   |  | 0                                       | 2  | 2  | 40  | 3   | 0  | 1   | 5  | 9                      | 36               |
| H751                           | H              | STEAM ELECTRIC POWER   | Contract with GCWA                                       | \$52,675,432  | 0                      | 1,381                  | 1,992                  | 2,819                  | 3,828                  | 5,057                  | N   |  | 8                                       | 10 | 18 | 360 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H752                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | \$0           | 0                      | 401                    | 469                    | 469                    | 469                    | 469                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H753                           | H              | STEAM ELECTRIC POWER   | Interim strategies - temporary overdraft                 | \$5,998,882   | 2,803                  | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H754                           | H              | STEAM ELECTRIC POWER   | City of Houston indirect reuse                           | \$66,073,816  | 0                      | 0                      | 0                      | 10,150                 | 14,075                 | 14,075                 | N   |  | 4                                       | 6  | 10 | 200 | 3   | 0  | 4   | 5  | 12                     | 48               |
| H755                           | H              | STEAM ELECTRIC POWER   | Contract with City of Houston                            | \$59,758,433  | 0                      | 3,286                  | 3,357                  | 4,189                  | 5,154                  | 6,027                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H756                           | H              | STEAM ELECTRIC POWER   | Contract with City of Houston                            | \$74,955,232  | 0                      | 3,510                  | 7,093                  | 5,451                  | 5,451                  | 5,451                  | Y   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H757                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | \$6,116,862   | 0                      | 2,353                  | 2,758                  | 2,758                  | 2,758                  | 2,758                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H758                           | H              | STEAM ELECTRIC POWER   | Reallocation of existing supplies                        | \$18,645,352  | 400                    | 400                    | 394                    | 1,445                  | 1,220                  | 3,909                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H759                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | \$12,020,322  | 0                      | 1,278                  | 1,995                  | 2,869                  | 3,934                  | 5,233                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H760                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | \$3,686,708   | 0                      | 1,037                  | 811                    | 728                    | 588                    | 502                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H761                           | H              | STEAM ELECTRIC POWER   | SJRA Water Resources Assessment Plan participation       | \$6,989,246   | 0                      | 0                      | 0                      | 0                      | 1,593                  | 4,307                  | N   |  | 4                                       | 4  | 8  | 160 | 5   | 0  | 10  | 5  | 25                     | 100              |
| H762                           | H              | SUGAR LAND             | BRA to City of Sugar Land contract                       | \$0           | 0                      | 1,027                  | 2,947                  | 3,616                  | 3,875                  | 4,756                  | Y   |  | 8                                       | 8  | 16 | 320 | 3   | 5  | 10  | 5  | 23                     | 92               |
| H763                           | H              | SUGAR LAND             | City of Sugar Land Groundwater Reduction Plan            | \$82,576,224  | 0                      | 1,027                  | 2,947                  | 3,616                  | 3,875                  | 4,756                  | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H764                           | H              | SUGAR LAND             | City of Sugar Land Groundwater Reduction Plan - reuse    | \$78,783,825  | 0                      | 560                    | 5,040                  | 5,040                  | 5,040                  | 5,040                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H765                           | H              | SUGAR LAND             | Contract with City of Sugar Land                         | \$0           | 0                      | 0                      | 813                    | 1,251                  | 1,413                  | 2,252                  | Y   |  | 6                                       | 8  | 14 | 280 | 3   | 5  | 1   | 5  | 14                     | 56               |
| H766                           | H              | SUGAR LAND             | Municipal conservation - large water user group          | \$0           | 0                      | 1,542                  | 1,581                  | 1,574                  | 1,574                  | 1,574                  | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H767                           | H              | SUNBELT FWSD           | City of Houston Groundwater Reduction Plan participation | \$13,356,470  | 0                      | 0                      | 2,418                  | 4,018                  | 5,005                  | 5,967                  | N   |  | 6                                       | 8  | 14 | 280 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H768                           | H              | SUNBELT FWSD           | Contract with City of Houston                            | \$3,661,924   | 0                      | 2,842                  | 1,459                  | 553                    | 246                    | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H769                           | H              | SUNBELT FWSD           | Municipal conservation - large water user group          | \$0           | 285                    | 331                    | 375                    | 422                    | 468                    | 517                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H770                           | H              | SUNBELT FWSD           | Reallocation of existing supplies                        | \$1,072,839   | 576                    | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H771                           | H              | SURFSIDE BEACH         | Expanded use of groundwater                              | \$207,377     | 0                      | 11                     | 29                     | 47                     | 66                     | 88                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H772                           | H              | SURFSIDE BEACH         | Municipal conservation - small water user group          | \$0           | 0                      | 10                     | 12                     | 13                     | 14                     | 15                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H773                           | H              | SWEENEY                | Expanded use of groundwater                              | \$249,792     | 0                      | 0                      | 17                     | 37                     | 68                     | 106                    | N   |  | 6                                       | 8  | 14 | 280 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H774                           | H              | SWEENEY                | Municipal conservation - medium water user group         | \$0           | 0                      | 30                     | 40                     | 41                     | 43                     | 45                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H775                           | H              | TEXAS CITY             | Contract with GCWA                                       | \$13,660,907  | 0                      | 10,085                 | 10,085                 | 10,085                 | 10,085                 | 10,085                 | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H776                           | H              | THE WOODLANDS          | Contract with SJRA                                       | \$0           | 0                      | 0                      | 2,653                  | 9,514                  | 13,948                 | 13,948                 | Y   |  | 4                                       | 6  | 10 | 200 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H777                           | H              | THE WOODLANDS          | Expanded use of groundwater                              | \$0           | 0                      | 4,038                  | 2,033                  | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H778                           | H              | THE WOODLANDS          | Interim strategies - temporary overdraft                 | \$5,296,115   | 2,438                  | 0                      | 0                      | 0                      | 0                      | 0                      | N   |  | 10                                      | 10 | 20 | 400 | 0   | 0  | 1   | 5  | 6                      | 24               |
| H779                           | H              | THE WOODLANDS          | Municipal conservation - large water user group          | \$0           | 930                    | 1,686                  | 1,796                  | 1,788                  | 1,779                  | 1,779                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H780                           | H              | THE WOODLANDS          | SJRA Water Resources Assessment Plan participation       | \$26,522,191  | 0                      | 23,426                 | 25,536                 | 18,663                 | 13,118                 | 9,607                  | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H781                           | H              | TIKI ISLAND            | Contract with GCWA                                       | \$6,788,454   | 0                      | 630                    | 630                    | 630                    | 630                    | 630                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H782                           | H              | TIKI ISLAND            | Expanded use of groundwater                              | \$14,139      | 0                      | 4                      | 6                      | 6                      | 6                      | 6                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H783                           | H              | TOMBALL                | Municipal conservation - large water user group          | \$0           | 166                    | 209                    | 244                    | 306                    | 353                    | 420                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H784                           | H              | TOMBALL                | NHCRWA Groundwater Reduction Plan participation          | \$12,543,073  | 620                    | 2,102                  | 2,830                  | 3,760                  | 4,441                  | 5,442                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H785                           | H              | TRAIL OF THE LAKES MUD | Municipal conservation - large water user group          | \$0           | 90                     | 87                     | 86                     | 85                     | 85                     | 85                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H786                           | H              | TRAIL OF THE LAKES MUD | WHCRWA Groundwater Reduction Plan participation          | \$2,358,060   | 334                    | 876                    | 1,005                  | 986                    | 986                    | 986                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H787                           | H              | TRINITY                | Expanded use of groundwater                              | \$4,713       | 0                      | 2                      | 0                      | 0                      | 0                      | 0                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H788                           | H              | VARNER CREEK UD        | Expanded use of groundwater                              | \$697,489     | 0                      | 45                     | 108                    | 166                    | 228                    | 296                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H789                           | H              | VARNER CREEK UD        | Municipal conservation - small water user group          | \$0           | 0                      | 24                     | 27                     | 31                     | 35                     | 39                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H790                           | H              | WALKER COUNTY RURAL W  | Expanded use of groundwater                              | \$344,031     | 0                      | 78                     | 119                    | 119                    | 131                    | 146                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H791                           | H              | WALKER COUNTY RURAL W  | Municipal conservation - medium water user group         | \$0           | 0                      | 54                     | 55                     | 53                     | 53                     | 53                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H792                           | H              | WALLER                 | Expanded use of groundwater                              | \$1,602,145   | 0                      | 142                    | 268                    | 398                    | 545                    | 511                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H793                           | H              | WALLER                 | Municipal conservation - small water user group          | \$0           | 7                      | 36                     | 43                     | 49                     | 57                     | 67                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H794                           | H              | WALLER                 | Reallocation of existing supplies                        | \$448,989     | 0                      | 0                      | 0                      | 0                      | 0                      | 203                    | N   |  | 0                                       | 2  | 2  | 40  | 5   | 0  | 1   | 5  | 11                     | 44               |
| H795                           | H              | WALLIS                 | Expanded use of groundwater                              | \$84,837      | 0                      | 16                     | 24                     | 29                     | 31                     | 36                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H796                           | H              | WALLIS                 | Municipal conservation - small water user group          | \$0           | 0                      | 11                     | 11                     | 11                     | 12                     | 12                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H797                           | H              | WEBSTER                | Expanded use of groundwater                              | \$318,106     | 0                      | 68                     | 135                    | 135                    | 135                    | 135                    | N   |  | 8                                       | 10 | 18 | 360 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H798                           | H              | WEST HARDIN WSC        | Expanded use of groundwater                              | \$80,123      | 0                      | 6                      | 13                     | 18                     | 25                     | 34                     | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 1   | 5  | 16                     | 64               |
| H799                           | H              | WEST HARDIN WSC        | Municipal conservation - small water user group          | \$0           | 0                      | 2                      | 2                      | 3                      | 3                      | 3                      | N   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H800                           | H              | WEST HARRIS COUNTY MU  | City of Houston Groundwater Reduction Plan participation | \$979,608     | 135                    | 360                    | 416                    | 406                    | 401                    | 401                    | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H801                           | H              | WEST HARRIS COUNTY MU  | Municipal conservation - medium water user group         | \$0           | 34                     | 33                     | 33                     | 33                     | 32                     | 32                     | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H802                           | H              | WEST HARRIS COUNTY REG | City of Houston to WHCRWA contract                       | \$0           | 1,241                  | 31,837                 | 46,324                 | 52,759                 | 55,549                 | 58,402                 | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H803                           | H              | WEST HARRIS COUNTY REG | Contract with WHCRWA                                     | \$44,753,636  | 0                      | 31,837                 | 46,324                 | 40,241                 | 43,031                 | 38,961                 | Y   |  | 8                                       | 10 | 18 | 360 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H804                           | H              | WEST HARRIS COUNTY REG | Municipal conservation - small water user group          | \$0           | 178                    | 3,969                  | 4,343                  | 4,630                  | 4,743                  | 4,815                  | N   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 10  | 5  | 25                     | 100              |
| H805                           | H              | WEST HARRIS COUNTY REG | Reallocation of existing supplies                        | \$5,414,850   | 1,241                  | 0                      | 0                      | 12,518                 | 12,518                 | 19,441                 | N   |  | 10                                      | 10 | 20 | 400 | 5   | 0  | 1   | 5  | 11                     | 44               |
| H806                           | H              | WEST HARRIS COUNTY REG | Wastewater reclamation for municipal irrigation          | \$2,221,700   | 0                      | 0                      | 734                    | 1,290                  | 1,552                  | 1,686                  | N   |  | 6                                       | 10 | 16 | 320 | 3   | 0  | 1   | 5  | 9                      | 36               |
| H807                           | H              | WEST HARRIS COUNTY REG | WHCRWA Groundwater Reduction Plan                        | \$0           | 21,678                 | 52,274                 | 66,761                 | 73,196                 | 75,985                 | 78,839                 | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 8   | 5  | 23                     | 92               |
| H808                           | H              | WEST HARRIS COUNTY REG | WHCRWA internal distribution                             | \$552,472,000 | 21,678                 | 52,274                 | 66,761                 | 73,196                 | 75,985                 | 78,839                 | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 8   | 5  | 23                     | 92               |
| H809                           | H              | WEST HARRIS COUNTY REG | WHCRWA transmission line                                 | \$290,084,193 | 21,678                 | 52,274                 | 66,761                 | 73,196                 | 75,985                 | 78,839                 | Y   |  | 10                                      | 10 | 20 | 400 | 5   | 5  | 8   | 5  | 23                     | 92               |
| H810                           | H              |                        |  |               |                        |                        |                        |                        |                        |                        |   |  |   |    |    |     |   |  |   |  |                        |                  |

| Alphabetized unique identifier | Sponsor Region | Sponsor                | Recommended Water Management Strategy Name               | Criteria 3 - Project Viability   |   |   |   |  |   | Criteria 4 - Project Sustainability |                           |   |   | Criteria 5 - Project Cost Effectiveness |                           | FINAL SCORE | Grouped With | Comments |  |                           |
|--------------------------------|----------------|------------------------|--|--|---|---|---|--|---|-------------------------------------|---------------------------|---|---|---|---------------------------|-------------|--------------|----------|--|---------------------------|
|                                |                |                        |  | 100  | 10  | 100   | 10  | 5.00   | 5   | 30.00                               | 250.00                    | 10  | 5   | 15.00                                   | 150                       |             |              |          | 5  | 100                       |
|                                |                |                        |  | Uniform Standard 3A - In the decade the project supply comes online, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3B - In the final decade of the planning period, what is the % of the WUG's (or WUGS) needs satisfied by this project? [Calculation is based on the needs of all WUGs receiving water from the project.] | Converted Needs-based score for Uniform Standard 3A | Uniform Standard 3C - Is this project the only economically feasible source of new supply for the WUG, other than conservation? [No = 0 points; Yes = 5] | Uniform Standard 3D - Does this project serve multiple WUGs? [No = 0 points; Yes = 5] | Criteria 3 Total Score              | Weighted Criteria 3 Total | Uniform Standard 4A - Over what period of time is this project expected to provide water (regardless of the planning period)? [Less than or equal to 20 yrs = 5 points; greater than 20 yrs = 10] | Uniform Standard 4B - Does the volume of water supplied by the project change over the regional water planning period? [Decreases = 0 points; no change = 3; increases = 5] | Criteria 4 Total Score                  | Weighted Criteria 4 Total |             |              |          | Uniform Standard 5A - What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost) [200% or greater than median = 0 points; 150% to 199% = 1; 101% to 149% = 2; 100% = 3; 51% to 99% = 4; 0% to 50% = 5] | Weighted Criteria 5 Total |
| H743                           | H              | STAGECOACH             | Municipal conservation - small water user group          | 22.22222222  | 2.22  | 6.557377049   | 0.66  | 0.00   | 0   | 2.88                                | 23.98                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 753.98   |  |                           |
| H744                           | H              | STAGECOACH             | SJRA Water Resources Assessment Plan participation       | 86.66666667  | 8.67  | 81.63934426   | 8.16  | 0.00   | 0   | 16.83                               | 140.26                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 814.26   |  |                           |
| H745                           | H              | STANLEY LAKE MUD       | Contract with SJRA                                       | 21.9895288   | 2.20  | 77.5261324  | 7.75  | 0.00   | 0   | 9.95                                | 82.93                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 556.93   |  |                           |
| H746                           | H              | STANLEY LAKE MUD       | Interim strategies - temporary overdraft                 | 74.11764706  | 7.41  | 0   | 0.00  | 0.00   | 0   | 7.41                                | 61.76                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 575.76   |  |                           |
| H747                           | H              | STANLEY LAKE MUD       | Municipal conservation - medium water user group         | 25.88235294  | 2.59  | 9.233449477   | 0.92  | 0.00   | 0   | 3.51                                | 29.26                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 669.26   |  |                           |
| H748                           | H              | STANLEY LAKE MUD       | SJRA Water Resources Assessment Plan participation       | 85.90078329  | 8.59  | 0   | 0.00  | 0.00   | 0   | 8.59                                | 71.58                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 645.58   |  |                           |
| H749                           | H              | STANLEY LAKE MUD       | SJRA Water Resources Assessment Plan participation       | 100  | 10.00   | 53.48432056   | 5.35  | 0.00   | 0   | 15.35                               | 127.90                    | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 591.90   |  |                           |
| H750                           | H              | STEAM ELECTRIC POWER   | Contract with NRG Energy                                 | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 492.67   |  |                           |
| H751                           | H              | STEAM ELECTRIC POWER   | Contract with GCWA                                       | 77.49719416  | 7.75  | 91.51284835   | 9.15  | 0.00   | 0   | 16.90                               | 140.84                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 686.84   |  |                           |
| H752                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | 22.50280584  | 2.25  | 8.487151647   | 0.85  | 0.00   | 0   | 3.10                                | 25.82                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 679.82   |  |                           |
| H753                           | H              | STEAM ELECTRIC POWER   | Interim strategies - temporary overdraft                 | 100  | 10.00   | 0   | 0.00  | 0.00   | 0   | 10.00                               | 83.33                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 597.33   |  |                           |
| H754                           | H              | STEAM ELECTRIC POWER   | City of Houston indirect reuse                           | 54.74058893  | 5.47  | 44.11672518   | 4.41  | 0.00   | 0   | 9.89                                | 82.38                     | 10  | 5   | 15.00                                   | 150                       | 1           | 20           | 500.38   |  |                           |
| H755                           | H              | STEAM ELECTRIC POWER   | Contract with City of Houston                            | 34.41198031  | 3.44  | 18.89104814   | 1.89  | 0.00   | 0   | 5.33                                | 44.42                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 598.42   |  |                           |
| H756                           | H              | STEAM ELECTRIC POWER   | Contract with City of Houston                            | 36.75777568  | 3.68  | 17.0856319  | 1.71  | 0.00   | 0   | 5.38                                | 44.87                     | 10  | 0   | 10.00                                   | 100                       | 0           | 0            | 548.87   |  |                           |
| H757                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | 24.6413237   | 2.46  | 8.644684052   | 0.86  | 0.00   | 0   | 3.33                                | 27.74                     | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 621.74   |  |                           |
| H758                           | H              | STEAM ELECTRIC POWER   | Reallocation of existing supplies                        | 100  | 10.00   | 12.25238215   | 1.23  | 0.00   | 0   | 11.23                               | 93.54                     | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 687.54   |  |                           |
| H759                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 822.33   |  |                           |
| H760                           | H              | STEAM ELECTRIC POWER   | Expanded use of groundwater                              | 100  | 10.00   | 10.43876066   | 1.04  | 0.00   | 0   | 11.04                               | 92.03                     | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 636.03   |  |                           |
| H761                           | H              | STEAM ELECTRIC POWER   | SJRA Water Resources Assessment Plan participation       | 73.03988996  | 7.30  | 89.56123934   | 8.96  | 0.00   | 0   | 16.26                               | 135.50                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 625.50   |  |                           |
| H762                           | H              | SUGAR LAND             | BRA to City of Sugar Land contract                       | 71.86843947  | 7.19  | 78.50775834   | 7.85  | 0.00   | 5   | 20.04                               | 166.98                    | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 828.98   | H43  |                           |
| H763                           | H              | SUGAR LAND             | City of Sugar Land Groundwater Reduction Plan            | 100  | 10.00   | 19.17744472   | 1.92  | 0.00   | 5   | 16.92                               | 140.98                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 790.98   | H764   |                           |
| H764                           | H              | SUGAR LAND             | City of Sugar Land Groundwater Reduction Plan - reuse    | 100  | 10.00   | 19.17744472   | 1.92  | 0.00   | 5   | 16.92                               | 140.98                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 790.98   | H763   |                           |
| H765                           | H              | SUGAR LAND             | Contract with City of Sugar Land                         | 33.875   | 3.39  | 69.7645601  | 6.98  | 0.00   | 0   | 10.36                               | 86.37                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 672.37   |  |                           |
| H766                           | H              | SUGAR LAND             | Municipal conservation - large water user group          | 100  | 10.00   | 48.76084263   | 4.88  | 0.00   | 0   | 14.88                               | 123.97                    | 10  | 5   | 10.00                                   | 100                       | 4           | 80           | 763.97   |  |                           |
| H767                           | H              | SUNBELT FWSD           | City of Houston Groundwater Reduction Plan participation | 56.86735654  | 5.69  | 92.02652684   | 9.20  | 0.00   | 0   | 14.89                               | 124.08                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 694.08   |  |                           |
| H768                           | H              | SUNBELT FWSD           | Contract with City of Houston                            | 89.56823196  | 8.96  | 0   | 0.00  | 0.00   | 0   | 8.96                                | 74.64                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 658.64   |  |                           |
| H769                           | H              | SUNBELT FWSD           | Municipal conservation - large water user group          | 33.1010453   | 3.31  | 7.973473165   | 0.80  | 0.00   | 0   | 4.11                                | 34.23                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 764.23   |  |                           |
| H770                           | H              | SUNBELT FWSD           | Reallocation of existing supplies                        | 66.8989547   | 6.69  | 0   | 0.00  | 0.00   | 0   | 6.69                                | 55.75                     | 5   | 0   | 5.00                                    | 50                        | 4           | 80           | 629.75   |  |                           |
| H771                           | H              | SURFSIDE BEACH         | Expanded use of groundwater                              | 52.38095238  | 5.24  | 85.4368932  | 8.54  | 5.00   | 0   | 18.78                               | 156.51                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 750.51   |  |                           |
| H772                           | H              | SURFSIDE BEACH         | Municipal conservation - small water user group          | 47.61904762  | 4.76  | 14.5631068  | 1.46  | 5.00   | 0   | 11.22                               | 93.49                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 783.49   |  |                           |
| H773                           | H              | SWEENEY                | Expanded use of groundwater                              | 29.8245614   | 2.98  | 70.1986755  | 7.02  | 5.00   | 0   | 15.00                               | 125.02                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 639.02   |  |                           |
| H774                           | H              | SWEENEY                | Municipal conservation - medium water user group         | 100  | 10.00   | 29.8013245  | 2.98  | 5.00   | 0   | 17.98                               | 149.83                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 799.83   |  |                           |
| H775                           | H              | TEXAS CITY             | Contract with GCWA                                       | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 800.67   |  |                           |
| H776                           | H              | THE WOODLANDS          | Contract with SJRA                                       | 21.99287076  | 2.20  | 77.59666203   | 7.76  | 0.00   | 0   | 9.96                                | 82.99                     | 10  | 5   | 15.00                                   | 150                       | 5           | 100          | 576.99   |  |                           |
| H777                           | H              | THE WOODLANDS          | Expanded use of groundwater                              | 26.38870736  | 2.64  | 0   | 0.00  | 0.00   | 0   | 2.64                                | 21.99                     | 5   | 0   | 5.00                                    | 50                        | 5           | 100          | 575.99   |  |                           |
| H778                           | H              | THE WOODLANDS          | Interim strategies - temporary overdraft                 | 72.3871734   | 7.24  | 0   | 0.00  | 0.00   | 0   | 7.24                                | 60.32                     | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 574.32   |  |                           |
| H779                           | H              | THE WOODLANDS          | Municipal conservation - large water user group          | 27.6128266   | 2.76  | 9.897079277   | 0.99  | 0.00   | 0   | 3.75                                | 31.26                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 711.26   |  |                           |
| H780                           | H              | THE WOODLANDS          | SJRA Water Resources Assessment Plan participation       | 100  | 10.00   | 53.44645341   | 5.34  | 0.00   | 0   | 15.34                               | 127.87                    | 10  | 0   | 10.00                                   | 100                       | 5           | 100          | 827.87   |  |                           |
| H781                           | H              | TIKI ISLAND            | Contract with GCWA                                       | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 0           | 0            | 720.67   |  |                           |
| H782                           | H              | TIKI ISLAND            | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 0.00   | 0   | 20.00                               | 166.67                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 760.67   |  |                           |
| H783                           | H              | TOMBALL                | Municipal conservation - large water user group          | 21.11959288  | 2.11  | 7.164790174   | 0.72  | 0.00   | 0   | 2.83                                | 23.57                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 753.57   |  |                           |
| H784                           | H              | TOMBALL                | NHCRWA Groundwater Reduction Plan participation          | 78.88040712  | 7.89  | 92.83520983   | 9.28  | 0.00   | 0   | 17.17                               | 143.10                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 833.10   |  |                           |
| H785                           | H              | TRAIL OF THE LAKES MUD | Municipal conservation - large water user group          | 21.22641509  | 2.12  | 7.936507937   | 0.79  | 0.00   | 0   | 2.92                                | 24.30                     | 10  | 0   | 10.00                                   | 100                       | 4           | 80           | 704.30   |  |                           |
| H786                           | H              | TRAIL OF THE LAKES MUD | WHCRWA Groundwater Reduction Plan participation          | 78.77358491  | 7.88  | 92.06349206   | 9.21  | 0.00   | 0   | 17.08                               | 142.36                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 782.36   |  |                           |
| H787                           | H              | TRINITY                | Expanded use of groundwater                              | 100  | 10.00   | 0   | 0.00  | 5.00   | 0   | 15.00                               | 125.00                    | 5   | 0   | 5.00                                    | 50                        | 2           | 40           | 639.00   |  |                           |
| H788                           | H              | VARNER CREEK UD        | Expanded use of groundwater                              | 65.2173913   | 6.52  | 88.35820896   | 8.84  | 5.00   | 0   | 20.36                               | 169.65                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 763.65   |  |                           |
| H789                           | H              | VARNER CREEK UD        | Municipal conservation - small water user group          | 34.7826087   | 3.48  | 11.64179104   | 1.16  | 5.00   | 0   | 9.64                                | 80.35                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 770.35   |  |                           |
| H790                           | H              | WALKER COUNTY RURAL W  | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H791                           | H              | WALKER COUNTY RURAL W  | Municipal conservation - medium water user group         | 69.23076923  | 6.92  | 36.30136986   | 3.63  | 5.00   | 0   | 15.55                               | 129.61                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 729.61   |  |                           |
| H792                           | H              | WALLER                 | Expanded use of groundwater                              | 94.0397351   | 9.40  | 70  | 7.00  | 0.00   | 0   | 16.40                               | 136.70                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 680.70   |  |                           |
| H793                           | H              | WALLER                 | Municipal conservation - small water user group          | 100  | 10.00   | 9.178082192   | 0.92  | 0.00   | 0   | 10.92                               | 90.98                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 820.98   |  |                           |
| H794                           | H              | WALLER                 | Reallocation of existing supplies                        | 27.80821918  | 2.78  | 27.80821918   | 2.78  | 0.00   | 0   | 5.56                                | 46.35                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 360.35   |  |                           |
| H795                           | H              | WALLIS                 | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H796                           | H              | WALLIS                 | Municipal conservation - small water user group          | 68.75  | 6.88  | 33.33333333   | 3.33  | 5.00   | 0   | 15.21                               | 126.74                    | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 816.74   |  |                           |
| H797                           | H              | WEBSTER                | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 802.33   |  |                           |
| H798                           | H              | WEST HARDIN WSC        | Expanded use of groundwater                              | 100  | 10.00   | 100   | 10.00   | 5.00   | 0   | 25.00                               | 208.33                    | 10  | 5   | 15.00                                   | 150                       | 2           | 40           | 822.33   |  |                           |
| H799                           | H              | WEST HARDIN WSC        | Municipal conservation - small water user group          | 33.33333333  | 3.33  | 8.223529412   | 0.88  | 5.00   | 0   | 9.22                                | 76.80                     | 10  | 5   | 15.00                                   | 150                       | 4           | 80           | 766.80   |  |                           |
| H800                           | H              | WEST HARRIS COUNTY MU  | City of Houston Groundwater Reduction Plan participation | 79.8816568   | 7.99  | 92.60969977   | 9.26  | 0.00   | 0   | 22.25                               | 185.41                    | 10  | 0   | 10.00                                   | 100                       | 2           | 40           | 8        |  |                           |

# Texas Water Development Board

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

June 6, 2014

Mr. Mark Evans  
North Harris County Regional Water Authority  
3648 Cypress Creek Pkwy #110  
Houston, TX 77068

Re: Texas Water Development Board review of the draft prioritization of projects in the 2011 Region H Regional Water Plan

Dear Mr. Evans:

Texas Water Development Board staff has completed a review of the draft 2011 Region H project prioritization list submitted by June 1, 2014 on behalf of the Region H Regional Water Planning Group and found that the list of projects that were prioritized to be administratively complete.

- Attachment A contains comments that are specific to the Region H submission.
- Attachment B includes recommended guidance to help ensure uniform application of the standards. **Please note that Attachment B is subject to consideration by the Stakeholder Committee.**
- Attachment C provides answers to some general questions that were submitted by the regional water planning groups as part of this process.

As a reminder, the final project prioritizations must be submitted by September 1, 2014. If you have any questions, please do not hesitate to contact Lann Bookout at 512-936-9439.

Sincerely,



Kevin Patteson  
Executive Administrator

cc w/att: Mr. Jace Houston, San Jacinto River Authority

Attachment A: Comments on the Draft Prioritization of the 2011 Region H Regional Water Plan

Attachment B: Recommended Guidance to Ensure Uniformity of Final Prioritization Submissions

Attachment C: Answers to General Questions Received from RWPGs/Stakeholder Committee Members by June 1, 2014

Our Mission : Board Members

To provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas

: Carlos Rubinstein, Chairman | Bech Bruun, Member | Kathleen Jackson, Member  
: Kevin Patteson, Executive Administrator



## ATTACHMENT A

### Comments on the Draft Prioritization of the 2011 Region H Regional Water Plan

- A. Please consider adjusting the prioritization scores in accordance with all the recommended guidance in Attachment B for the final prioritization submission. **Note that Attachment B is a draft document provided by TWDB that is subject to the HB4 Stakeholder Committee's discretion.** Attachment B is being provided to the HB4 Stakeholder Committee for their consideration and possible use.
- B. It appears that the assumptions/methodology used by the regional water planning group (RWPG) to score projects under uniform standard 1B were not applied consistently to all projects. The assumption for uniform standard 1B states that "in the absence of specific information from the Infrastructure Finance Report (IFR), standard assumptions on funding lead time were applied..." However, Project H523 (Montgomery Co. MUD #9, Contract with SJRA) was scored as needing funding in 2030 when their IFR response indicates 2010. Please apply assumptions/methodologies consistently to all projects for each uniform standard in the final prioritization submission.
- C. Please see guidance item number 1 in Attachment B of this comment letter.
- D. Please see guidance item number 4 in Attachment B of this comment letter.
- E. Please see guidance item number 8 in Attachment B of this comment letter.
- F. Please see guidance item number 12 in Attachment B of this comment letter.

### **Recommended Guidance to Ensure Uniformity of Final Prioritization Submissions**

The following guidance is being offered to assist the Stakeholder Committee and RWPGs to achieve an acceptable degree of uniformity in the application of the uniform standards adopted by the stakeholder committee and approved by TWDB on December 5, 2013. This guidance was developed based on: a generic interpretation of the language of the uniform standards; the limits of the information contained within 2011 regional water plans; the time and resources available to the RWPGs; and with an acknowledgement of the flexible nature of the prioritization process moving forward. This guidance is strictly limited to recommending how the existing uniform standards should be applied within the confines of their existing scope as adopted by the Stakeholder Committee. **This guidance does not attempt to address any overall concerns about the uniform standards themselves or matters not currently taken into consideration by the uniform standards.**

**This guidance is subject to the Stakeholder Committee’s discretion. Coordinate with your Stakeholder Committee representative before applying these guidelines.**

|  |
|--|
| <b>RECOMMENDED GUIDANCE FOR APPLYING THE UNIFORM STANDARDS</b> |
|--|

1. **GENERAL - Grouping Projects for Scoring**

**Guidance:** *(As indicated in previous guidance provided on October 9, 2013)*

Projects cannot be bundled if they are considered separate projects and are presented as such in the regional plans and will or can be implemented separately. For example, two groundwater well projects that would serve two different entities and are entirely separate physically shouldn’t be prioritized together. **The reason for this is that each project could be built independently and there would not be a single borrower to implement those two projects.** Moreover, with separate entities, the projects may receive different scoring under the criteria specified by House Bill (HB) 4 due to entity-specific circumstances (e.g., decade of need, availability of water rights, cost-effectiveness, taking into consideration the expected unit cost). In instances when it is appropriate to bundle projects for scoring, please leave all the associated project line items in place (with their shared prioritization scores) and clearly note in the final submission where this occurred and which projects were related to each other.

2. **GENERAL – Tie-breakers**

**Background:** There are likely to be some ties in scoring projects at the regional level.

**Guidance:** In order to ensure uniformity in applying the uniform standards across all 16 regions, RWPGs should not introduce new variability into the scoring of projects by developing regional tie-breaking criteria. Ties at the regional level may not remain after a state-level prioritization.

3. **GENERAL – SWIFT funding category “flags”**

**Background:** The Stakeholder Committee included flags in the Uniform Standards document to allow RWPGs to indicate potential funding categories.

**Guidance:** These labels will not affect funding opportunities or priorities of projects requesting funding from TWDB. TWDB will determine what categories of funding each

project will qualify for at the time that funding applications are submitted, regardless of these flags.

4. **Uniform Standard 1A** - *What is the decade the RWP shows the project comes online?*

**Background:** (The choices for response to standard 1A include only the planning decades 2010-2060.)

**Guidance:** All the regional water plans present water supply information in the common form of the 2010-2060 planning decades. The online date of a project is the earliest planning decade presented in the published regional water plan in which there is a water supply volume shown, regardless of the date of water needs of any participants. A project that has zero supply shown for the 2010 decade, for example, could not be considered online in 2010 since there is not a supply volume in the 2010 decade. (Note that the online date of a project cannot be changed from what is in the regional water plan without a formal regional water plan amendment.)

5. **Uniform Standard 1B** - *In what decade is initial funding needed?*

**Background:** There were questions about how to determine the score if there was no response to the Infrastructure Financing Survey or other information in the published plan regarding a date that initial funding will be needed. Several standards (including 1B, 2B and 2C) include a footnote indicated by a double asterisk that states: “\*\* indicates that additional data may have to be collected by RWPG in order to score projects.”

**Guidance:** The footnote (\*\*) suggests that not all the uniform standard scores would be based on water plan information obtained at a single, common point in time (e.g., from 2011). Data sources for this score should be limited as much as possible to the published plan and Infrastructure Financing Survey responses (data provided by TWDB). In the absence of information directly related to the 2011 regional water plans, the RWPG should seek other published information and, in the absence of published information, the RWPG should apply a reasonable and consistent assumption for all project types. In any case, the decade that funding is needed should never be later than the decade the project comes online.

6. **Uniform Standards (2A-C):**

**2A** - *What supporting data is available to show that the quantity of water needed is available?*

**2B** - *If necessary, does the sponsor hold necessary legal rights, water rights and/or contracts to use the water that this project would require?*

**2C** - *What level of engineering and/or planning has been accomplished for this project? (Points based on progress on scientific data collection, stage of studies and design)*

**Background:** There were questions about whether the scoring had to be based on conditions at the time of the plan (adoption) or current conditions. Several uniform standards (including 2B and 2C ) include a footnote indicated by a double asterisk that states: “\*\* indicates that additional data may have to be collected by RWPG in order to score projects.”

**Guidance:** The addition of a new project through an amendment, for example, will likely require scoring the additional project based on currently available information. Therefore, we recommend currently available information whenever possible. Because the regional project prioritizations are not considered part of the regional water plans, they may be updated by the RWPGs in the future (e.g., if the uniform standards are modified). The effort and frequency with which RWPGs acquire updated information and update their regional water plan prioritizations is for each RWPG to determine.

7. **Uniform Standard 2D** - *Has the project sponsor requested (in writing for the 2016 Plan) that the project be included in the Regional Water Plan?*

**Background:** There were questions about whether the parenthetical statement regarding requests in writing was relevant to prioritizations of the 2011 regional water plans.

**Guidance:** The parenthetical should be ignored when prioritizing the 2011 regional water plans.

8. **Uniform Standards (3A and B):**

**3A** - *In the decade the project supply comes online, what is the % of the WUG's (or WUGs') needs satisfied by this project?*

**3B** - *In the final decade of the planning period, what is the % of the WUG's (or WUGs') needs satisfied by this project?*

**Background:** The basis for obtaining points in these standards is meeting a percentage of identified water needs in the plans.

**Guidance:**

- If the entities served by a strategy in the plan have no needs in a decade of interest, that strategy would not be meeting any water needs and should therefore score zero points.
- County-wide water user groups are considered a single water user group for the purpose of applying this standard.

9. **Uniform Standard 3C** - *Is this project the only economically feasible source of new supply for the WUG, other than conservation?*

**Guidance:**

- Since this particular uniform standard developed by the stakeholder committee does not directly consider conservation for scoring under this criteria, conservation would always score zero points based on the language.
- For projects that are the only economically feasible strategy other than conservation *for at least one of the WUGs served by the project* (in the case of a project sponsored by a wholesale water supplier and that serves multiple WUGs) it should score five points.

10. **Uniform Standard 3D** - *Does the project serve multiple WUGs?*

**Guidance:**

- A wholesale water provider project will only score 5 points if the water plan data indicates that multiple water user groups rely on the project.
- County-wide water user groups are considered a single water user group for the purpose of applying this standard.
- Water user groups split by river basin and/or regional water planning area are considered a single water user for the purpose of applying this standard.

11. **Uniform Standard 4B** - *Does the volume of water supplied by the project change over the regional water planning period?*

**Guidance:** Standard applies only to the associated “regional water planning period” (i.e., 2010 to 2060)

12. **Uniform Standard 5A** - *What is the expected unit cost of water supplied by this project compared to the median unit cost of all other recommended strategies in the region's current RWP? (Project's Unit Cost divided by the median project's unit cost)*

**Background:** There were questions about a) whether strategies with zero unit costs should be included in the calculation, and b) which decade should be used as the basis for the calculation when determining the cost of the project relative to the median unit cost of all the recommended strategies.

**Guidance:**

- The unit cost of all projects, including those with zero capital costs, should be included in the calculation of the median unit costs of projects in a regional water plan.
- The unit cost should be calculated using the first decade online unit cost of the project of interest relative to the median of the first decade online unit costs of all recommended strategies.

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**Answers to General Questions Received from RWPGs/Stakeholder Committee Members  
by June 1, 2014**

Below are questions and associated answers to some general questions related to the overall process, some of which had been previously addressed.

- 1. Q: When there is a data error in the 2012 plan, should the project be scored on erroneous information? Or is there a mechanism for dealing with these data errors other than going through a revision of the plan?**

*A: The projects in each regional water plan must be scored based on the information in the associated, adopted regional water plan. If a RWPG decides that information in its regional water plan is incorrect it may need to amend its plan or to request publication of an errata in order to modify information that may change a project's prioritization.*

- 2. Q: Does the project list [provided by TWDB based on the state water planning database] for prioritization include split WUGs?**

*A: No – the project lists provided by TWDB for each region include whole entity sponsors. (Splitting WUGs would have created redundant sponsor-project line items.)*

- 3. Q: Can projects be grouped across regions?**

*A: As stated in response number three in the October 9, 2013 “Answers to Questions Received from the House Bill 4 Prioritization Stakeholder Committee Members” projects may be bundled to reflect project development and the associated borrowers. In this particular case, both regions could present the same score for the shared project if that project would be implemented simultaneously in both regions. An associated comment should be placed in the list submitted by the region to TWDB identifying that the project was bundled across regions.*

- 4. Q: If a WMS serving the Region X plan has all of the associated capital costs presented in the Region Y plan, can Region X use the capital [associated unit costs] from the Region Y plan? Or use \$0 as their share of the cost as reflected in the plan?**

*A: See previous answer. Capital costs should remain associated with the listed sponsor of the project and cannot be associated with a different entity for the purposes of prioritizations.*

- 5. Q: Does DB12 [state water plan database] data have to be used?**

*A: Data entered by RWPGs into the state water planning database was required to be based directly on the regional water plans. There should not be significant differences between the data in the regional water plan document and DB12. If there is a specific discrepancy, RWPGs should base their prioritization on the published regional water plan data but should clearly note in their submission to TWDB, in each case, where this occurred. Each occurrence may require follow-up by the RWPG to correct their data in DB12 and may also require issuing a RWPG-approved errata to their 2011 regional water plan.*

- 6. Q: When calculating the percent of WUG needs met by a strategy, how is that reported? Some strategies meet needs for multiple WUGS, for example, irrigation in multiple counties. Since the spreadsheet has a supply available in each county, should they report the percent of needs met for irrigation in each county? The other way would be to add all the needs in counties where the WMS is recommended and calculate the percent of needs are met by the strategy.**

*A: The stakeholder committee uniform standards explicitly state that for each project the percent needs met is to be based on an aggregated calculation: “based on the total needs of all WUGs receiving water from the project.”*

- 7. Q: There are a large number of ties [between ranked projects] with no established way to break. Use volume? Unit cost?**

*A: It is not surprising that there may be a few ties. RWPGs are not to introduce any new standards for the purpose of breaking ties within a single region. TWDB will review the draft prioritizations, including tie rankings.*

- 8. Q: Is there a mechanism in the template to screen out projects which have already been implemented?**

*A: After the RWPG confirms the information with project sponsors, projects that have already been fully implemented may be noted as such in the prioritization data submission and disregarded.*

- 9. Q: How do we update prioritizations when a new project is amended into a regional water plan?**

*A: Once the RWPG adopts an amendment, the RWPG should score any amended projects and submit that project prioritization score along with the adopted amendment materials to TWDB.*

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## Agenda Item 17

Consider and take action on authorizing the Consultant Team to finalize and submit the final TWDB prioritization scoring template for Region H water management strategies included in the 2011 Regional Water Plan.



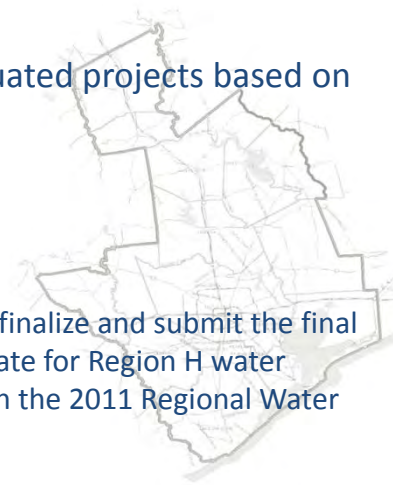
## Project Prioritization Submittal



- **Propose submittal of draft document as final version**
- Subject to additional or reevaluated projects based on proposed amendments

***Action:***

Authorize the Consultant Team to finalize and submit the final TWDB prioritization scoring template for Region H water management strategies included in the 2011 Regional Water Plan.





## Agenda Item 18

Receive a presentation from the Consultant Team regarding draft rules developed by TWDB related to the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT) and propose comments to be submitted to TWDB by September 1, 2014.





## Draft SWIFT/SWIRFT Rules

- Draft rules from TWDB – June 17<sup>th</sup>
  - 31 TAC Chapter 363, Financial Assistance Programs
  - 31 TAC §353.3, Board Meetings
  - 31 TAC §356.10, Definitions
  - 31 TAC §367.2, Definitions
- Program Provides Support for:
  - low-interest loans
  - longer repayment terms for loans
  - incremental purchase terms
  - deferral of loan payments
- Anticipate FAQ document to be made available

## Draft SWIFT/SWIRFT Rules

- State Prioritization Criteria

| Criteria                   | Maximum Points |
|----------------------------|----------------|
| Population Served          | 30             |
| Urban/Rural                | 30             |
| Regionalization            | 30             |
| Percentage of Needs Served | 30             |
| Local Contribution         | 5              |
| Capacity to Repay          | 2              |
| Emergency Need             | 3              |
| Ready to Proceed           | 3              |
| Conservation               | 15             |
| Regional Prioritization    | 15             |

## Draft SWIFT/SWIRFT Rules



### • State Prioritization Scoring

| Criteria                          | Potential %  |
|-----------------------------------|--------------|
| <b>Population Served</b>          | <b>13.44</b> |
| <b>Urban/Rural</b>                | <b>13.44</b> |
| <b>Regionalization</b>            | <b>13.44</b> |
| <b>Percentage of Needs Served</b> | <b>13.44</b> |
| Local Contribution                | 5.38         |
| Capacity to Repay                 | 2.15         |
| Emergency Need                    | 3.23         |
| Ready to Proceed                  | 3.23         |
| Conservation                      | 16.13        |
| Regional Prioritization           | 16.13        |

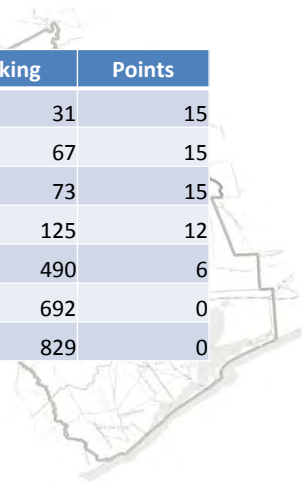
| Criteria                   | Potential % |
|----------------------------|-------------|
| Online Decade              | 3.23        |
| Funding Need               | 3.23        |
| Supporting Data            | 0.32        |
| Rights                     | 0.32        |
| Level of Planning          | 0.65        |
| Sponsor Request            | 0.32        |
| First Decade Supply Factor | 1.34        |
| 2060 Supply Factor         | 1.34        |
| Only Economical Source?    | 0.67        |
| Multiple WUG?              | 0.67        |
| Lifespan                   | 1.61        |
| Changing Volume?           | 0.81        |
| Unit Cost                  | 1.61        |

## Draft SWIFT/SWIRFT Rules



### • Representative Region H Priority Scoring

| Project                        | Ranking | Points |
|--------------------------------|---------|--------|
| COH Distribution Expansion     | 31      | 15     |
| COH Treatment Expansion        | 67      | 15     |
| Luce Bayou Transfer            | 73      | 15     |
| City of Pearland WTP           | 125     | 12     |
| Allens Creek Reservoir         | 490     | 6      |
| COH Indirect Reuse             | 692     | 0      |
| Brazoria Off-Channel Reservoir | 829     | 0      |

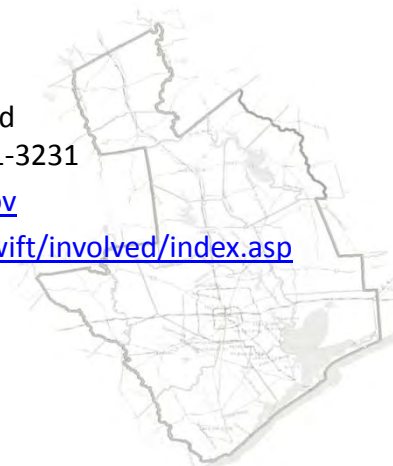


## Draft SWIFT/SWIRFT Rules



- **Comments Due**

- September 1, 2014
- Office of General Counsel  
Texas Water Development Board  
PO Box 13231, Austin, TX 78711-3231
- [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov)
- <http://www.twdb.state.tx.us/swift/involved/index.asp>





**TO:** Board Members

**THROUGH:** Kevin Patteson, Executive Administrator  
Les Trobman, General Counsel

**FROM:** Todd Chenoweth, Senior Advisor

**DATE:** June 17, 2014

**SUBJECT:** Proposed Rulemaking  
31 TAC Chapter 363, Financial Assistance Programs  
31 TAC §353.3, Board Meetings  
31 TAC §356.10, Definitions  
31 TAC §367.2, Definitions

## **ACTION REQUESTED**

Authorize publication of proposed amendments to 31 Texas Administrative Code (TAC) Chapter 363 relating to Financial Assistance Programs, 31 TAC §353.3 relating to Board Meetings, 31 TAC §356.10 of Subchapter A relating to Definitions, and 31 TAC §367.2 relating to Definitions, along with the proposed addition of Subchapter M to 31 TAC Chapter 363 relating to the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT).

## **BACKGROUND**

House Bill 4 together with Senate Joint Resolution 1, passed by the 83rd Texas Legislature, created the SWIFT and the SWIRFT to help finance projects in the state water plan and to provide ongoing state financial assistance for water supplies. In accordance with Texas Water Code §15.439, the Board is required to adopt rules that provide for the use of funds in the SWIFT/SWIRFT; that establish standards for determining whether projects meet the criteria for rural political subdivisions, agricultural water conservation or water conservation and reuse; and that specify the Board's criteria for prioritization of projects. Pursuant to Texas Water Code §6.101, the Board also has the authority to adopt rules it deems necessary to carry out its powers and duties.

## **KEY ISSUES**

*Proposed Amendments to 31 TAC Chapter 363, Subchapter A (relating to General Provisions).*

### **Our Mission** : **Board Members**

To provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas : Carlos Rubinstein, Chairman | Bech Bruun, Member | Kathleen Jackson, Member  
: Kevin Patteson, Executive Administrator

The proposed amendment to §363.1 (relating to Scope of Subchapter) adds the State Water Implementation Fund for Texas and the State Water Implementation Revenue Fund for Texas to the list of financial assistance programs covered by Chapter 363. The change is required because the board is proposing to implement these new financial assistance programs by adding a Subchapter M to Chapter 363.

The proposed amendment to §363.2 (relating to Definitions of Terms) adds the acronym SWIFT for the state water implementation fund for Texas and the acronym SWIRFT for the state water implementation revenue fund for Texas to the definitions used in Chapter 363 in order to have a convenient way to refer to these programs through the Chapter.

The proposed amendment to §363.33 (relating to Interest Rates for Loans and Purchase of Board's Interest in State Participation Projects) adds loans from the SWIRFT to the list of loan financial programs for which the board will establish lending rate scales, in order to cover the new financial program established by HB 4.

The proposed amendments to §363.51 (relating to Inspection during Construction) adds the phrase "provisions for environmental mitigative measures," in order to be consistent with §363.731. The requirement that the project engineer give assurance that the project is constructed in accordance with engineering principles is deleted for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles for consistency with Texas Water Code §17.183(a)(2)(A). And the proposed section adds the requirement that the political subdivision must take corrective action on a project as necessary to complete the project in accordance with the approved plans and specifications, in order to be consistent with §363.731, (relating to Inspection During Construction).

The proposed amendments to §363.731 (relating to Inspection During Construction) deletes the requirement that the project engineer give assurance that the project is constructed in accordance with engineering principles for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles, in order provide oversight that the contractor is meeting the obligations of its performance bond and for consistency with Texas Water Code §17.183(a)(2)(A).

The proposed amendment to §363.951 (relating to Construction Contract Requirements) adds the requirement that the executive administrator certifies that work on construction of a project has been completed in accordance with the approved plans and specifications, as well as deleting the requirement that the certification include that the work was done in accordance with sound engineering principles and practices, in order to implement Texas Water Code §17.183(a)(5)(C).

The proposed amendment to §363.953 (relating to Inspection of Projects) deletes the requirement that the project engineer give assurance that the project is constructed in accordance with engineering principles for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles in order provide oversight that the contractor is meeting the obligations of

its performance bond and for consistency with Texas Water Code §17.183(a)(2)(A). The rest of that section is reworded for consistency with §§363.51 and 363.731.

The proposed amendments to §363.955 (relating to Certificate of Approval) adds the words, “and specifications,” and deletes, “sound engineering principles,” in order to implement Texas Water Code §17.187.

*Proposed Amendment to 31 TAC Chapter 363 by addition of a New Subchapter M (relating to State Water Implementation Fund for Texas and State Water Implementation Revenue Fund for Texas)*

The new §363.1301 (relating to Scope of Subchapter M) is proposed to specify the scope and coverage of the Subchapter M. Subchapter M governs the board’s new financial program to provide loans to political subdivisions to finance management strategies in the state water plan. Subchapter A of Chapter 363 will also apply to the program except to the extent there is a conflict with Subchapter M, in which case Subchapter M will apply.

The new proposed §363.1302 (relating to Definition of Terms) is proposed to provide definitions of terms used throughout Subchapter M.

The proposed definition of “Agricultural water conservation” is defined by referring to the board’s existing Agricultural Water Conservation Program. Those types of projects covered by the Agricultural Water Conservation Program would be eligible for funding under the SWIFT/SWIRFT loan program if it were otherwise qualified, e.g. the project was a water management strategy in the state water plan.

The proposed definition of “Agricultural irrigation project” includes projects on agricultural lands that improve water delivery or application efficiency. Also included in the proposed definition are projects that install new water sources, such as a well, or new irrigation systems on agricultural land. Finally the proposed definition would also cover the purchase and installation of meters.

The proposed rules define “Alternative facility,” “Excess capacity,” and “Existing needs,” consistent with the use of those terms for the board’s existing state participation program, 31 TAC §§363.1001- 363.1017.

The rule proposes to define “Historically Underutilized Business,” consistent with the definition in Texas Water Code §15.431, which references Section 2161.001, Government Code, and the implementing regulations of that section.

The proposed rule would define “Reuse,” as the use of groundwater or surface water that has already been beneficially used because this is the definition used in the state water plan. See Water for Texas 2012, pages 170 and 249. This definition would include both direct reuse, where water that has been used once is treated and then reused, and indirect reuse where the once

used water is treated, discharged to a surface water body or injected into an aquifer, and then retrieved at a later time.

The proposed rule would define “Rural,” as required by Texas Water Code §15.434(b)(1)(A), which is to use the definition found in Texas Water Code §15.992. The proposed rule uses that definition but further specifies that the board will use the most current data available from the U.S. Bureau of the Census or board-approved projections for the population figures.

The proposed rule would define “Water conservation,” consistent with the definition in the state’s best management practices guide for water conservation, first developed by the Water Conservation Implementation Task Force in 2004 and since updated and maintained by the Water Conservation Advisory Council established pursuant to Texas Water Code Chapter 10. The preamble notes that Texas Water Code §15.434(b)(2) seems to draw a distinction between “water conservation,” and “reuse.” In light of this statutory language, the preamble specifically invites comments on whether the phrase “or increase the recycling and reuse of water,” should be deleted from the final definition of “water conservation.” The preamble notes that if this deletion was made, reuse projects would still count toward satisfying the requirements of the 20% of funds for water conservation and reuse.

The proposed rule would define “Water plan project,” in a manner consistent with the use of the term in the state water plan and common usage among water professionals dealing with water resources planning in Texas.

The proposed rule would define “Water supply need,” in a manner consistent with the use of the term in the state water plan and common usage among water professionals dealing with water resources planning in Texas and consistent with the use of the term in Texas Water Code §16.053.

Proposed §363.1303 (relating to the Prioritization System) provides a prioritization system required by Texas Water Code §15.437. The proposed prioritization system functions similar to the prioritization system for the current Water Infrastructure Fund of §363.1207, but dates and timing of SWIFT/SWIRFT applications will not be fixed by rule to give the board additional flexibility in the timing of when it will make funds available.

Proposed §363.1304 (relating to Prioritization Criteria) incorporates a priority criteria into the SWIFT/SWIRFT rules required by Texas Water Code §15.437. The proposed criteria provide for consideration of the various statutorily required factors, giving the most weight to those factors required by statute to receive the highest consideration. The proposed rules would implement the criteria for the local contribution to finance the project and the criteria related to federal funding for the project being used or sought by combining those two criteria into one category for obtaining points. In keeping with Texas Water Code §15.437(d)(6), the proposed rule has a proposed criteria relative to water conservation. While the proposed priority system does not have criteria for projects that serve rural political subdivisions, the executive administrator is of the opinion that many rural political subdivisions will be able to obtain points for the project meeting the needs of a high percentage of the water supply needs of the water users to be served.



Proposed §363.1305 (relating to Use of Funds) incorporates restrictions on the use of funds provided by Texas Water Code §15.474.

Proposed §363.1306 (relating to Interest Rates on Loans) identifies the timing and general method that the board would use to set the interest rates for SWIFT and SWIRFT project funding and payment deferrals.

Proposed §363.1307 (relating to Pre-design Funding Option) sets out the requirements for projects under this Subchapter to utilize the pre-design funding option.

Proposed §363.1308 (relating to Board Participation Program) sets out the requirements for projects where the applicant desires the board to acquire an ownership interest in the project that the applicant will buy back over time.

Proposed §363.1309 (related to Findings Required) states the findings by the board that are required prior to approval of an application for financial assistance under the SWIFT and SWIRFT program.

Proposed §363.1310 (related to Action of the Board on Application) sets out the board's decision on an application. The recommended proposed rule states that the commitment will include a date after which the financial assistance will no longer be available. The recommended proposed rule did not set a specific date by rule in order to retain some flexibility in adjusting the time period. The executive administrator is of the opinion that the proposed rule would allow the board to make commitments over multiple years with specific take downs amounts each year, with the interest rate for each take down determined by the debt service schedule in effect at the time.

Proposed §363.1311 (relating to Rural and Water Conservation Reporting) sets out how the board would report and account for the project funds: (1) 10% of which support projects for rural political subdivisions and agricultural water conservation, and (2) 20% of which support projects for water conservation and reuse, including agricultural irrigation projects. This proposed section is in part to implement Texas Water Code §15.434(b).

The recommended proposed rule would require the executive administrator to assign costs to the specified categories. Any costs that are shared would be proportionally allocated. For example, for a project that served a diverse urban and rural area, the executive administrator would first decide which costs are associated with the urban area and which cost are associated with the rural area. For the remaining costs that are shared by both areas, the percentage allocated to rural would be the ratio of rural costs to the total of direct urban and rural costs.

Proposed §363.1312 (relating to Reporting Requirements Regarding Historically Underutilized Businesses) sets out a proposed requirement that political subdivisions report the use of historically underutilized businesses that worked on the board funded project. This reporting is intended to allow the executive administrator to then be able to report this information to the

State Water Implementation Fund for Texas Advisory Committee as required by Texas Water Code §15.438(n)(2).

*Proposed Amendment to 31 TAC Chapter 353, Subchapter A (relating to General Provisions).*

The proposed amendment to §353.3 (relating to Board Meetings) if adopted, would make changes to the scheduling of board meetings, the presiding board member in the absence of the Chairman, and the calling of special meetings of the board. The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4, Section 1.06 which amended Texas Water Code Section 6.060 (relating to Board Meetings). The proposed rule is necessary to implement that provision.

*Proposed Amendments to 31 TAC Chapter 356, Subchapter A (relating to General Provisions).*

The proposed amendment to §356.10 (relating to Definitions) if adopted, would amend the definition of “Board,” for purposes of 31 TAC Chapter 356, (relating to Groundwater Management) by deleting any reference to the number of board members serving as the governing body of the state agency, the Texas Water Development Board. The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the board from six members to three members. The proposed amendment would implement this legislative change.

*Proposed Amendments to 31 TAC Chapter 367.2, (relating to Definitions).*

The proposed amendment to §367.2 (relating to Definitions) if adopted, would amend the definition of “Board,” for purposes of 31 TAC Chapter 367, (relating to Agricultural Water Conservation Program) by deleting any reference to the number of board members serving as the governing body of the state agency, the Texas Water Development Board. The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the board from six members to three members. The proposed amendment would implement this legislative change.

**RECOMMENDATION**

Authorize publication of proposed amendments to 31 TAC Chapter 363 relating to Financial Assistance Programs, 31 TAC §353.3 of Subchapter A relating to Board Meetings, 31 TAC § 356.10 of Subchapter A relating to Definitions, and 31 TAC § 367.2 relating to Definitions, along with the proposed addition of Subchapter M to 31 TAC Chapter 363 relating to the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT).

Draft Rulemaking

6/17/14

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This recommendation has been reviewed by legal counsel and the action requested is within the authority of the Board.

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Les Trobman  
General Counsel

Attachment: Proposed rulemaking for publication in the Texas Register

## **CHAPTER 363. FINANCIAL ASSISTANCE PROGRAMS**

The Texas Water Development Board (board or TWDB) proposes amendments to 31 TAC §§363.1, 363.2, 363.33, and 363.51 of Subchapter A, relating to General Provisions, to ensure consistency with recent statutory amendments made to Chapter 15, Texas Water Code, relating to the establishment of the State Water Implementation Fund for Texas (SWIFT) and the State Water Implementation Revenue Fund for Texas (SWIRFT), and to Chapter 17, Texas Water Code, relating to Construction Contract Requirements, Inspection of Projects, and Certificates of Approval. The specific provisions being amended and the reasons for the amendments are addressed in more detail below.

The board proposes amendments to 31 TAC §363.731 of Subchapter G relating to Small Community Emergency Loan Program Division 4, Construction and Post-Construction Phase, to ensure consistency with recent statutory amendments to Chapter 17, Texas Water Code, relating to Construction Contract Requirements, Inspection of Projects, and Certificates of Approval. The specific provisions being amended and the reasons are addressed in more detail below.

The board proposes amendments to 31 TAC §§363.951, 363.953, and 363.955, of Subchapter I, relating to Pilot Program for Water and Wastewater Loans to Rural Communities Division 4, Construction and Post-Construction, to ensure consistency with recent statutory amendments to Chapter 17, Texas Water Code, relating to Construction Contract Requirements, Inspection of Projects, and Certificates of Approval. The specific provisions being amended and the reasons are addressed in more detail below.

The board proposes to add new Subchapter M, §§363.1301 – 363.1312, relating to the SWIFT and the SWIRFT, to implement certain recent statutory amendments to Chapter 15, Texas Water Code, Subchapters G and H relating to the SWIFT and the SWIRFT. These new rules are addressed in more detail below.

### **BACKGROUND AND SUMMARY OF THE FACUTAL BASIS FOR THE PROPOSED AMENDMENTS.**

The Legislature created the SWIFT and SWIRFT to ensure financial assistance is available to provide an adequate water supply for the future of this state. The SWIFT was created by the Legislature to serve as a water infrastructure bank in order to enhance the financing capabilities of the TWDB under constitutionally created programs and revenue bond programs. No financial assistance is provided from the SWIFT directly to political subdivisions. Instead, SWIFT provides a source of revenue or security for board financial programs and provides a cash flow mechanism under which money used in board programs flows back to the SWIFT to provide protection for the

SWIFT corpus. Money in the SWIFT will be available to provide support for low-interest loans, longer repayment terms for loans, incremental repurchase terms for projects in which the state owns an interest and deferral of loan payments. The financial assistance cannot be in the form of a grant. The SWIRFT was created by the Legislature for use in managing revenue bonds issued by the board that are supported by the SWIFT. In the preamble and rule, reference is often made to the “SWIFT and SWIRFT,” because the financial assistance to political subdivisions is provided from SWIRFT with support from SWIFT, or SWIFT may be used to support other board programs. Use of the phrase “SWIFT and SWIRFT” or “SWIFT or SWIRFT” in the preamble and rules is intended to only describe the programs and is not intended to describe the movement of monies between the two funds for any purpose. The SWIFT and SWIRFT programs are solely for the purpose of supporting projects in the state water plan.

The board is proposing the present rules to implement the SWIFT and the SWIRFT by creating a new Subchapter in Chapter 363, relating to Financial Assistance Programs. By placing the SWIFT and SWIRFT into this chapter, the provisions of Chapter 363, Subchapter A, relating to General Provisions will apply to the SWIFT and SWIRFT programs unless those provisions conflict with Subchapter M, relating to the SWIFT and the SWIRFT. This allows the board to use the procedures and practices common to many of the board’s existing financial programs rather than to recreate them separately in the SWIFT and SWIRFT rules. Applicants will find the utilization of existing and understood practices more convenient and efficient, as opposed to having to navigate and understand a totally new rule and process. Because we are placing the SWIFT and SWIRFT program as a new subchapter in existing rules, to read and understand all of the rules that will apply to the program, Chapter 363, Subchapter M, relating to SWIFT and SWIRFT, must be read together with Subchapter A, relating to General Provisions. The board is currently examining its processes and procedures for all of its financial programs looking for efficiencies and process improvements. The board intends to continually seek to enhance our processes to be as efficient as possible, consistent with our statutory duties and fiduciary responsibilities.

The executive administrator envisions that the application process for SWIFT and SWIRFT loans will function similar to the process for the existing Water Infrastructure Fund program, as modified by any process improvements. On a semiannual schedule specified by the board and not more frequently than twice in any state fiscal year, the TWDB will announce that they will be taking applications for SWIRFT/SWIRFT loans. As it is currently structured in the Water Infrastructure Fund program, the executive administrator anticipates receiving an initial abridged application and longer application at the appropriate time. The executive administrator will recommend a prioritized list of applications based on the criteria specified in proposed rule §363.1304. The prioritized list of projects, as recommended by the executive administrator, will go to the board for deliberation and preliminary decision. Those projects that are selected

by the board for funding may be required to submit additional information as part of the due diligence process. The financial application will then be subject to the executive administrator's traditional analysis for project viability and ability to repay the loan.

The executive administrator envisions that once the staff analysis is complete, based on the application and due diligence process, the application will go to the board for their deliberation and decision. If the board has made a commitment to fund the project, similar to the current process, the applicant will execute a financing agreement that allows the board to include the applicant's requested amount in the TWDB's bond issue and that specifies when the applicant must close on the loan with the board. The board may require that the applicant must close within a very short time of the board obtaining the proceeds from its bond issue that it will use to fund the loan with the applicant. A discussion regarding the timing between commitment and closing is discussed in further detail in the section by section analysis. Interest rates and the terms and conditions of the loans and any repurchase agreements will be developed on a case-by-case basis and will depend on what is necessary to meet the immediate and long-term needs for water as contained in the state water plan existing at that time, what is necessary to preserve the long-term viability of the SWIFT and SWIRFT program, and current market conditions.

The executive administrator anticipates, prior to the first round of SWIFT and SWIRFT funding, developing an instructional and Frequently Asked Questions document that will further detail the application and due diligence process.

Prior to proposing these rules, the board engaged in an extensive effort of outreach and solicitation of input and suggestions from the public on the implementation of House Bill 4, 83rd Legislature, 2013, (HB 4). Individual board members traveled across the state talking to regional water planning groups, civic organizations, the public, and representatives of various interest groups on how best to implement HB 4. The board also held work sessions on February 11, 2014, in Conroe, on February 24, 2014, in Lubbock, on March 24, 2014, in Harlingen, and on May 29, 2014, in El Paso. As an agenda item in each of these work sessions, the board took comments on what should be contained in these rules. The executive administrator also held three staff-led stakeholder meetings on January 31, February 19, and March 6, 2014, in Austin to have a dialogue with any interested parties and members of the public on the suggested content of these rules. The board also received over 35 written comments on implementation of HB 4 via e-mail or through the board's web site.

The board wishes to sincerely thank all of the individuals and organizations that provided comments on the development of these proposed rules. The board acknowledges that public participation in this process has led to the improvement of these proposed rules. For those organizations and individuals that do not see all of their

comments incorporated into these proposed rules, the board sincerely encourages you to continue to participate and use this opportunity to make formal comments on these proposed rules. The process for making comment on these proposed rules is explained toward the close of this preamble.

In addition to the comments that the board receives from members of the public through the comment process, the board will consider comments from the State Water Implementation Fund for Texas Advisory Committee in accordance with Texas Water Code §15.438(g).

During the board's solicitation of early comments for development of these proposed rules, the board received comments and suggestions on a number of issues that are not covered in the proposed rule. The board will consider similar comments if received during the official comment period of this rule.

Among those early comments were some suggestions on application processing by the executive administrator, as well as suggestions for changes to the board's oversight of political subdivisions in their bidding process and construction oversight on board-funded projects. The board appreciates those comments. The board tentatively decided not to include those suggestions in these proposed rules. In some cases those suggestions can be made without a rule change. In many cases the suggestions were made, or could be made, to all the board's financial programs, not just the SWIFT and SWIRFT. Those suggestions have been passed on to the executive administrator for his consideration. The executive administrator is actively looking for ways to improve all board financial programs and those suggestions will be carefully considered.

In a similar vein, the board received several suggestions related to the structure and the terms of financing that should be offered under SWIFT and SWIRFT financing. As will be seen, very few decisions on the structure and terms of financing, beyond what is set out in HB 4, are made in these proposed rules. Some of the suggestions the board considers valid and may be adopted by the board. The board has tentatively decided to not place those suggestions in the proposed rule. The board's current opinion is that the terms and structure of SWIFT and SWIRFT will of necessity need to change over time. In order to preserve the ability of the board to respond as quickly as events dictate, such as changing market conditions and varying demands for funding, the board is opting to keep as much flexibility as possible with the board by keeping the rules on structure and terms of the SWIFT and SWIRFT to a minimum. However, the board solicits comments on this approach as well as comments on how the SWIFT and SWIRFT financing might best be structured.

The proposed rules do not contain a rule related to the uniform standards and the prioritization of projects by the regional water planning groups set forth in Texas Water Code §15.436. Prior to the effective date of HB 4, the board created a statutorily

mandated stakeholder committee of the regional water planning groups to develop uniform standards to be used by the regional water planning groups in prioritizing their projects in their regional water plans. The stakeholder committee commenced working with a webinar on September 17, 2013. The committee then worked at developing the uniform standards at three two-day meetings and held two conference calls. The stakeholder committee submitted its Uniform Standards to the board on November 25, 2013. As required by Texas Water Code §15.436(c), the board approved the stakeholder committee's recommended uniform standards at its board meeting on December 5, 2013. The current set of uniform standards can be found on the agency's web site. If and when the stakeholder committee makes recommendations to the board to amend the uniform standards, the board intends to take up those recommendations for consideration, and if appropriate, approve amendments to the uniform standards. It may be appropriate, at some point in the future, once general consensus is reached that the regional planning group standards are appropriate and tested to propose rulemaking. However, the board solicits comments on its approach to approve the uniform standards by board item action instead of by rule. The board also solicits comments on the current uniform standards for regional water planning group prioritization of projects as approved by the board on December 5, 2013.

The board has tentatively decided to not propose a rule related to a requirement that iron and steel products and manufactured goods used in board-financed projects be produced in the United States, under certain circumstances. The board believes that the statute is self-executing and that a rule is unnecessary. The executive administrator has prepared a guidance document related to this requirement that is available on the agency's web site. The board invites comments on this approach and further invites comments as to specific language that a board rule, if pursued, related to United States-produced iron, steel and manufactured goods should contain.

During the public input into the development of these rules the board received comments on Property Assessed Clean Energy (PACE) legislation (Chapter 376, Local Government Code) and how SWIFT and SWIRFT might work together with a local PACE project. The board has tentatively decided to not propose a specific rule related to PACE and the SWIFT and SWIRFT program. The board understands that in a PACE project a local government establishes designated districts where officials and certain property owners can enter into contracts to assess properties for water and energy efficiency improvements. Lenders provide the funding for water conservation and energy efficiency devices and measures, and the lenders are paid back from the property assessments. The board does not believe that the proposed rule prohibits the use of SWIFT and SWIRFT funding for PACE projects; however, the PACE project would have to meet the statutory requirements of HB 4. The board would have to take an application from a political subdivision that would become the local lender for the PACE project. The board could not directly loan money to the businesses that participated in



the local PACE project. The project would have to be included in the state water plan. The financial assistance would be in the form of a loan to the local political subdivision and the board could only loan money for the water conservation component of the PACE project. Energy efficiency measures would have to be funded through other means.

#### SECTION BY SECTION DISCUSSION OF PROPOSED AMENDMENTS.

##### *Proposed Amendments to 31 TAC Chapter 363, Subchapter A (relating to General Provisions).*

The proposed amendment to §363.1 (relating to Scope of Subchapter) adds the State Water Implementation Fund for Texas and the State Water Implementation Revenue Fund for Texas to the list of financial assistance programs covered by Chapter 363. The change is required because the board is proposing to implement these new financial assistance programs by adding a Subchapter M to Chapter 363.

The proposed amendment to §363.2 (relating to Definitions of Terms) adds the acronym SWIFT for the state water implementation fund for Texas and the acronym SWIRFT for the state water implementation revenue fund for Texas to the definitions used in Chapter 363 in order to have a convenient way to refer to these programs through the Chapter. The board notes that it is leaving the definition for the word “grants” intact for use in other board financial programs. However, no financial assistance in the form of grants will be given by either SWIFT or SWIRFT funds.

The proposed amendment to §363.33 (relating to Interest Rates for Loans and Purchase of Board’s Interest in State Participation Projects) adds loans from the SWIFT and SWIRFT to the list of loan financial programs for which the board will establish lending rate scales, in order to cover the new financial program established by HB 4.

The proposed amendments to §363.51 (relating to Inspection during Construction) adds the phrase “provisions for environmental mitigative measures,” in order to be consistent with §363.731. The requirement that the project engineer give assurance that the project is constructed in accordance with engineering principles is deleted for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles for consistency with Texas Water Code §17.183(a)(2)(A). The proposed section also adds the requirement that the political subdivision must take corrective action on a project as necessary to complete the project in accordance with the approved plans and specifications, in order to be consistent with §363.731, (relating to Inspection During Construction).

The proposed amendments to §363.731 (relating to Inspection During Construction) deletes the requirement that the project engineer give assurance that the project is

constructed in accordance with engineering principles for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles, in order to provide oversight that the contractor is meeting the obligations of its performance bond and for consistency with Texas Water Code §17.183(a)(2)(A).

The proposed amendment to §363.951 (relating to Construction Contract Requirements) adds the requirement that the executive administrator certifies that work on construction of a project has been completed in accordance with the approved plans and specifications, as well as deleting the requirement that the certification include that the work was done in accordance with sound engineering principles and practices, in order to implement Texas Water Code §17.183(a)(5)(C).

The proposed amendment to §363.953 (relating to Inspection of Projects) deletes the requirement that the project engineer give assurance that the project is constructed in accordance with engineering principles for consistency with Texas Water Code §§17.183(a)(5)(C), 17.185(a), and 17.187. The amendment also adds that the project is constructed in accordance with sound construction principles in order to provide oversight that the contractor is meeting the obligations of its performance bond and for consistency with Texas Water Code §17.183(a)(2)(A). The rest of that section is reworded for consistency with §§363.51 and 363.731.

The proposed amendments to §363.955 (relating to Certificate of Approval) adds the words, “and specifications,” and deletes, “sound engineering principles,” in order to implement Texas Water Code §17.187.

*Proposed Amendment to 31 TAC Chapter 363 by addition of a New Subchapter M (relating to State Water Implementation Fund for Texas and State Water Implementation Revenue Fund for Texas).*

The new §363.1301 (relating to Scope of Subchapter M) is proposed to specify the scope and coverage of the Subchapter M. Subchapter M governs the board’s new financial program to provide loans to political subdivision to finance water management strategies in the state water plan. Subchapter A of Chapter 363 will also apply to the program except to the extent there is a conflict with Subchapter M, in which case Subchapter M will apply.

The new proposed §363.1302 (relating to Definition of Terms) is proposed to provide definitions of terms used throughout Subchapter M.

The proposed definition of “Agricultural water conservation” is defined by referring to the board’s existing Agricultural Water Conservation Program. Those types of projects covered by the Agricultural Water Conservation Program would also be eligible for

funding under the SWIFT and SWIRFT loan program if it were otherwise qualified, e.g. the project was a water management strategy in the state water plan. In keeping with that definition and Texas Water Code §17.898(a)(5), preparation and maintenance of land to be used for brush control activities in areas of the state where those activities in the board's judgment are effective would also be eligible for SWIFT and SWIRFT loan funding.

The proposed definition of "Agricultural irrigation project" includes projects on agricultural lands that improve water delivery or application efficiency. The proposed definition would allow for new water sources such as a new well, as part of an agricultural irrigation project. Also included in the proposed definition are projects for new irrigation systems. Finally, the proposed definition would also cover meters within the definition of an agricultural irrigation project.

The proposed rules define "Alternative facility," "Excess capacity," and "Existing needs," consistent with the use of those terms for the board's existing state participation program, 31 TAC §§363.1001- 363.1017.

The rule proposes to define "Historically Underutilized Business" consistent with the definition in Texas Water Code §15.431, which references Section 2161.001, Government Code, and the implementing regulations of that section. Information on the State's Historically Underutilized Business program is available on the Comptroller's web site: <http://www.window.state.tx.us/procurement/prog/hub/>

The proposed rule would define "Reuse" as the use of groundwater or surface water that has already been beneficially used because this is the definition used in the state water plan. See: *Water for Texas 2012*, pages 170 and 249. This definition would include both direct reuse, where water that has been used once is treated and then reused, and indirect reuse where the once used water is treated, discharged to a surface water body or injected into an aquifer, and then retrieved at a later time.

The proposed rule would define "Rural" as required by Texas Water Code §15.434(b)(1)(A), which is to use the definition of "rural political subdivisions" found in Texas Water Code §15.992. The proposed rule uses that definition but further specifies that the board will use the most current data available from the U.S. Bureau of the Census or board-approved projections for the population figures.

The proposed rule would define "Water conservation" consistent with the definition in the state's best management practices guide for water conservation, first developed by the Water Conservation Implementation Task Force in 2004 and since updated and maintained by the Water Conservation Advisory Council established pursuant to Texas Water Code Chapter 10. The board notes that Texas Water Code §15.434(b)(2) seems to draw a distinction between "water conservation" and "reuse." In light of this statutory

language, the board specifically invites comments on whether the phrase “or increase the recycling and reuse of water” should be deleted from the final definition of “water conservation.” The board notes that if this deletion was made, reuse projects would still count toward satisfying the requirement of the 20% of funds for water conservation and reuse.

The proposed rule would define “Water plan project” in a manner consistent with the use of the term in the state water plan and common usage among water professionals dealing with water resources planning in Texas.

The proposed rule would define “Water supply need” in a manner consistent with the use of the term in the state water plan and common usage among water professionals dealing with water resources planning in Texas and consistent with the use of the concept in Texas Water Code, Chapter 16, Subchapter C (relating to Planning).

Proposed §363.1303 (relating to the Prioritization System) provides a prioritization system required by Texas Water Code §15.437. The processing of applications and the steps in the proposed prioritization system is similar to the functioning of the prioritization system for the current Water Infrastructure Fund of §363.1207, but dates and timing of SWIFT and SWIRFT applications will not be fixed by rule to give the board additional flexibility in the timing of when it will make funds available. The actual factors to be evaluated in the prioritization are as required by HB 4. The proposed rule indicates that the board will identify the amount of funds available from SWIFT and SWIRFT for new applications by category. Categories may include: state participation; water infrastructure; deferred water infrastructure; rural political subdivisions or agricultural water conservation; and agricultural irrigation projects, water conservation, or reuse.

Proposed §363.1304 (relating to Prioritization Criteria) incorporates a priority criteria into the SWIFT and SWIRFT rules required by Texas Water Code §15.437. The proposed criteria provide for consideration of the various statutorily required factors, giving the most weight to those factors required by statute to receive the highest consideration. The proposed rules would implement the criteria for the local contribution to finance the project and the criteria related to federal funding for the project being used or sought by combining those two criteria into one category for obtaining points. In keeping with Texas Water Code §15.437(d)(6), the proposed rule has a proposed criteria relative to water conservation. For municipal projects, the applicant can score points by demonstrating that they have already achieved significant water conservation savings or that significant water conservation savings will be achieved by implementing the proposed project. Municipal projects can also score points for achieving the water loss threshold that will be set by board rules in another board rulemaking proceeding roughly simultaneous with this rulemaking. While the

proposed priority system does not have criteria for projects that serve rural political subdivisions, the board is of the opinion that many rural political subdivisions will be able to obtain points for the project meeting the needs of a high percentage of the water supply needs of the water users to be served. In addition, projects that serve rural populations may also be able to receive points in the diverse urban and rural category, or the regionalization category. As an example, a rural project that provides 100 percent of the water supply needs of the water users and that links five separate rural political subdivisions together in a regionalization project would receive 30 points for the high percentage of need category and 20 points for the regionalization criteria, for the maximum of 50 points for those factors receiving the highest consideration. That rural project would receive more points than an “urban” project that served a large population but only met 50 percent of the water supply needs and did not provide for regionalization or serve a diverse urban and rural population. Actual scoring of a specific application will be based upon all relevant facts that weigh into a project’s scoring.

The rule the board proposes today does not award additional project prioritization points specifically for rural, agricultural irrigation projects or reuse projects, per se. The board solicits comments on whether additional criteria should be added to the proposed criteria to award points for rural, agricultural irrigation or reuse projects.

Proposed §363.1305 (relating to Use of Funds) incorporates restrictions on the use of funds provided by Texas Water Code §15.474. The board expects that the terms of the financial assistance provided to applicants will be tailored to best fit the needs of the applicants and to benefit the long-term viability of the fund. The board expects that the terms of the financial assistance will change based on each round of applications. Interest rates on the loans provided to applicants under this program will depend in part on the board’s cost of funds as the board issues bonds. Because the interest rate that the bond market charges to the board will vary over time, the interest rate that the board offers political subdivisions will also vary over time. In addition the amounts and types of funding provided to political subdivisions in preceding fundings affect the amounts and types of funding that can be provided to subsequent applicants while still protecting the corpus of the fund and the board’s ability to offer financing on attractive terms.

Proposed §363.1306 (relating to Interest Rates on Loans) identifies the timing and general method that the board would use to set the interest rates for SWIFT and SWIRFT project funding and payment deferrals. The proposed provision is similar to the method for setting interest rates for the Water Infrastructure Fund, see 31 TAC §363.1205 (relating to Interest Rates for Loans) modified as necessary to fit the requirements of HB 4.

Proposed §363.1307 (relating to Pre-design Funding Option) sets out the requirements for projects under this Subchapter to utilize the pre-design funding option. The proposed provision is similar to how this option is handled in the Water Infrastructure Fund, see 31 TAC §363.1206 (relating to Pre-design Funding Option).

Proposed §363.1308 (relating to Board Participation Program) sets out the requirements for projects where the applicant desires the board to acquire an ownership interest in the project that the applicant will buy back over time. The requirements and terms are similar to the board's existing state participation program.

Proposed §363.1309 (related to Findings Required) states the findings by the board that are required prior to approval of an application for financial assistance under the SWIFT and SWIRFT program.

Proposed §363.1310 (related to Action of the Board on Application) sets out the board's range of options in acting on an application. The proposed rule states that the commitment will include a date after which the financial assistance will no longer be available. The board did not set a specific date by rule in order to retain some flexibility in adjusting the time period. The board is of the opinion that the proposed rule would allow the board to make commitments over multiple years with specific take down amounts each year, with the interest rate for each take down determined by the debt service schedule in effect at the time. The board is of the opinion that multi-year take downs will be a beneficial option for funding larger projects with high capital costs and longer construction schedules. The board solicits comments on whether the proposed rule would allow for multiple year commitments and any improvements to this suggested procedure. Once the board has made a commitment, the applicant will execute a financing agreement that will specify when the loan must close. The board anticipates that the applicant must close within a very short time of the board obtaining the proceeds that it will use to fund the loan. The board recognizes that any undue delay between the board's obtaining funds through a sale of its bonds and closing loans with political subdivisions for their water projects has a negative impact on the overall capacity of the fund and is committed to minimizing those negative impacts.

Proposed §363.1311 (relating to Rural and Water Conservation Reporting) sets out how the board intends to report and account for the project funds: (1) 10% of which support projects for rural political subdivisions and agricultural water conservation, and (2) 20% of which support projects for water conservation and reuse, including agricultural irrigation projects. This proposed section is in part to implement Texas Water Code §15.434(b). The board understands that the percentages given in the statute are intended as a floor and not a ceiling, meaning that the board is not limited to funding only 10% of total project funds for rural and agricultural water conservation, or only funding 20% of total project funds for water conservation and reuse. If applicants

submit sufficient eligible rural projects, the board could fund more than 10% rural projects, for example. The same is true for water conservation and reuse projects. The board intends to undertake to apply funding to these percentages by a very aggressive marketing and outreach program to ensure that potential applicants for all of these special classes of projects know the requirements and benefits of the programs. The board also intends to work with the regional water planning groups to ensure that they know about the programs and the requirements for either amending the regional water plan to include such projects or to include these types of projects in the next round of regional planning. The board does acknowledge that the SWIFT and SWIRFT program is a voluntary program for loaning money to political subdivisions.

The proposed rule would require the executive administrator to assign costs to the specified categories, e.g. rural political subdivisions, etc. Any costs that are shared would be proportionally allocated. For example, for a project that served a diverse urban and rural area, the executive administrator would first decide which costs are associated with the urban area and which costs are associated with the rural area. For the remaining costs that are shared by both areas, the percentage allocated to rural would be the ratio of rural costs to the total of direct urban and rural costs. The board considered proposing a rule with a more detailed description of how it would allocate costs. In the end the board decided that no one method could cover every possible situation. Therefore, the board decided to propose a rule that provides the executive administrator with some discretion in that calculation, coupled with the report to the Legislature as required by statute. The board also intends to report the amount of funds used to support rural, agricultural water conservation, water conservation, agricultural irrigation projects, and reuse projects on the board website along with the other information required by Texas Water Code §15.440. The board has not proposed a more specific rule related to its duty to report to the Legislature and post on the Board's website information on the use of the SWIFT and SWIRFT because the board considers the provisions of Texas Water Code §15.440 to be self-executing.

Proposed §363.1312 (relating to Reporting Requirements Regarding Historically Underutilized Businesses) sets out a proposed requirement that political subdivisions report the use of historically underutilized businesses that worked on the SWIFT or SWIRFT funded project. This reporting is intended to allow the executive administrator to then be able to report this information to the State Water Implementation Fund for Texas Advisory Committee as required by Texas Water Code §15.438(n)(2).

#### **FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS**

Ms. Amanda Landry, Chief Financial Officer, has determined that for the first five-year period the proposal is in effect, there will be fiscal implications on state government as a result of administering the proposal. The costs to the state are expected to be: Fiscal

Year (FY) 2014 - \$511,300; FY 2015 - \$1,402,084; FY 2016 - \$1,422,399; FY 2017 - \$1,380,384; FY 2018 - \$1,380,384. There are no fiscal implications to local governments in general as a result of enforcing or administering the rules, since no local government is required to apply for assistance under these programs. For local governments that choose to apply for funding under these programs, there will be costs associated with applying for and receiving funding, but those costs are anticipated to be more than offset by savings to the local government in financing costs for the projects. However, at this time, no reliable estimates may be made in the amount of costs to local governments and cost savings to local governments. There are no estimated losses or increases in revenue to the state or local governments as a result of enforcing or administering these rules.

## **PUBLIC BENEFITS AND COSTS**

Ms. Amanda Landry, Chief Financial Officer, has also determined that for the first five-year period the proposal is in effect, the public benefit anticipated as a result of the proposed rules is the ability of local governments to receive savings in financing costs for projects that implement the state water plan. However, at this time no reliable estimates may be made on the quantified benefits and reductions in costs.

## **LOCAL EMPLOYMENT IMPACT STATEMENT**

The board has determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect because it will impose no new requirements on local economies. The board also has determined that there will be no adverse economic effect on small businesses or micro-businesses as a result of enforcing this rulemaking. The board also has determined that there is no anticipated economic cost to persons who are required to comply with the rulemaking as proposed. Therefore, no regulatory flexibility analysis is necessary.

## **REGULATORY ANALYSIS**

The board has determined that the proposed rulemaking is not subject to Government Code §2001.0225 because it is not a major environmental rule under that section.

## **TAKINGS IMPACT ASSESSMENT**

The board has determined that the promulgation and enforcement of this proposed rule constitutes neither a statutory nor a constitutional taking of private real property. The proposed rule does not adversely affect a landowner's rights in private real property, in whole or in part, because the proposed rule does not burden or restrict or limit the



owner's right to or use of property. Therefore, the proposed rulemaking does not constitute a taking under Texas Government Code, Chapter 2007 or the Texas Constitution.

#### ANNOUNCEMENT OF HEARINGS

The board will hold public hearings on this proposal on July 24, 2014, at Texas A&M University – San Antonio, One University Way, San Antonio, Texas 78224 at 1:00 p.m.; on August 13, 2014, at the McNease Convention Center, 500 Rio Concho Drive, San Angelo, Texas 76903 at 10:00 a.m.; on August 21, 2014, at [Metroplex address TBD at [time TBD]]. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon. Open discussion and questions to the board will not be permitted during the hearings.

Persons who have special communication or other accommodation needs who are planning to attend the hearings should contact Merry Klonower at (512) 463-8165 as far in advance as possible, and no later than five (5) work days prior to the hearing so that appropriate arrangements can be made.

#### SUBMISSION OF COMMENTS

Comments on the proposed rulemaking will be accepted until September 1, 2014, and may be submitted to the Office of General Counsel, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231, by e-mail to [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov), via entering comments on our web page: <http://www.twdb.state.tx.us/swift/involved/index.asp>, or by fax at (512) 475-2053.

#### STATUTORY AUTHORITY

The amendments are proposed under the authority of Texas Water Code §6.101, which authorizes the TWDB to adopt rules necessary to carry out the powers and duties of the TWDB.

The amendments affect Texas Water Code, Chapters 15 and 17.

#### **§ 363.1. Scope of Subchapter**

This subchapter shall govern the board's programs of financial assistance under the following programs established by the Texas Water Code:

- (1) in Chapter 15:

(A) Water Assistance Fund under Subchapter B;

~~(A)~~ ~~(B)~~ ~~water loan assistance fund~~ Water Loan Assistance Fund under Subchapter C;

~~(B)~~ ~~(C)~~ Storage Acquisition Program authorized under Subchapter E;

~~(C)~~ ~~(D)~~ Colonia Self-Help Program authorized under Subchapter P;

~~(D)~~ ~~(E)~~ ~~Pilot Program for Water and Wastewater Loans to Rural Communities~~ Program for Water and Wastewater Financial Assistance for Disadvantaged Rural Communities authorized under Subchapter O; ~~and~~

~~(E)~~ ~~(F)~~ Water Infrastructure Fund under Subchapter Q; and

(G) State Water Implementation Fund for Texas and State Water Implementation Revenue Fund for Texas under Subchapter M.

(2) in Chapter 16, state participation in the purchase or acquisition of facilities under Subchapters E and F;

(3) in Chapter 17:

(A) the programs of assistance under the Texas water development funds; and

(B) the programs of assistance under the water financial assistance bond program (Development Fund II, Subchapter L), including:

(i) financing of water supply projects under Subchapter D;

(ii) water quality enhancement projects including municipal solid waste facilities under Subchapter F;

(iii) flood control projects under Subchapter G; and

(iv) economically distressed areas projects under Subchapter K.

(4) in Chapter 17, Revenue Bond Program under Subchapter I; and

(5) in Chapter 36, Groundwater District Loan Program, under Subchapter L.

### **§ 363.2. Definitions of Terms**

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise. Words defined in the Texas Water Code, Chapter

15, 16 or 17, and not defined here shall have the meanings provided by the appropriate Texas Water Code chapter.

(1) to (22) No change.

(23) SWIFT—the state water implementation fund for Texas.

(24) SWIRFT—the state water implementation revenue fund for Texas.

~~(23)~~ (25) Water Plan--The current state water plan prepared and adopted in accordance with Texas Water Code, § 16.051.

### **§ 363.33. Interest Rates for Loans and Purchase of Board's Interest in State Participation Projects**

(a) Procedure and method for setting ~~fixed~~ interest rates.

(1) The executive administrator will set ~~fixed~~ interest rates under this section for purchase of the board's interest in state participation projects or for loans on a date that is five business days prior to the political subdivision's adoption of the ordinance or resolution authorizing its bonds or drawdown of state participation funds and not more than 45 days before the anticipated closing of the loan or state participation project from the board. After 45 days from the establishment of the interest rate of a loan, rates will be reconsidered, and may be extended only with the approval of the executive administrator.

(2) For loans from the Texas Water Development Fund II or for rates for the purchase of the board's interest in state participation projects, the executive administrator will set the interest rate at:

(A) the rates established by the board under subsection (b) of this section;

(B) for loans funded by the board with proceeds of bonds, the interest of which is intended to be tax exempt for purposes of federal tax law, the executive administrator will limit the interest set pursuant to this subsection at no higher than the rate permitted under federal tax law to maintain the tax exemption for the interest on the board's bond; and

(C) the board may establish different interest rates for loans under this paragraph in order to facilitate a restructuring of an existing board loan that is in imminent risk of default as determined by the board.

(3) Interest rates for loans from the Water Loan Assistance Fund, or from funds from the board's sale of political subdivision bonds to the Texas Water Resources Finance Authority will be set according to the Municipal Market Data A scale. The board may establish different interest rates for loans under this paragraph if it finds such rates are legislatively directed or are necessary to promote major water initiatives designed to provide significant regional benefit.

(b) Lending and interest rate scale. After each bond sale, or as necessary to meet changing market conditions, the board will set the lending rate scale for loans and the interest rate scale for the purchase of the board's interest in state participation projects based upon cost of funds to the board, risk factors of managing the board's loan portfolio, and market rate scales. To calculate the cost of funds, the board will add new bond proceeds to those remaining bond funds that are not currently assigned to schedule loan closings, weighting the funds by dollars and true interest costs of each source. The rate scale shall include the program subsidy, if any. The board will establish separate lending rate scales for tax-exempt and taxable projects from each of the following:

(1) loans from the Texas Water Development Fund II;

(2) loans from the Water Infrastructure Fund;

(3) purchase of the board's interest in state participation projects from the State Participation Account;

(4) loans from the Economically Distressed Area Program Account; ~~and~~

(5) if revenue bonds constitute the consideration for the purchase of the board's interest in a state participation project by a political subdivision, the revenue bonds shall bear interest at:

(A) the prevailing state participation lending rate, as set in subsection (b)(3) of this section;

(B) if there is outstanding board indebtedness related to the purchase of its state participation interest, then at the rate then in effect at the time the board provided funds, through the issuance of bonds, to participate in the project; or

(C) a different rate as established by the board, where no schedule for the purchase of the board's interest in the project was fixed at the time the board provided funds to participate in the project: ~~and~~;

(6) loans from the SWIRFT.

### **§ 363.51. Inspection During ~~during~~ Construction**

After the construction contract is awarded, the political subdivision shall provide for adequate inspection of the project under the supervision of a registered professional engineer and require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the approved plans and specifications, other engineering design or permit documents, approved alterations, provisions for environmental mitigative measures, and in accordance with sound ~~engineering principles and~~ construction principles and practices. The executive administrator is authorized to inspect the construction and materials of any project at any time,

but such inspection shall never subject the State of Texas to any action for damages. The political subdivision shall take corrective action necessary to complete the project in accordance with approved plans and specifications.

### **§ 363.731. Inspection During Construction**

After the construction contract is awarded, the political subdivision shall provide for adequate inspection of the project by a registered professional engineer and require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the approved plans and specifications, other engineering design or permit documents, approved alterations, provisions for environmental mitigative measures, and in accordance with sound ~~engineering principles and construction~~ principles and practices. The executive administrator is authorized to inspect the construction and materials of any project at any time, but such inspection shall never subject the State of Texas to any action for damages. The political subdivision shall take corrective action as necessary to complete the project in accordance with approved plans and specifications.

### **§ 363.951. Construction Contract Requirements**

The rural community shall require in all project construction contracts that:

- (1) each bidder furnish a bid guarantee equivalent to five percent of the bid price;
- (2) each contractor awarded a construction contract furnish performance and payment bonds as follows:
  - (A) the performance bond must include guarantees that work done under the contract will be completed and performed according to approved plans and specifications in accordance with sound construction principles and practices; and
  - (B) the performance and payment bonds must be in a penal sum of not less than 100 percent of the contract price and remain in effect for one year after the date of approval by the engineer of the rural community;
- (3) payment will be made in partial payments as the work progresses;
- (4) each partial payment shall not exceed 95 percent of the amount due at the time of the payment, as shown by the engineer of the project, but if the project is substantially complete, a partial release of the five percent retainage may be made by the rural community with the approval of the executive administrator;
- (5) payment of the retainage remaining due on completion of the contract shall be made only after:

- (A) approval by the engineer for the rural community;
  - (B) approval by the rural community by resolution or other formal action of the governing body; and
  - (C) certification by the executive administrator that the work to be done under the contract has been completed and performed in a satisfactory manner and in accordance with approved plans and specifications; sound engineering principles and practices;
- (6) no valid approval shall be granted unless the work done under the contract has been completed and performed in a satisfactory manner according to approved plans and specifications ~~specification~~; and
- (7) labor from inside the rural community has been used to the extent possible.

**§ 363.953. Inspection of Projects**

~~(a)~~ After a construction contract is awarded, the rural community shall provide for adequate inspection of the project by a registered professional engineer and require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the approved plans and specifications, other engineering design or permit documents, approved alterations, provisions for environmental mitigative measures, and in accordance with sound ~~engineering principles and construction principles and practices.~~ The executive administrator is authorized to inspect the construction and materials of any project at any time, but such inspection shall never subject the State of Texas to any action for damages. The political subdivision shall take corrective action as necessary to complete the project in accordance with approved plans and specifications.

~~(b) The board may inspect the construction of a project at any time to assure that:~~

~~(1) ——— the contractor is substantially complying with the approved engineering plans of the project; and~~

~~(2) the contractor is constructing the project in accordance with sound engineering principles.~~

~~(c) Inspection of a project by the board does not subject the state to any civil liability.~~

**§ 363.955. Certificate of Approval**

The executive administrator may consider the following as grounds for refusal to give a certificate of approval for any construction contract:

- (1) failure to construct the project according to the approved plans and specifications; or

~~(2) failure to construct the works in accordance with sound engineering principles; or~~

~~(3)~~ (2) failure to comply with any term of the contract.

## **SUBCHAPTER M STATE WATER IMPLEMENTATION FUND FOR TEXAS AND STATE WATER IMPLEMENTATION REVENUE FUND FOR TEXAS**

### **§ 363.1301. Scope of Subchapter M**

This subchapter shall govern the board's programs of financial assistance under the following programs established by the Texas Water Code, Chapter 15, Subchapters G and H. Unless in conflict with the provisions of this subchapter, the provisions of Subchapter A of this chapter (relating to General Provisions) shall apply to projects under this subchapter.

### **§ 363.1302. Definition of Terms**

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) Agricultural water conservation -- those practices, techniques or technologies used in agriculture, as defined in Texas Agriculture Code, which will improve the efficiency of the use of water and further water conservation or reuse in the state, including but not limited to those programs or projects defined in Texas Water Code §§17.871 – 17.912.
- (2) Agricultural irrigation project -- those projects which improve water delivery or application efficiency on agricultural lands, or involve purchase and installation on agricultural public or private property of new water sources, new irrigation systems, or devices designed to indicate the amount of water withdrawn for agricultural irrigation purposes.
- (3) Alternate facility--A construction project that would be necessary to serve the excess capacity of the area to be served by the facility in the event that the facility was not initially constructed to meet the excess capacity.
- (4) Commission--the Texas Commission on Environmental Quality or its successor.
- (5) Entity -- a political subdivision or nonprofit water supply or sewer service corporation.
- (6) Excess capacity--The difference between the foreseeable needs of the area to be served by the useful life of the facility and the existing needs for the area to be served by the facility.

- (7) Executive administrator --The executive administrator of the board or a designated representative.
- (8) Existing needs--Maximum capacity necessary for service to the area receiving service from the facility for current population and including the service necessary to serve the estimated population in the area ten years from the date of the application.
- (9) Facility--A regional facility for which an application has been submitted requesting board participation and that includes sufficient capacity to serve the existing needs of the applicant and excess capacity.
- (10) Historically Underutilized Business -- the meaning assigned by Section 2161.001, Government Code, and the regulations adopted pursuant thereto.
- (11) Household Cost Factor -- the average annual cost of service per household divided by the median household income.
- (12) Nonprofit water supply or sewer service corporation -- A water or sewer service corporation operating under Texas Water Code, Chapter 67.
- (13) Political subdivision -- includes a city, county, district or authority created under the Texas Constitution Article III, Section 52, or Article XVI, Section 59, any other political subdivision of the state, any interstate compact commission to which the state is a party, and any nonprofit water supply corporation created and operating under Texas Water Code, Chapter 67.
- (14) Reuse -- the use of groundwater or surface water that has already been beneficially used.
- (15) Rural political subdivision -- a nonprofit water supply or sewer service corporation, district, or municipality with a service area of 10,000 or less in population based upon the most current data available from the U.S. Bureau of the Census or board-approved projections, or that otherwise qualifies for financing from a federal agency; or a county in which no urban political subdivision exceeds 50,000 in population based upon the most current data available from the U.S. Bureau of the Census or board-approved projections.
- (16) Rural population -- residents of a rural political subdivision.
- (17) Urban population -- residents of a political subdivision with a population of more than 10,000 individuals based upon the most current data available from the U.S. Bureau of the Census or board-approved projections.
- (18) Water conservation -- those practices, techniques, programs, and technologies that will protect water resources, reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling



and reuse of water so that a water supply is made available for future or alternative uses.

- (19) Water plan project -- A project that is a recommended water management strategy in the current board-adopted state water plan.
- (20) Water supply need -- Projected water demands in excess of existing supply as identified in the state water plan.

### **363.1303. Prioritization System**

- (a) The board will establish deadlines for application submittals. The executive administrator will provide the prioritization of those applications to the board for approval as soon thereafter as practicable. To be considered for prioritization, an applicant must provide adequate information to establish that the applicant qualifies for funding, to describe the project comprehensively, and to establish the cost of the project, as well as any other information requested by the executive administrator. The executive administrator will develop and provide an abridged application to gather information necessary for prioritization. If an applicant submits an abridged application for prioritization purposes, the applicant must submit a complete application to the board within 30 days after the board meeting at which the applicant's project received priority for funding, or the project will lose its priority ranking and the board may commit to other projects consistent with the prioritization.
- (b) For each application that the executive administrator has determined has adequate information for prioritization purposes and prior to each board meeting at which applications may be considered for prioritization, the executive administrator shall:
  - (1) prioritize the applications by the criteria identified in §363.1304 of this title (relating to Prioritization Criteria); and
  - (2) provide to the board a prioritized list of all complete applications as recommended by the executive administrator, the amount of funds requested and the priority of each application received.
- (c) The board will identify the amount of funds available from SWIFT and SWIRFT for new applications by category, establish the structure of financing and the terms of any subsidy, and will consider applications according to §363.1304, regarding Prioritization Criteria. The board reserves the right to limit the amount of funding available to an individual entity.

### **363.1304. Prioritization Criteria**

The executive administrator will prioritize applications based on the following point system:

- (a) Projects will be evaluated on the criteria provided in subsections (b) through (e) below. The points for subsections (b) through (e) will be summed up to a maximum score for these criteria of 50 points.
- (b) Projects that either directly, or in conjunction with other recommended water management strategies in accordance with §357.10 of this title (relating to Regional Water Planning), will serve, in total, when the project water supply volume is fully operational:
  - (1) at least 10,000 population, 6 points; or
  - (2) at least 250,000 population, 12 points; or
  - (3) at least 500,000 population, 18 points; or
  - (4) at least 750,000 population, 24 points; or
  - (5) at least 1,000,000 population, 30 points; or
  - (6) less than 10,000 population, zero points.
- (c) Projects that will serve a diverse urban and rural population:
  - (1) serves one or more urban populations and one rural population, 10 points, and
  - (2) for each additional rural population served, 4 points up to a maximum of 30 points; or
  - (3) serves only an urban population, or only a rural population, zero points.
- (d) As specified in the application, projects which provide regionalization:
  - (1) serves additional entities other than the applicant, 5 point per each political subdivision served for a maximum of 30 points; or
  - (2) serves only applicant, zero points.
- (e) Projects that meet a high percentage of the water supply needs of the water users to be served calculated from those served and needs that will be met during the first decade the project becomes operational, based on state water plan data:
  - (1) at least 50 percent of needs met, 10 points; or
  - (2) at least 75 percent of needs met, 20 points; or
  - (3) at least 100 percent of needs met, 30 points; or
  - (4) less than 50 percent of needs met, zero points.
- (f) Projects will receive additional points of the project's score on each of the criteria of subsections (g) through (j) below.

- (g) Local contribution to be made to implement the project, including federal funding, and including up-front capital, such as funds already invested in the project or cash on hand and/or in-kind services to be invested in the project, provided that points will not be given for a prior loan through the Board that included a loan forgiveness component:
- (1) other funding at least 10 percent of total project cost, 1 point; or
  - (2) other funding at least 20 percent of total project cost, 2 points; or
  - (3) other funding at least 30 percent of total project cost, 3 points; or
  - (4) other funding at least 40 percent of total project cost, 4 points; or
  - (5) other funding at least 50 percent of total project cost, 5 points; or
  - (6) other funding less than 10 percent of total project cost, zero points.
- (h) Financial capacity of the applicant to repay the financial assistance provided:
- (1) applicant's household cost factor is less than or equal to 1 percent, 2 points; or
  - (2) applicant's household cost factor is greater than 1 percent but not more than 2 percent, 1 point; or
  - (3) applicant's household cost factor is greater than 2 percent, zero points.
- (i) Projects which address an emergency need:
- (1) applicant, or entity to be served by the project, is included on the list maintained by the Commission of local public water systems that have a water supply that will last less than 180 days without additional rainfall, or is otherwise affected by a Commission emergency order, and drought contingency plan has been implemented by the applicant or entity to be served, 3 points; plus
  - (2) water supply need is anticipated to occur in an earlier decade than identified in the most recent state water plan, 1 point; plus
  - (3) applicant has used or applied for federal funding for emergency, 1 point; or
  - (4) none of the above, zero points.
- (j) Projects which are ready to proceed:
- (1) preliminary planning and/or design work (30 percent of project total) has been completed or is not required for the project, 3 points; plus
  - (2) applicant is able to begin implementing or constructing the project within 18 months of application deadline, 3 points; plus
  - (3) applicant has acquired all water rights associated with the project or no water rights are required for the project, 1 point; plus
  - (4) applicant has secured funding for the project from other sources, 1 point; or
  - (5) none of the above, zero points.
- (k) Entities that have demonstrated water conservation or projects which will achieve water conservation, including preventing the loss of water:

(1) for municipal projects, applicant has already demonstrated significant water conservation savings, as determined by comparing the highest rolling four-year average total gallons per capita per day within the last thirty years to the average total gallons per capita per day for the most recent 4-year period based on board water use data; or significant water conservation savings will be achieved by implementing the proposed project, as determined by comparing the conservation to be achieved by the project with the average total gallons per capita per day for most recent four-year period:

- (A) 2 to 5.9 percent total gallons per capita per day reduction, 2 points; or
- (B) 6 to 9.9 percent total gallons per capita per day reduction, 4 points; or
- (C) 10 to 13.9 percent total gallons per capita per day reduction, 6 points; or
- (D) 14 to 17.9 percent total gallons per capita per day reduction, 8 points; or
- (E) 18 percent or greater total gallons per capita per day reduction, 10 points;
- or
- (F) Less than 2 percent total gallons per capita per day reduction, zero points.

(2) for municipal projects, applicant has achieved the water loss threshold established by 31 TAC §358.6, as demonstrated by most recently submitted water loss audit:

- (A) less than the threshold, 5 points; or
- (B) at or above the threshold, zero points.

(3) for agricultural projects, significant water efficiency improvements will be achieved by implementing the proposed project, as determined by the projected percent improvement:

- (A) 1 to 1.9 percent increase in water use efficiency, 1 point; or
- (B) 2 to 5.9 percent increase in water use efficiency, 3 points; or
- (C) 6 to 9.9 percent increase in water use efficiency, 6 points; or
- (D) 10 to 13.9 percent increase in water use efficiency, 9 points; or
- (E) 14 to 17.9 percent increase in water use efficiency, 12 points; or
- (F) 18 percent or greater increase in water use efficiency, 15 points; or
- (G) less than 1 percent increase in water use efficiency, zero points.

(l) Priority assigned by the applicable regional water planning group within the project sponsor's primary planning region:

- (A) top 80 percent of regional project ranking, 3 points; or
- (B) top 60 percent of regional project ranking, 6 points; or
- (C) top 40 percent of regional project ranking, 9 points; or
- (D) top 20 percent of regional project ranking, 12 points; or
- (E) top 10 percent of regional project ranking, 15 points; or
- (F) less than 80 percent of regional project ranking, zero points.

(m) If two or more projects receive the same priority ranking, priority will be assigned based on the relative score(s) from §363.1304(k) of this title. If after considering the

relative scores of the projects based on the criteria of §363.1304(k) of this title, then priority will be assigned based on the relative score(s) from §363.1304(i) of this title.

### **§363.1305. Use of Funds**

- (a) The board may use the funds for financial assistance to political subdivisions as follows:
  - (1) to make loans at or below market interest rates, but not lower than 50 percent of the board's market rate.
  - (2) to make loans with terms not to exceed the lesser of:
    - (A) the expected useful life of the facility; or
    - (B) 30 years.
  - (3) to defer loan repayments, including deferral of principal and interest or accrued interest under criteria developed by the board;
  - (4) to make loans with incremental repurchase terms for an acquired facility, including terms for no initial repurchase payment followed by progressively increasing incremental levels of interest payment, repurchase of principal and interest, and ultimate repurchase of the entire state interest in the facility using simple interest calculations; or
  - (5) a combination of the financing outlined in subsections (1)-(4).
- (b) The board may make funding available under subsection (a) of this section only for implementation of water plan projects.

### **§363.1306. Interest Rates for Loans**

- (a) For loans from the SWIFT and SWIRFT, the following procedures will be used to set interest rates.
  - (1) The executive administrator will set interest rates under this section for loans on a date that is at least five business days prior to the political subdivision's anticipated adoption of the ordinance or resolution authorizing its bonds and not more than 45 days before the anticipated closing of the loan from the board. After 45 days from the establishment of the interest rate of a loan, rates will be reconsidered, and may be extended only with the approval of the executive administrator.
  - (2) For loans from the fund, the executive administrator will set the interest rates in accordance with the following:
    - (A) To the extent that the source of funding is provided from bond proceeds, the lending rate scale(s) will be determined as provided under §363.33(b) of this title (relating to Interest Rates for Loans and Purchase of board's Interest in State Participation Projects).
    - (B) The loan interest rate will be determined based on a debt service schedule acceptable to the executive administrator. The executive administrator will identify the appropriate scale for the borrower and identify the market rate for the maturity due in each year. The executive administrator will reduce the market rate by a subsidy to be determined by the board and thereby identify a proposed loan interest rate for each maturity. The proposed loan interest rate will be applied

to the proposed principal repayment schedule. In no instance shall the subsidy determined by the board exceed 50 percent of the market rate.

(C) For loans made under §363.1305(a)(4) of this title (relating to Use of Funds), which receive deferred principal and interest payments, the executive administrator will identify the appropriate scale for the borrower and identify the market rate for the maturity due in each year. The executive administrator will reduce the market rate by a subsidy to be determined by the board and thereby identify a proposed loan interest rate for each maturity. The proposed loan interest rate will be applied to the proposed principal repayment schedule.

### **§363.1307. Pre-design Funding Option**

- (a) This loan application option will provide an eligible applicant that meets all applicable board requirements an alternative to secure a commitment and close a loan for the pre-design, design or construction costs associated with funding of a project under §363.1305 of this title (relating to Use of Funds). Under this option, a loan may be closed and funds necessary to complete planning and design activities released. If planning requirements have not been satisfied, design and construction funds will be held or escrowed and released in the sequence described in this section. Following completion of planning activities and environmental assessment, the executive administrator may require the applicant to make changes in order to proceed with the project. If the portion of a project associated with funds in escrow cannot proceed, the loan recipient shall use the escrowed funds to redeem bonds purchased by the board in inverse order of maturity.
- (b) Reservoir projects are eligible for a board commitment to fund planning, permitting, acquisition, and design costs under this option. Applicants for reservoir construction funds must complete planning, permitting, acquisition, and design before receiving a commitment to fund reservoir construction costs.
- (c) The executive administrator may recommend to the board the use of this section if, based on available information, there appear to be no significant permitting, environmental, engineering, or financial issues associated with the project. An application for pre-design funding may be considered by the board despite a negative recommendation from the executive administrator.
- (d) Applications for pre-design funding must include the following information:
  - (1) for loans including construction cost, preliminary engineering feasibility data which will include at minimum: a description and purpose of the project; area maps or drawings as necessary to fully locate the project area(s); a proposed project schedule; estimated project costs and budget including sources of funds; current and future populations and projected water needs and sources; and a discussion of known permitting, social or environmental issues which may affect the alternatives considered and the implementation of the proposed project;
  - (2) contracts for engineering services;
  - (3) evidence that an approved water conservation plan will be adopted prior to the release of loan funds;
  - (4) all information required in §363.12 of this title (relating to General, Legal and Fiscal Information); and

- (5) any additional information the executive administrator may request to complete evaluation of the application.
- (e) After board commitment and completion of all closing and release prerequisites as specified in §363.42 of this title (relating to Loan Closing) and §363.43 of this title (relating to Release of Funds), funds will be released in the following sequence:
  - (1) for planning and permitting costs, after receipt of executed contracts for the planning or permitting phase;
  - (2) for acquisition and design costs, after receipt of executed contracts for the design phase and upon approval of an engineering feasibility report as specified in §363.13 of this title (relating to Preliminary Engineering Feasibility Data) and compliance with §363.14 of this title (relating to Environmental Assessment); and
  - (3) for construction costs, after issuance of any applicable permits, and after bid documents are approved and executed construction documents are contingently awarded.
- (f) The executive administrator will use preliminary environmental data provided by the applicant, as specified in subsection (d) of this section and make a written report to the executive administrator on known or potential significant social or environmental concerns.
- (g) The executive administrator will advise the board concerning projects that involve major economic or administrative impacts to the applicant resulting from environmentally related special mitigative or precautionary measures from an environmental assessment under §363.14 of this title.

### **§363.1308. Board Participation Program**

#### **(a) Board Participation**

Unless otherwise directed by legislation, the board will only use the SWIFT or SWIRFT to provide financial assistance for all or a part of the cost to construct the excess capacity of a water plan project where:

- (1) at least 20 percent of the total facility capacity of the proposed project will serve existing need, or
- (2) the applicant will finance at least 20 percent of the total project cost from sources other than Board Participation from the SWIFT and SWIRFT.

#### **(b) Application for Assistance**

In addition to the information required in §363.12 and §363.1307 and any other information that may be required by the executive administrator or the board, the applicant shall provide:

- (1) a proposed schedule for purchase of the board's interest in the project;
- (2) information to demonstrate the findings required in §363.1310(b);
- (3) if payment under the master agreement is based either wholly or in part from revenues of contracts with others, a copy of any actual or proposed contracts under which applicant's gross income is expected to accrue. Prior to release of funds, an

applicant shall submit executed copies of such contracts to the executive administrator; and

- (4) if an election is required by law to authorize participation in the project, the executive administrator may require applicant to provide the election date and election results as to each proposition necessary for the participation of the applicant as part of the application.

(c) Determination

The board may provide funding for board participation from SWIFT and SWIRFT when the information available to the board is sufficient for the board to determine that:

- (1) it is reasonable to expect that the state will recover its investment in the facility based upon a determination that the revenue to be generated by the projected number of customers served by the facility will be sufficient to purchase the excess capacity owned by the state;
- (2) the estimated cost of the facility as set forth in the application exceeds the current financing capabilities of the area to be served by the facility based on a determination that the existing rates of the applicant available for payment of the facility collected from the number of connections at the end of construction and other revenues available for payment of the facility;
- (3) the optimum regional development cannot be reasonably financed by local interests based on an assessment of the estimated cost to construct the alternate facility and the revenue to be generated by the projected number of customers of the facility;
- (4) the public interest will be served by acquisition of the facility based on a determination that the cost of the facility to the public is reduced by the state's participation in the facility; and
- (5) the facility to be constructed or reconstructed contemplates the optimum regional development which is reasonably required under all existing circumstances of the site based on a determination that design capacity of the components of the facility are sufficient to meet the foreseeable needs of the area over the useful life of the facility.



(d) Master Agreement

The board and the political subdivision shall enter into and execute a master agreement the text of which shall include, but not be limited to, the responsibilities, duties, and liabilities of each party, including the responsibility of a designated political subdivision to assure that proper procedures are observed in advertising for bids and selecting a bidder to construct the project; the board's cost of acquisition; procedures for disbursement of board funds for the project; recognition of a political subdivision's right of first refusal prior to any sale of the board's interest in the project; a non-competitive clause; a schedule for purchase of the board's interest in the project by the political subdivision; and any other provisions deemed appropriate and necessary by the board.

(e) Construction

On projects to be constructed or enlarged by a political subdivision or subdivisions, one political subdivision may be designated under an agreement with the board to act as manager for the project and perform the functions customarily performed by a manager-owner.

(f) Disbursement of State Funds

State funds expended for the acquisition and/or development of facilities in a project shall be disbursed in accordance with the provisions of the master agreement and any other contracts by the board pursuant thereto.

(g) Acquisition of Board's Ownership Interest

- (1) A prospective political subdivision purchaser of the board's ownership interest in a facility or of the use of such board interest other than under terms specified in the master agreement shall submit an application in the form and number prescribed by the executive administrator. The executive administrator may request any additional information needed to evaluate the application, and may return any incomplete application.
- (2) Upon receipt of an application by a prospective purchaser of the board's ownership interest in a facility or use of the facility, the board will send notice of its receipt by regular United States mail to all co-owners of the facility, and any users of the facility or water from the facility.
- (3) The application shall be scheduled on the board's agenda, and representatives of the prospective purchaser and other interested parties shall be notified of the time of the meeting. At the conclusion of the meeting to consider the project, the board may resolve to approve, disapprove, approve with conditions, or continue consideration of the application. A commitment will include a date after which the financial assistance will no longer be available. That date shall be the end of that month which is twelve months from the month of board commitment.

- (4) If the board approves the application, a transfer resolution will be adopted which shall prescribe the terms and conditions necessary for the sale, transfer, or lease, if such terms have not been specified in the master agreement between the board and political subdivision.
- (5) Before the board's adoption of the transfer resolution, the executive administrator shall negotiate a transfer agreement with the prospective purchaser regarding the sale, transfer, or lease of board-owned interests. The transfer agreement shall include the interest transferred, the character of the interest transferred, the formula used to compute the price to be paid for the facilities to be acquired, provisions governing lease or rental of facilities, a hold harmless clause, recognition of the right of first refusal of any of the participating political subdivisions, a clause stating the conditions under which the contract may be terminated, and other provisions appropriate to the subject of the transfer agreement including provisions setting standards for operation and maintenance of the project. The attorney general of Texas shall approve as to legality any contract authorized under this subchapter.

(h) Administrative Cost Recovery for Board Participation Program

- (1) General. The board will assess fees for the purpose of recovering administrative costs from all political subdivisions with which the board agrees to participate under this section.
- (2) Payment Method. Payment of one-third of the fee is due at closing. The balance of the fee may be paid in a limited number of annual installments with the consent of the executive administrator. The fee may not be included in the total amount of financial assistance provided by the board.

**§ 363.1309. Findings Required**

- (a) The executive administrator shall submit the application for financing under subchapter M (relating to state water implementation fund for Texas and state water implementation revenue fund for Texas) to the board with comments concerning financial assistance. The application will be scheduled on the agenda for board consideration at the earliest practical date. The applicant and other interested parties known to the board shall be notified on the time and place of such meeting.
- (b) The board shall grant the application only if the board finds that at the time the application for financial assistance was made that:
  - (1) the applicant has submitted and implemented a water conservation plan in accordance with Texas Water Code Section 11.1271;
  - (2) the applicant satisfactorily completed a request by the executive administrator or a regional water planning group for information relevant to the project for which the financial assistance is sought, including a water infrastructure financing survey under Texas Water Code Section 16.053(q); and

- (3) the applicant has acknowledged its legal obligation to comply with any applicable requirements of federal law relating to contracting with disadvantaged business enterprises, and any applicable state law relating to contracting with historically underutilized businesses.

### **§ 363.1310. Action of the Board on Application**

At the conclusion of the meeting to consider the project for financing under subchapter M (relating to state water implementation fund for Texas and state water implementation revenue fund for Texas), the board may resolve to approve, disapprove, approve with conditions, including requiring the applicant to retain professional project management assistance, or continue consideration of the application. A commitment will include a date after which the financial assistance will no longer be available.

### **§363.1311 Rural and Water Conservation Reporting**

- (a) After the loan closing of a project and release of funds to the political subdivision, the executive administrator shall determine what portion of the project funds, if any, qualify as funding for:
  - (1) rural political subdivisions;
  - (2) agricultural water conservation;
  - (3) water conservation, including agricultural irrigation projects; or
  - (4) reuse.
- (b) For project costs that cannot be assigned to either a qualifying category and non-qualifying portions of the project, the executive administrator will allocate costs proportionately.
- (c) The executive administrator will include in the biennial report to the Legislature required by Texas Water Code §15.440, the percentage of SWIFT and SWIRFT funds used to support rural political subdivisions and agricultural water conservation, and the percentage of SWIFT and SWIRFT funds used to support water conservation, including agricultural irrigation projects, or reuse projects.

### **§ 363.1312 Reporting Requirements Regarding Historically Underutilized Businesses**

The political subdivision receiving financial assistance from the board shall report to the executive administrator the amounts of project funds, if any, which were used to compensate historically underutilized businesses that worked on the project. The executive administrator shall not issue a certificate of approval on a project until this report has been received.

## CHAPTER 353. INTRODUCTORY PROVISIONS

The Texas Water Development Board (TWDB) proposes an amendment to 31 TAC §353.3 of Subchapter A, relating to General Provisions, to ensure consistency with recent statutory amendments made to Chapter 6, Texas Water Code, relating to the TWDB. The specific provision being amended and the reason for the amendment are addressed in more detail below.

### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED AMENDMENT.

The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which made numerous amendments to Texas Water Code. The first article of that bill made changes to the administration of the TWDB. More specifically Section 1.06 of the bill amended Texas Water Code Section 6.060 (relating to Board Meetings) to delete the requirement that the board meet at least once every other month and provide that the board shall hold regular meetings and special meetings at times and places that the board decides are appropriate. The statute also deleted the office of the vice-chairman of the board and provided that the chairman may designate another board member to act for the chairman in the chairman's absence.

### SECTION BY SECTION DISCUSSION OF PROPOSED AMENDMENT.

*Proposed Amendment to 31 TAC Chapter 353, Subchapter A (relating to General Provisions).*

The proposed amendment to §353.3 (relating to Board Meetings) if adopted, would: delete the requirement that the board meet at least once every other month; provide that the board may hold special meetings at the times and places that the board decides are appropriate; provide that the chairman or the board member acting for the chairman shall give the other members reasonable notice of the special board meeting; and provide that the chairman may designate another board member to act for the chairman in the chairman's absence.

### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Amanda Landry, Chief Financial Officer, has determined that for the first five year period the proposal is in effect, there will be no fiscal implications on state or local governments as a result of the proposal. There are no fiscal benefits to local governments as a result of the proposal.

### PUBLIC BENEFITS AND COSTS

Amanda Landry has also determined that for the first five years the proposed rule is in effect, the public benefit anticipated as a result of the proposal will be the agency's rules will conform to applicable legislation. Ms. Landry has determined that there will be no economic costs to small businesses or individuals as a result of the proposed rule.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The board has determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect because it will impose no new requirements on local economies. The board also has determined that there will be no adverse economic effect on small businesses or micro-businesses as a result of enforcing this rulemaking. The board also has determined that there is no anticipated economic cost to persons who are required to comply with the rulemaking as proposed. Therefore, no regulatory flexibility analysis is necessary.

#### REGULATORY ANALYSIS

The board has determined that the proposed rulemaking is not subject to Government Code §2001.0225 because it is not a major environmental rule under that section.

#### TAKINGS IMPACT ASSESSMENT

The board has determined that the promulgation and enforcement of this proposed rule constitute neither a statutory nor a constitutional taking of private real property. The proposed rule does not adversely affect a landowner's rights in private real property, in whole or in part, because the proposed rule does not burden or restrict or limit the owner's right to or use of property. Therefore, the proposed rulemaking does not constitute a taking under Texas Government Code, Chapter 2007 or the Texas Constitution.

#### ANNOUNCEMENT OF HEARINGS

The board will hold public hearings on this proposal on July 24, 2014, at Texas A&M University – San Antonio, One University Way, San Antonio, Texas 78224 at 1:00 p.m.; on August 13, 2014, at the McNease Convention Center, 500 Rio Concho Drive, San Angelo, Texas 76903 at 10:00 a.m.; on August 21, 2014, at [Metroplex address TBD at [time TBD]]. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon. Open discussion and questions to the board will not be permitted during the hearings.

Persons who have special communication or other accommodation needs who are planning to attend the hearings should contact Merry Klonower at (512) 463-8165 as far

in advance as possible, and no later than five (5) work days prior to the hearing so that appropriate arrangements can be made.

## SUBMISSION OF COMMENTS

Comments on the proposed rulemaking will be accepted until September 1, 2014, and may be submitted to the Office of General Counsel, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231, by e-mail to [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov), via entering comments on our web page:

<http://www.twdb.state.tx.us/swift/involved/index.asp>, or by fax at (512) 475-2053.

## STATUTORY AUTHORITY

The amendment is proposed under authority of Texas Water Code §6.101, which authorizes the TWDB to adopt rules necessary to carry out the powers and duties of the TWDB.

The amendment affects Texas Water Code, Chapter 6.

### § 353.3. Board Meetings

The board shall hold regular meetings and all hearings at times specified by a board order and entered in its minutes. ~~meet at least once every other month on a day and a place within the state selected by it subject to recesses at the discretion of the board.~~ The board may hold special meetings at the times and places in this state that the board decides are appropriate for the performance of its duties. The chairman of the board or the board member acting for the chairman shall give the other members reasonable notice before holding a special meeting. ~~The chair or two board members may call a special meeting at any time by giving notice to the other members and other parties required by law to be notified of the meeting.~~ All meetings are subject to the Texas Open Meetings Act, Government Code, Chapter 551. The chairman, or the designated board member acting in the absence of the chairman, ~~chair or in the chair's absence, the vice chair,~~ shall preside at all meetings of the board.

## CHAPTER 356. GROUNDWATER MANAGEMENT

The Texas Water Development Board (TWDB) proposes an amendment to 31 TAC §356.10 of Subchapter A, relating to General Provisions, to ensure consistency with recent statutory amendments made to Chapter 6, Texas Water Code, relating to the TWDB. The specific provision being amended and the reason for the amendment are addressed in more detail below.

### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED AMENDMENT.

The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which made numerous amendments to Texas Water Code. The first article of that bill made changes to the administration of the TWDB. More specifically Section 1.1 of the bill amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the governing body of the agency from six members to three members. The current rule, which would be amended by this proposed rule, refers to the governing body of the TWDB as having six members.

### SECTION BY SECTION DISCUSSION OF PROPOSED AMENDMENT.

*Proposed Amendment to 31 TAC Chapter 356, Subchapter A (relating to General Provisions).*

The proposed amendment to §356.10 (relating to Definitions) if adopted, would amend the definition of “Board,” for purposes of 31 TAC Chapter 356, (relating to Groundwater Management) by deleting any reference to the number of board members serving as the governing body of the state agency, the Texas Water Development Board. The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the board from six members to three members. The proposed amendment would implement this legislative change.

### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Amanda Landry, Chief Financial Officer, has determined that for the first five year period the proposal is in effect, there will be no fiscal implications on state or local governments as a result of the proposal. There are no fiscal benefits to local governments as a result of the proposal.

### PUBLIC BENEFITS AND COSTS

Amanda Landry has also determined that for the first five years the proposed rule is in effect, the public benefit anticipated as a result of the proposal will be the agency’s rules

will conform to applicable legislation. Ms. Landry has determined that there will be no economic costs to small businesses or individuals as a result of the proposed rule.

#### LOCAL EMPLOYMENT IMPACT STATEMENT

The board has determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect because it will impose no new requirements on local economies. The board also has determined that there will be no adverse economic effect on small businesses or micro-businesses as a result of enforcing this rulemaking. The board also has determined that there is no anticipated economic cost to persons who are required to comply with the rulemaking as proposed. Therefore, no regulatory flexibility analysis is necessary.

#### REGULATORY ANALYSIS

The board has determined that the proposed rulemaking is not subject to Government Code §2001.0225 because it is not a major environmental rule under that section.

#### TAKINGS IMPACT ASSESSMENT

The board has determined that the promulgation and enforcement of this proposed rule constitute neither a statutory nor a constitutional taking of private real property. The proposed rule does not adversely affect a landowner's rights in private real property, in whole or in part, because the proposed rule does not burden or restrict or limit the owner's right to or use of property. Therefore, the proposed rulemaking does not constitute a taking under Texas Government Code, Chapter 2007 or the Texas Constitution.

#### ANNOUNCEMENT OF HEARINGS

The board will hold public hearings on this proposal on July 24, 2014, at Texas A&M University – San Antonio, One University Way, San Antonio, Texas 78224 at 1:00 p.m.; on August 13, 2014, at the McNease Convention Center, 500 Rio Concho Drive, San Angelo, Texas 76903 at 10:00 a.m.; on August 21, 2014, at [Metroplex address TBD at [time TBD]]. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon. Open discussion and questions to the board will not be permitted during the hearings.

Persons who have special communication or other accommodation needs who are planning to attend the hearings should contact Merry Klonower at (512) 463-8165 as far in advance as possible, and no later than five (5) work days prior to the hearing so that appropriate arrangements can be made.



## SUBMISSION OF COMMENTS

Written comments on the proposed rules will be accepted until September 1, 2014, and may be submitted to the Office of General Counsel, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231, or by e-mail to [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov), or by fax at (512) 475-2053.

## STATUTORY AUTHORITY

The amendment is proposed under authority of Texas Water Code §6.101, which authorizes the TWDB to adopt rules necessary to carry out the powers and duties of the TWDB.

The amendment affects Texas Water Code, Chapter 36.

### **§ 356.10. Definitions**

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Words defined in Texas Water Code Chapter 36, Groundwater Conservation Districts, that are not defined here shall have the meanings provided in Chapter 36.

(1) Agency--The Texas Water Development Board.

(2) Amount of groundwater being used on an annual basis--An estimate of the quantity of groundwater annually withdrawn or flowing from wells in an aquifer for at least the most recent five years that information is available. It may include an estimate of exempt uses.

(3) Board--The ~~six member~~ governing body of the Texas Water Development Board.

(4) through (24) No change

## CHAPTER 367. AGRICULTURAL WATER CONSERVATION PROGRAM

The Texas Water Development Board (TWDB) proposes an amendment to 31 TAC §367.2, relating to Definitions, to ensure consistency with recent statutory amendments made to Chapter 6, Texas Water Code, relating to the TWDB. The specific provisions being amended and the reason for the amendment is addressed in more detail below.

### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED AMENDMENT.

The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which made numerous amendments to Texas Water Code. The first article of that bill made changes to the administration of the TWDB. More specifically Section 1.1 of the bill amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the board from six members to three members. The current rule, which would be amended by this proposed rule, refers to the governing body of the TWDB as having six members.

### SECTION BY SECTION DISCUSSION OF PROPOSED AMENDMENT.

#### *Proposed Amendments to 31 TAC Chapter 367.2, (relating to Definitions).*

The proposed amendment to §367.2 (relating to Definitions) if adopted, would amend the definition of “Board,” for purposes of 31 TAC Chapter 367, (relating to Agricultural Water Conservation Program) by deleting any reference to the number of board members serving as the governing body of the state agency, the Texas Water Development Board. The amendment is necessary because the 83<sup>rd</sup> Legislature passed House Bill 4 which amended Texas Water Code Section 6.052 (relating to Members of the Board; Appointment) to change the composition of the governing body of the agency from six members to three members. The proposed amendment would implement this legislative change.

### FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENTS

Amanda Landry, Chief Financial Officer, has determined that for the first five year period the proposal is in effect, there will be no fiscal implications on state or local governments as a result of the proposal. There are no fiscal benefits to local governments as a result of the proposal.

### PUBLIC BENEFITS AND COSTS

Amanda Landry has also determined that for the first five years the proposed rule is in effect, the public benefit anticipated as a result of the proposal will be the agency’s rules will conform to applicable legislation. Ms. Landry has determined that there will be no economic costs to small businesses or individuals as a result of the proposed rule.

## LOCAL EMPLOYMENT IMPACT STATEMENT

The board has determined that a local employment impact statement is not required because the proposed rule does not adversely affect a local economy in a material way for the first five years that the proposed rule is in effect because it will impose no new requirements on local economies. The board also has determined that there will be no adverse economic effect on small businesses or micro-businesses as a result of enforcing this rulemaking. The board also has determined that there is no anticipated economic cost to persons who are required to comply with the rulemaking as proposed. Therefore, no regulatory flexibility analysis is necessary.

## REGULATORY ANALYSIS

The board has determined that the proposed rulemaking is not subject to Government Code §2001.0225 because it is not a major environmental rule under that section.

## TAKINGS IMPACT ASSESSMENT

The board has determined that the promulgation and enforcement of this proposed rule constitute neither a statutory nor a constitutional taking of private real property. The proposed rule does not adversely affect a landowner's rights in private real property, in whole or in part, because the proposed rule does not burden or restrict or limit the owner's right to or use of property. Therefore, the proposed rulemaking does not constitute a taking under Texas Government Code, Chapter 2007 or the Texas Constitution

## ANNOUNCEMENT OF HEARINGS

The board will hold public hearings on this proposal on July 24, 2014, at Texas A&M University – San Antonio, One University Way, San Antonio, Texas 78224 at 1:00 p.m.; on August 13, 2014, at the McNease Convention Center, 500 Rio Concho Drive, San Angelo, Texas 76903 at 10:00 a.m.; on August 21, 2014, at [Metroplex address TBD at [time TBD]]. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon. Open discussion and questions to the board will not be permitted during the hearings.

Persons who have special communication or other accommodation needs who are planning to attend the hearings should contact Merry Klonower at (512) 463-8165 as far in advance as possible and no later than five (5) work days prior to the hearing so that appropriate arrangements can be made.

## SUBMISSION OF COMMENTS

Written comments on the proposed rules will be accepted until September 1, 2014, and may be submitted to the Office of General Counsel, Texas Water Development Board, P.O. Box 13231, Austin, Texas 78711-3231, or by e-mail to [rulescomments@twdb.texas.gov](mailto:rulescomments@twdb.texas.gov), or by fax at (512) 475-2053.

#### STATUTORY AUTHORITY

The amendment is proposed under authority of Texas Water Code §6.101, which authorizes the TWDB to adopt rules necessary to carry out the powers and duties of the TWDB.

The amendment affects Texas Water Code, Chapter 17, Subchapter J.

#### § 367.2. Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

- (1) Board--The ~~six-member~~ governing body of the Texas Water Development Board.
- (2) through (13) No changes

## Agenda Item 19

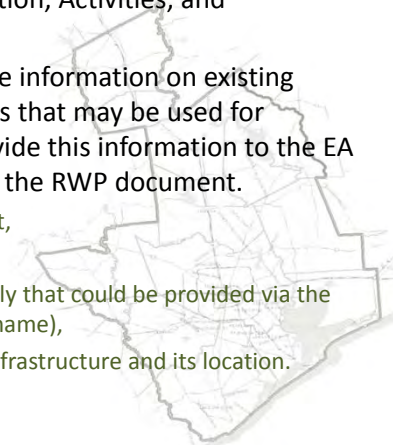
Consider authorizing the Executive Committee to review and consider submittal of a separate report summarizing existing water infrastructure facilities that may be used for interconnections in the event of an emergency shortage of water.



## Emergency Interconnects



- Existing and Potential Emergency Interconnects
  - Task 7: Drought Response Information, Activities, and Recommendations
  - RWPGs shall collect and summarize information on existing major water infrastructure facilities that may be used for emergency interconnects and provide this information to the EA confidentially and separately from the RWP document.
    - potential user(s) of the interconnect,
    - potential supplier(s),
    - estimated potential volume of supply that could be provided via the interconnect (including the source name),
    - general description of the facility/infrastructure and its location.



## Emergency Interconnects



### **Action:**

Authorize the Executive Committee to review and consider submittal of a separate report summarizing existing water infrastructure facilities that may be used for interconnections in the event of an emergency shortage of water.

